Climate Policy as a Window of Opportunity

Sweden and Global Climate Change

MATHIAS ZANNAKIS

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Acknowledgements

So this is it? The first pages the reader finds in a dissertation are usually the last written. I can assure you this is certainly the case here. When finally coming to the point when I can sum up all these years, I have totally forgotten all versions of this introduction my mind has made up over the years. But I do remember that a lot of people have supported me and in various ways contributed to my work. I would like to give a big round of applause to some of you.

Everything starts at home, doesn't it? I am very grateful to my mother Anja Persson, who has always supported me in all possible ways. We didn't exactly discuss environmental politics at our kitchen table, but your home was always loving and open-minded. This has been of great importance to me.

I didn't think political science was that interesting or important until I met Sverker Jagers, who supervised me when I wrote my first undergraduate thesis in 1997. I had recently tasted the bitterness of love and wasn't up for writing a thesis at all, but that didn't stop you from pretending I was quite talented and that I just *had* to write it up. I actually made the deadline but the thesis was honestly quite lousy. Apart from spreading a lot of inspiration, you are a really good and caring friend. Thank you, I really appreciate that!

In January 2002 I was given the chance to assist in a research project. My first roommate at the Department of Political Science was Helena Rohdén. I couldn't have wished for a warmer welcome than yours. There weren't many topics we didn't have time to chit-chat about, making us working overtime more often than not. You still pop by for a chat every now and then, which makes university life not that bad and lonely after all.

In early September 2002 I started graduate school together with five humorous, intelligent and very kind persons: Stefan Dahlberg, Göran Duus-Otterström, Johan Karlsson, Anna Persson and Maria Solevid. Thanks for all the laughs, high-fives, comments on my work, and for living with each others' sweat for several years! Part of me still misses the days and nights in Hexagon.

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1. The country that shouldn't be

On the eve of the 11th day of intense negotiations the world's states on 11 December 1997 agreed on what later came to be called the Kyoto Protocol, an international agreement to tackle global climate change. Finally, the world community committed to start reducing its greenhouse gas (GHG) emissions, if so only by an average of 5 percent in the years 2008–2012 compared to 1990 levels. The results have so far been quite modest; many countries will have difficulties to meet their quantitative commitments under the Kyoto Protocol.[1]

But there is one small country which does not follow this pattern: Sweden.[2] Sweden opted for a more ambitious target than obliged to and will most probably *over-implement* this relatively ambitious target. This is indeed a theoretical anomaly; it shouldn't have happened according to mainstream theoretical expectations on international environmental cooperation. Such theoretical perspectives would rather expect countries to try to defect from international cooperation and commitments, the assumption being that countries do not want to contribute to the collective good if they are not sure others will do the same. Moreover, from such expectations it must be considered quite peculiar that Sweden has done *more* than committed to. The aim of this thesis is to try to understand why Sweden has been such a strange bird in climate change politics.

But why is this behaviour exceptional? Well, to start with, the most common theoretical understanding of global environmental problems like climate change is through the lens of a social dilemma.[3] Theoretically, actors would be better off if everyone cooperated by contributing to the common good (e.g., by reducing their GHG emissions), but at the same time they have incentives not to contribute to this common good. The logic is that if an actor knows that others will do their share, then it matters little if that actor does not contribute to the common good. The defector or free-rider can thus benefit both from the improved common good and the benefits deriving from, in this case, its own continued GHG emissions. Moreover, since the actor cannot be sure that others

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[1] See UNFCCC: FCCC/SBI/2008/12; cf. EEA 2008. On average the projections are not that discouraging, but if the so called Economies in transition to market economy (mostly countries in Eastern Europe) are not included the picture gets different: most industrialised and 'developed' countries have difficulties to commit to their Kyoto Protocol targets.
[2] There are other countries that will also live up to their commitments but Sweden still stands out as the most deviant case. I will elaborate on this below.
[3] Dawes 1980.

will contribute to the common good, why contribute unilaterally and risk being a sucker? This is the essence of the social dilemma, which is said to characterise so many environmental problems. Then it is not surprising that

> international agreements are the product of complex and time-consuming negotiations among disparate countries with conflicting interests that typically produce weak documents reflecting the lowest common denominator of perceived interests. Countries tend to seek treaties that maximize the responsibilities of other nations while minimizing their own obligations, thus playing the role of free rider.[4]

Almost all scholarly literature on international environmental governance assumes the existence of social dilemmas or tragedies of the commons.[5] The notion of a social dilemma is thus very influential, besides being analytically powerful. Rationalistic International Relations (IR) theories such as neorealism and various forms of liberalism are practically impregnated by assumptions of a social dilemma—especially when analyzing environmental problems. What also characterizes these theories is the assumption of rational and self-interested actors whose interests are exogenous to social interaction. That social dilemma assumptions are influential when we characterise global environmental problems is not that strange; by and large, the data corroborate such assumptions. But not always; sometimes we find theoretical anomalies, which, I think, there is reason to analyse further.

But let me start with discussing the most important reasons we have to describe international environmental politics in terms of a social dilemma. David Downie has summarised the obstacles to effective global environmental policy while drawing on a variety of research literature.[6] The first and probably most obvious obstacle is the structure of the international political system and more specifically, the system's most defining characteristic: anarchy. There is no global government that can maintain order. If we assume, like many scholars, that states are primarily acting self-interestedly, then this structure will imply a lack of cooperation because, *inter alia*, states want to "gain benefits without paying a fair share of the costs (free riding)" or because they are afraid "that other countries might gain relative positional advantages".[7] Such arguments are mostly drawn from the neorealist literature, but few deny these structural obstacles. The norm of sovereignty is furthermore important in international politics.[8] In a world of sovereign states, who do not want others to intrude in

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[4] Soroos 2005b: 39.
[5] E.g. Dietz et al. 2002; Vig 2005; Downie 2005; Dauvergne 2005; Soroos 2005a; Vogler 2005.
[6] Downie 2005: 70-79. I will not discuss all of these obstacles here, only the ones I find central to illustrate my argument.
[7] Ibid.: 71. Cf. Olson 1965; Grieco, Powell & Snidal 1993.
[8] But see Krasner 1999 for a dissenting—neorealist—opinion.

their internal affairs, effective cooperation is difficult to achieve. The result is often agreements in line with the 'lowest common denominator'.[9] Hence, this systemic obstacle speaks against states wanting to commit to costly international (environmental) obligations. If transboundary environmental problems are taken seriously, this is indeed a social dilemma.

Second, global environmental issues are typically scientifically complex, which in turn causes uncertainty. Global environmental problems like ozone depletion, climate change, biodiversity loss and the diminishing of ocean fish stocks are complex regarding causation, who should take responsibility, how the problem can be solved and so on. They often depend on knowledge from various scientific disciplines. Downie argues that such lack of firm knowledge may undermine the concern for these environmental problems in favour of more obvious political and economic interests. Scientific complexity may also imply that government bureaucracies do not know how to tackle the problems.[10] Hence, scientific complexity and the consequential uncertainty further contribute to the social dilemma character of global environmental problems.

Third, the costs for tackling global environmental problems have to be considered. More specifically, international regimes often specify who should have responsibility, and frequently give rich countries greater burdens than poor ones. Alternatively, the problem's character may imply that countries with 'special circumstances' have to face comparatively greater adjustment costs than others. Downie exemplifies with the case of ozone depletion: "Countries with warmer climate required more CFCs for air conditioning and realized their comparative costs would be higher."[11] Thus, unequal adjustment costs may also contribute to the social dilemma character of global environmental problems, further complicating international cooperation.

Fourth, global environmental change is often characterised as involving a large number of states and private actors, from the international to the local level. International agreements in themselves are thus not enough to tackle these problems. The involvement of and dependency on so many actors provides incentives for free riding.[12] The understanding of political challenges as involving a large number of actors at different levels is often called multi-level governance or sometimes institutional interplay.[13] This adds to the picture of complexity surrounding global environmental problems. One may even say that it constitutes the most extreme form of a social dilemma: successful action is dependent on the involvement of many actors at many levels; the incentives for free riding are obvious because it is possible to stay anonymous; and

[9] Downie 2005: 72f.
[10] Ibid.: 74f.
[11] Ibid.: 77.
[12] Ibid.: 78.
[13] See Hooghe & Marks 2003; Fairbrass & Jordan 2004, and Young 2002, respectively.

others' action cannot be guaranteed. Why should anyone take action given such circumstances?

This relates to the importance political scientists attribute to institutions for solving environmental problems in the commons. Ostrom and many of her followers argue that actors can create robust institutions in order to manage natural resources.[14] That is true, but when we face truly global problems it is much more difficult to create institutions that can overcome social dilemmas, since actors cannot rely on mutual trust or institutional arrangements that are respected by all participants. The global character, together with the fact that there is no legitimate state above states which can enforce policy or sanction rule-violation, provides few incentives to contribute to the common good. You simply cannot be sure that others will contribute and not leave you behind, acting the sucker.

These are just some of the social dilemma kind of obstacles to successful international environmental policy that can be identified. Yet, they are the most important ones in my view. Given these obstacles, it is not that extraordinary that managing many of the world's environmental problems has proved so difficult. According to the notion of the social dilemma we should not expect progressive behaviour by states in global environmental issues.

Yet, the picture is not that black and white. Even though global environmental politics should not be described as a success story, we should not neglect the steps forward that have been taken. Everything is not as gloomy as one might expect given the assumption of social dilemmas. Sometimes cooperative behaviour can be identified. For example, the development of global efforts and institutions for managing the environment bears witness that the social dilemma does not totally prevent attempts to countervail or prevent environmental problems.[15] The United Nations Environment Programme (UNEP) estimates that there are more than 700 international agreements that intend to govern some aspect of the environment.[16] Reviews of state and local policies for implementing 'sustainable development' tell that efforts and progress *can* be found, although this does not necessarily change the general 'crisis' picture of global environmental change.[17] In other words, states actually *do* engage in cooperative behaviour in order to govern the environment. Even if these attempts have not solved all environmental problems—indeed, they have not— we can be sure that the situation would have been far worse were it not for these attempts.

How come that we can identify cooperative behaviour despite the powerful notion of global environmental problems as social dilemmas? Why do coun-

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[14] E.g. Ostrom 1990; Ostrom 1998; Stern et al. 2002.
[15] Soroos 2005b. This is in line with the expectations of neoliberal institutionalism.
[16] UNEP 2006: 29.
[17] E.g. Lafferty & Meadowcroft 2000; Cooper & Vargas 2004.

tries ratify the Kyoto Protocol, and why do they implement policies in order to reduce their GHG emissions?[18] The rationalist stance (whether neorealist or neoliberal institutionalist) provides no satisfactory understanding of such puzzling questions, basically because it takes the social dilemma character of environmental problems for granted. With this comes the assumption of humans—and states—as rational and self-interested utility-maximizers. Nevertheless, the rationalist stance is the mainstream perspective on environmental problems in the social sciences. Without denying that self-interest can be important for human behaviour, my point of departure is that it is less fruitful to assume the self-interest of human agents *a priori*. People and their behaviour are more complex than that.

This thesis will focus on the theoretical anomaly of Sweden's behaviour in climate change politics—aiming for a tougher burden than committed to internationally and complying with this national target with a vengeance—and try to explore why the obvious social dilemma obstacles have not hindered Sweden from living up to international agreements and even over-implementing its own national target. We should theoretically tackle Sweden's behaviour in climate policy by investigating how climate change as a political problem is socially constructed in the Swedish polity, leaving open the question of the self-interest of policy actors.

THE SOCIAL DILEMMA CHARACTER OF CLIMATE CHANGE

Climate change is probably the contemporary environmental issue most clearly illustrating the social dilemma character of global environmental politics. Contemplate the established 'truth' why the Kyoto Protocol for managing climate change is considered weak. Some scholars argue that one of the reasons Kyoto (and implicitly other environmental treaties) may fail is that "for most developed countries [...] the Protocol provides only small environmental benefits, but imposes significant costs."[19] Scholars generally agree that the benefits of combating human induced climate change are probably long-term, and that already vulnerable parts of the world will most likely be subject to the worst of its effects. In that respect, the costs are considered high for restructuring the fundament of industrialized societies—the dependency on fossil fuels for generating energy.[20] So far in the climate change regime, it is only the most industrialised (and richest) countries in the world that have made quantitative commitments to reduce their GHG emissions. Following this line of reasoning, the neorealist analysis, which indeed emphasises power, seems plausi-

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[18] See http://unfccc.int for the latest updates of national inventory reports of GHG emissions.
[19] McKibbin & Wilcoxen 2002: 125; cf. Nordhaus 2001; Verweil et al. 2006.
[20] But some argue that these costs are over-stated, especially if viewed in the longer perspective; see e.g. Azar 1998; Grubb & Depledge 2001; Stern 2007.

ble; it is the relative gains concerning economic impacts of the management of climate change that explain the lack of cooperation in the climate change regime.[21] Hence, we have the core ingredients of a social dilemma at hand; in the long run it is best for all if everyone contributes to the collective good, while individual actors (here states) have a short-sighted incentive to free ride on others' actions. Of course, other global environmental issues (e.g. biodiversity, desertification, over-fishing, ozone depletion etc.) share many of these characteristics with climate change. Yet, I think no other issue implies such fundamental restructuration of most countries' economic and social structures, and potentially involves so many societal actors as do the issue of climate change.

Further, if global environmental problems are scientifically very complex, climate change is even more so. The issue has been surrounded by debates regarding the *human* impact on the climate (i.e. whether it is emissions of GHG's that cause global warming), uncertainty regarding the level of temperature increase expected to follow from the accumulation of GHG's in the atmosphere, the ecological and social consequences of a changed climate, and the effects of mitigating efforts. Even though mainstream science takes climate change seriously, a lot of the above topics are surrounded with uncertainty. Making policy decisions that extend quite far into the future under these relatively uncertain circumstances does not seem to be expected given the logic of social dilemmas. Practically all transboundary environmental problems are considered scientifically complex; this is not unique for climate change. But it is difficult to find other issues that are surrounded with as much complexity, uncertainty, and debate as climate change. The case of erosion of biodiversity is similar, at least regarding the complexity surrounding causes and effects of erosion of biodiversity. However, what makes the case of climate change special in comparison is that it involves far more actors and countries in order to tackle the problem. Therefore, it is likely that climate change implies a bigger threat to institutionalised interests, thus adding to the social dilemma character of the issue.

Climate change politics lacks an international authority with capacity to forcefully govern and punish states that do not cooperate. The United Nation's Framework Convention on Climate Change (UNFCCC) gathers states who wish to participate, but cannot really do much if states do not comply with agreements. States are not forced to be part of the Convention, and are not forced to sign follow-up agreements to the Kyoto Protocol (agreements in which states could be punished for not complying with previous commitments).

Add to this that climate change politics is indeed marked by its multi-level character, since energy use and the burning of fossil fuels are at the heart of the climate change issue. Moreover, according to the greenhouse thesis it does not matter where on the earth GHG's are emitted; the effects on the global climate are still the same. This means that an efficient climate policy does not

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[21] Grundig 2006.

only involve states or intergovernmental cooperation but other levels of authority, and many social activities. Practically all organised human behaviour is related to these things, especially—but not solely—in the industrialised world. Climate relevant activities span from, e.g., individual decisions in the supermarket, individuals choosing modes of transportation; to municipalities' physical planning, provision of public transports and energy/heating systems; to states' choice of ambitions and policy instruments such as bans, taxes, and subsidies; and to corporate behaviour. We typically perceive the state as being unable to tackle successfully problems such as climate change by itself—it needs support from other actors as well.[22]

The case of climate change could be contrasted with other global issues, e.g. the proliferation of nuclear weapons. Although being truly global in scope, the question of proliferation of nuclear weapons does not involve individuals' consumption or local politics. Another example is the case of stratospheric ozone depletion due to emissions of primarily chlorofluorocarbons (CFC's). It is similar to climate change in that it does not matter where CFC's are emitted for them to be harmful to the stratospheric ozone layer. It concerns individual behaviour in that CFC's are emitted from refrigerators and spray cans etc. However, it does not concern everyday consumption patterns (people usually do not buy refrigerators or spray cans on a daily basis), or, for that matter, municipal behaviour. Rather, key actors in the management of stratospheric ozone depletion are states and major corporations, the latter which produce CFC emitting products.[23] Accordingly, ozone depletion is considered easier to come to grips with than climate change, simply because it does not concern as many actors at various levels of governance as the management of climate change does.

Thus, according to the picture of social dilemmas painted in the previous section, climate change politics is by far the biggest challenge there is in our contemporary world. Climate change implies significant costs, and a threat to many institutionalised interests. Moreover, it provides incentives for free riding. Further, climate change is scientifically complex and there is anything but agreement what the causes, effects and appropriate solutions are. Truly global solutions are considered necessary, but such are always subordinated to the anarchical character of international politics. The management of climate change includes a large variety of actors all over the world, and for management to be successful scholars often argue that action needs to be coordinated between different levels and type of actors. In other words, the management of climate change is the multi-level governance issue *par preference*. How is it possible to make so many actors aim for the same goal, i.e. drastic cuts of GHG emissions throughout the twenty-first century?

[22] See e.g. Lundqvist & Biel 2007b.
[23] Cf. Benedick 1991; Purvis, Hunt & Drake 2001.

As a consequence of acknowledging the multi-level character of global environmental problems, the local level is emphasised as crucial in order to manage them. However, scholars warn against analysing the local level without considering the variety of actors at different scales that are tangled up in complex inter-relations.[24] Thus, we should be cautious not to analyse the local level in isolation.[25] I will attempt to analyse the Swedish state level, as well as the sub-national level, consisting of both the regional and the local levels.[26]

Nevertheless, the character of climate change as a political problem is not given once and for all. In both academia and among policy actors, it is generally constructed as one of the most global issues there are.[27] At the same time, scholars and policy actors more and more acknowledge that the solutions have to be local. The protection of the climate can thus be (re-)constructed as a local issue in concrete policy processes.[28] It can also be framed as a global issue, in a local setting. The territorial framing of the issue certainly has consequences for which policies that are viewed legitimate.[29] We can thus conclude that whether climate change should be seen as a local, national, or global problem (i.e., where should it be managed, what levels/actors should be involved) is open for interpretation and negotiation.

That the sub-national governance of climate change is intertwined with and dependent on structures decided at other levels, both nationally and globally, does not, of course, imply that policy actors at the latter levels definitely decide what the local level should do. However, when analysing policies at the local level we need to take into account policies institutionalised at other arenas, i.e., international climate policies and state level policies toward climate change.

Now, let's contemplate the vein of thinking that focuses on 'the logic of collective action',[30] according to which the local level comes in a somewhat darker light. From a logic of collective action perspective, local actors are often perceived to be part of the problem in multi-level governance of environmental

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[24] This multi-level governance thus implies many 'nested dilemmas' and potential conflicts, see e.g. Biel & Lundqvist 2007.
[25] Bulkeley & Betsill 2005; Betsill & Bulkeley 2006; Bulkeley & Kern 2006.
[26] Instead of talking of the local level I prefer to use the term sub-national level, which is more than just the local level. Rather, it usually consists of the local level (i.e. municipalities) and the regional level. The latter, in turn, consists in Sweden of both a state institution (the County Board) and a publicly elected regional municipality. Thus, the sub-national governance structures are more complex than implicated by the term 'local'.
[27] Oels 2005; cf. Smith 2007; Miller 2004.
[28] Lindseth 2004.
[29] Paterson & Stripple 2007; Lindseth 2006. Cf. Lundqvist & von Borgstede 2008.
[30] Olson 1965.

resources. We usually think that contributing to the mitigation of climate change have positive consequences for the collective. But these contributions may have other costs for the local community, e.g. taking resources from other important tasks, or leading to the development of other negative environmental outcomes. An example of the latter is the introduction of wind power turbines. As a strategy for developing renewable resources, local communities perceive that they create (other) environmental downsides such as undesired noise or disturbances on the local (land or sea) environment.[31]

This background of multi-level governance in climate change politics—the apparent 'pressure from above', and the obvious incentives for local communities not to contribute to this collective effort—may indicate to some readers that interests play a large role here. That is, self-interested behaviour is to be expected, and thus interests should be at the centre of the analysis. My answer is yes, interests are often important when analysing human and organised behaviour. However, the major problem with the rationalist perspective is that it seems to end up in circular reasoning. The basic assumption is that states and other actors always pursue their narrow self-interests. But in all political decision-making, actors always end up doing something particular, leaving many other possibilities aside. Thus, no matter what they do, states and other actors always end up doing what is in line with their self-interest, according to rationalism. Actors do what is in their interest because it is in their interest. In other words, rationalist assumptions about states trying to maximize their relative power or absolute wealth "are too general to provide much of a guide to states, even if they are accurate assumptions".[32] Rationalism's only possible answer to Sweden's unexpected behaviour in climate change politics is thus that it has to be viewed as in line with Swedish national interests.

The aim of this study is not to sort out and characterize Sweden's behaviour as self-interested or altruistic. In my view, it is more interesting to analyse how interests originate, how they are socially constructed (given this logic interests may even be altruistic).[33] With a social constructivist theoretical framework we are more concerned with how Sweden's particular policy choices could be constructed the way they were, regardless of whether we like to call the choices self-interested or not. Thus, is it obvious what the interests are or is it possible to find several competing political goals, articulated by their respective advocates? Why does a certain view win this struggle and not some other? In this perspective, it is also interesting to pay attention to what is *not* articulated. I obviously prefer this latter view on interests, and hence I intend to analyse this process of social construction of meaning, which has to do with power indeed.

[31] Söderholm, Ek & Pettersson 2007.
[32] Florini 1996: 365.
[33] Cf. Hopf 2002: 16ff.

Even though the task involves many actors the state stands out as the key institution. Some argue that the state does not have the capacity to steer society as it did in earlier decades. This may be true. But there is no other institution that has the state's potential for capacity and legitimacy, at least if we stick to Western liberal democracies.[34] Hence, we need to focus on state behaviour as the key to overcoming social dilemmas of international environmental problems. But this does not mean that the sub-national level should be ignored. Rather, the sub-national level ought to be analysed in its national context. The state is still the most important institution, but the state is not enough for successful implementation. If climate change can be called the most pronounced social dilemma issue in contemporary environmental politics, then it is even more interesting to acknowledge the case of Sweden, a state which has acted contrary to the expectations underlying social dilemma analyses. Let me now explain why.

SWEDEN'S PARADOXICAL BEHAVIOUR IN CLIMATE CHANGE POLITICS

Theoretically, Sweden does not have better reasons to contribute to the mitigation of climate change than other countries. Sweden is a relatively rich country which already has low GHG emissions compared to other industrialised countries and should not be more concerned than other countries, especially not if there is little reason to be sure that other countries will do their share. The paradox of Sweden's behaviour is that the country has probably contributed most of all countries in the climate change issue, in relation to its international commitments and GHG emissions per capita. Sweden is unique in that the country will over-implement its international commitments, while already having among the lowest per capita GHG emissions in the industrialised world. How should we understand this, given the powerful understanding of global climate change as a social dilemma? This is what I aim to explore in this study.

Let's consider the way Sweden has acted in the climate change issue. First, Sweden was one of the promoters of a legally binding Protocol (although the Kyoto Protocol is generally not considered successful for managing climate change[35]), even though emissions reductions would be quite costly for Sweden given its small national share of fossil fuel dependency relative to other industrialised countries.[36] Cutting emissions in a (industrialised) country with rela-

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[34] Barry & Eckersley 2005; Eckersley 2004.

[35] See McKibbin & Wilcoxen 2002; Barrett 2003: 359-406; Verweil et al. 2006; Depledge 2006 for various discussions of why the Kyoto Protocol is a badly designed treaty.

[36] This is due to Sweden's relative large share of nuclear power, which was expanded in the years after the 1970's oil crisis and which for many years was slated for decommissioning (but in March 2009 the government abandoned the ban on developing nuclear power, Government Bill 2008/09:162; Government Bill 2008/09:163).

tively low GHG emissions is considered costly because it is more difficult to decrease from relatively lower levels than from higher emissions levels.[37]

Second, some even argue that the expected consequences of climate change are not only negative but also positive for Swedish society.[38] Third, Sweden's own target is to cut its GHG emissions by an average of 4 percent in the years 2008–2012 as compared to 1990. Contrast this with the right to *increase* emissions by 4 percent according to EU's burden sharing agreement (EU as a whole has committed to reduce GHG emissions by 8 percent in the same period). This has to be considered rather unique. Sweden is not the only country which has reduced its GHG emissions quite radically. While several European countries have significantly increased their GHG emissions, Sweden together with Germany and the UK stand out as in a league of their own. However, the latter countries started from a higher level of emissions (in absolute amounts and counted as per capita) and thus e.g. cut down radically on the use of carbon power. Thus their targets according to EU's burden sharing agreement were tougher than Sweden's (UK: –12,5 percent; Germany: –21 percent). Both Germany and the UK have cut their GHG emissions more drastically percentagewise than Sweden since 1990. What makes Sweden special is that Sweden had already reduced its emissions quite radically compared to other industrialised countries, even if it wasn't due to climate considerations. The overachievement gap between the Kyoto target and actual 2006 emissions was biggest in Sweden compared to all other EU-15 countries, including the UK and Germany. Recent figures tell that Sweden is most likely to over-implement not only the EU target but also the national minus 4 percent target.[39] Moreover, Sweden's emissions reductions have been reached without accounting for carbon sinks and the use of flexible mechanisms. Sweden's per capita emissions are also considerably lower than the UK's and Germany's—in fact the lowest in EU-15.[40] Compared to international commitments Sweden will under all circumstances over-implement.

Fourth, Sweden's GHG emissions sum up to about 0,5 percent of all Annex I countries' emissions (i.e. countries with quantified commitments according to the Kyoto Protocol) and about 0,2 percent of the world's GHG emissions. Thus, what Sweden does or does not will most likely have very little effect on the global climate. From a 'rational' point of view Sweden's behaviour is hardly

[37] Cf. Nordhaus 1997; Marshall 2007.

[38] These positive effects are indicated in SOU 2007:60. Examples of positive consequences of climate change in Sweden are a favoured energy balance, improved agricultural production, and favoured conditions for summer tourism. However, it should be emphasised that the Commission's report generally depict the expected consequences of climate change as major challenges to Swedish society.

[39] Total GHG emissions, as CO_2 equivalents, decreased by 9,1 percent between 1990 and 2007, see SEPA 2009.

[40] cf. EEA 2008.

understandable. Hence, Sweden's behaviour seems to speak against the notion of states acting out of self-interest. Or does it? It would of course be too naïve to label, beforehand, Sweden the great altruist. But at least it points to the need for a closer examination of the domestic political processes that surround the signing of international agreements.

The main argument and contribution of this study is that Sweden's behaviour in climate change policy contradicts the theoretical assumption of rational and self-interested states underlying both the neorealist and neoliberal institutionalist theoretical camps, as well as expected behaviour in social dilemmas. Therefore, a careful investigation of Sweden's climate policy can contribute to the theoretical understanding of the interplay between international agreements and state policies. To analyse the domestic political processes in Sweden is thus crucial in order to understand better the conditions under which international climate and environmental cooperation can lead to desired outcomes. That is, by analysing Swedish climate policy, which seems to contradict expected behaviour of states in social dilemmas, I intend to explore possible ways out of the social dilemma, or why countries may emphasise their cooperative behaviour in international politics. In short, the analysis in this thesis suggests that *the combination* of an internationally oriented and rich country, rhetorically committed to environmental issues and international justice, and the construction of climate policy as an opportunity best explains the paradox of Sweden's behaviour in climate change politics.

UNDERSTANDING RESPONSES TO INTERNATIONAL AGREEMENTS

How can we understand states' responses to international agreements and commonly perceived global problems? One fruitful body of literature which I draw on is that on international norms and institutions, or more specifically the part of this literature that deals with international norms' impact on state behaviour and policies. Let me clarify that I am not interested in compliance with international norms or agreements, or the 'appropriate' way of treaty implementation. Compliance refers to conformity with prescribed behaviour, whereas treaty implementation has to do with the adoption of rules that aim to facilitate compliance with international agreements.[41] I make no such normative claims on what is 'appropriate' or normatively worth striving for. Rather, I am simply interested in how Sweden understands climate change as a political problem (that is, what 'is' climate change to relevant policy actors in Sweden?), how the issue of responsibility is constructed, and what action to mitigate climate change is considered necessary and possible. We already know that Sweden has opted for a more ambitious quantitative target in climate policy than obliged to according to international agreements. We also know that

[41] Simmons 1998.

Sweden most likely is going to over-implement its own target. If we want to understand why Sweden has acted so exceptionally in climate politics, then we need to analyse how the country has constructed climate change regarding the 'is', 'ought', and 'do' of politics.

The international norms literature has various branches, consisting of both rationalist and social constructivist theoretical assumptions. I find it most fruitful to take my departure in the social constructivist research camp. The reason is quite simple; it is the only perspective that does not take for granted that humans are instrumentally rational and self-interested. Such assumptions make it difficult to explain why states act against expected behaviour in social dilemmas. We may find that Sweden's strange behaviour in climate change politics cannot be called altruistic. Yet, the constructivist interest in the social construction of meaning, originating in discursive identities, is a more helpful theoretical point of departure, I argue. Constructivism makes us search for clues to policy choices in the social environment, rather than taking for granted that actors are self-interested and that their policy choices thus always can be explained because they were in line with the actors' self-interest. Such explanations seem to be like circular reasoning.

Instead of asking what national interests that can explain Sweden's behaviour in climate politics I begin by asking what it is in Swedish policy actors' understanding of the situation that makes such unique policy choices possible. To be clear, I do not claim that people or policy actors are not self-interested. Rather, I think it might be delusive to take self-interest for granted. A constructivist perspective is more open regarding human motivation, more curious one might say. My expectation of a constructivist framework is rather that it makes it possible to analyse the intertwining of material and ideational factors in policy-making. Material interests are also subject to processes of social construction of meaning. For example, oil fields or forests exist independently of human thoughts about them, but what they mean or symbolise to humans, and if and how humans should exploit them is not given on beforehand, but instead social products.

My reading of the constructivist norms literature leads me to contend that there are three key threads that need to be developed: (1) we should incorporate sub-national policy actors into the analysis; (2) we should develop the 'fitness' argument (i.e., that fitness between international and domestic norms is conducive to treaty implementation) by analysing domestically salient discourses; (3) we should deal more seriously with the issue of power, also by taking the power of socially established discourses into analytical consideration. I will discuss this thoroughly in the next chapter.

Hence, I will work with a discourse analysis perspective. The constructions of climate change as a political problem—what climate change 'is', who should have responsibility to mitigate it and why, and how it should be mitigated—is necessarily filtered through the domestic social structure consisting of socially and historically established discourses, including ideas, norms and practices.

The theoretical argument of this study is to analyse how the 'is', 'ought', and 'do' of climate policy is constructed against this background of the social structure in Sweden. That is, the domestic social structure is where I will attempt to find the keys to understand Sweden's exceptional behaviour in climate politics. Moreover, by doing this I hope to contribute to the knowledge on why states act against the theoretical expectations in global social dilemmas, which generally predict non-cooperation.

But I am also interested in the discursive representations of climate change. I think this should be analysed while having the broader environmental discourse(s) in mind, what is called the discursive order in discourse theoretical terms. The environmental field is discursively heterogeneous; there is a discursive struggle between various environmental discourses, all understanding the human–nature relations and the seriousness of, roots to, and solutions to environmental problems differently. This is also one of the main points of discourse theory; within specific discursive orders there are combating discourses, struggling for hegemony. Total hegemony, i.e., when a specific discursive understanding of social reality becomes 'objective', is theoretically possible but rare. When specific discourses are not 'objective' they are 'political', i.e. the social reality within a field like environmental politics is not taken for granted, but is left to struggles between various discursive understandings.[42]

However, students of environmental politics often argue that the discourse of ecological modernisation is the most influential contemporary environmental discourse, at least in Western liberal democracies, who also by and large dominate international politics.[43] But is it reasonable to say that ecological modernisation is the most influential contemporary environmental discourse regarding constructions of what climate change 'is', as well as constructions of responsibility to mitigate climate change, and constructions of the 'ought', i.e., the appropriate way to mitigate climate change? Further, do we find similar patterns when analysing international climate change policy as institutionalised in the UNFCCC and the Kyoto Protocol, as can be found domestically, in state and sub-national policies?

Such an analysis may contribute both to the understanding of Sweden's paradoxical behaviour in climate politics, as well as a better understanding of whether ecological modernisation is the most influential discourse regarding every aspect of environmental policy, or if this picture can be nuanced. What environmental discourses are reproduced and influential when Sweden constructs its climate policy? This is important to understand given that Sweden is such a unique and theoretically interesting case. My assumption is that domestic policy constructions will be influenced by the domestic social structure, al-

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[42] Laclau 1990.
[43] E.g. Jansen, Osland & Hanf 1998; Hajer 1995; Lundqvist 1998; Barrett 2005; Mol, Sonnenfeld & Spaargaren 2009; Bäckstrand & Lövbrand 2007.

though internationally institutionalised policy, as interpreted by domestic policy actors, is important too. The latter may also influence the domestic social structure, at least in the longer run.

The thesis is organized as follows. Chapter 2 critically discusses the norms literature and contends that despite some serious problems with the constructivist norms literature (e.g. the handling of power) it is fruitful to take its prospects as a point of departure. Then I present my theoretical framework, including a discussion of the method of analysis. One of the ways to strengthen the constructivist norms literature, I argue, is to analyse discourses because they have to do with power. Hence, I elaborate on this in chapter 2.

In chapter 3 I present and discuss various environmental discourses, which further guide the analysis in the following chapters. I shall argue that the environmental field is heterogeneous, consisting of conflicting discourses. To get a grip of this heterogeneity can contribute to a more profound analysis, but also to the understanding of discursive struggles within environmental politics. The latter helps us to see what is at stake in environmental politics—from the global to the local. Interesting to analyse is thus what kind of environmental discourse(s) that are influential in climate change policy. Many scholars argue that the discourse of ecological modernisation is hegemonic in contemporary environmental policy. This study contributes to the knowledge of whether this is the case in climate change policy.

Chapter 4 analyses the discursive articulations of the international climate change regime. It is based on both my own analyses and what other scholars have written on international climate change policy. Since climate change is generally considered a global problem and has indeed lead to intergovernmental efforts to manage it within the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol, we should first analyse how climate change has been constructed at this level. Although I do not assume that climate policy in terms of norms or discourses is simplistically 'diffused' from the international arena to the domestic it is crucial to analyse in what way international climate policy is interpreted in the domestic polity.[44] This is the core of this thesis' mission.

Chapter 5 consists of an analysis of Swedish state level climate policies, and chapter 6 analyses climate policies at the sub-national level in the Västra Götaland Region and in the municipalities Gothenburg, Stenungsund and Borås. These chapters constitute the lion's share of the thesis, and there I try to answer the questions of how the polities under scrutiny construct what climate change 'is', their own responsibility, and what (if anything) should be done to

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[44] Note that I exclude 'concerned interests' from the analysis, but stick to the political and administrative institutions; see chapter 2.

mitigate climate change. Finally, chapter 7 sums up the main findings from the study.

2. To the limits of what is thinkable

The aim of this thesis is to theoretically explore why Sweden has acted contrary to social dilemma expectations in climate policy. This is interesting since it can provide insights into possible ways out of global social dilemmas like climate change. It can also contribute to our understanding of how states—broadly understood—react to internationally decided policies. I will use a social constructivist framework and work with discourse analysis in order to fulfil this aim. The merits with such perspective will be discussed in this chapter. Let me first situate the study in the literature that deals with the importance of international norms and institutions, and how these affect domestic policy. In order to properly analyse the case of Sweden, and how Sweden has constructed its policy response to international climate policy, I need theoretical guidance from the literature that deals with the international–domestic interrelation.

Since the mid 1990's we have seen a boom in the international relations (IR) literature's treatment of international institutions and international norms, which are supposed to make claims on domestic influence. Today there are practically no objections to the importance of international institutions and the norms they generate—not even from die-hard realists. But different theories have different ways to conceive the phenomenon. The mainstream theoretical perspectives in IR can be attributed to neorealism, neoliberal institutionalism, and constructivism. More rationalistic understandings (neorealism, neoliberal institutionalism) emphasise that norms are used strategically to pursue exogenously given state interests. The constructivist work assumes that norms independently exert influence over state interests and, hence, state behaviour. This is because they help constitute identities, and it is thus identities that make norms matter in the social constructivist paradigm.

In this chapter I shall explain why I use a social constructivist framework, while I discuss the most important contributions to the relevant research field. Let me first comment that I do not thoroughly discuss theories more explicitly dealing with the domestic policy process, given my emphasis of domestic society's importance. According to this school of domestic policy analysis the state and the implementation process is viewed as complex, hence consisting of many different actors.[45] In that sense it differs from especially realist and to a lesser extent liberal accounts. According to a liberal view of the interplay between international and domestic politics domestic society's interests are sim-

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[45] The review in Underdal 1998: 12-20 indicates that this 'school' is not homogeneous.

ply reflected in a state's foreign policy, while in the domestic policy analysis tradition it is more complex than that. At the same time this literature shares with the aforementioned the assumption of rational—but constrained—utility maximizers, although not necessarily "fully consistent with that of the nation-state at large".[46] All in all, while there are some important insights in this literature, it does not sufficiently theorise the interplay between international and domestic politics, despite that it usually acknowledges the 'two-level game' of international cooperation.[47] Most importantly, this literature takes for granted what social constructivism and discourse analysis tries to problematise: "the linguistic, identity, and knowledge base of policy making".[48] Constructivism is not essentially a theory of international relations although it since the 1990's has made progress in the IR field, most distinctly Alexander Wendt's systemic theory[49], but also the norms literature which I discuss below.

This chapter is organised as follows. First, the overall characteristics of the most relevant theoretical perspectives (neorealism, neoliberalism, and social constructivism) are shortly discussed. Second, the specific theoretical and empirical debates in the norms literature, which is by and large liberal or constructivist, are discussed. These debates concern the role of domestic society, an argument about cultural match, and how to consider power issues. There are some problematic aspects in the constructivist research literature in this field, but nothing that cannot be overcome. Third, with this theoretical context in mind, it leads up to a discussion of my own analytical choices and how these can develop our understanding of the interplay between international and domestic politics, and the development of constructivist theory. In short, I argue that the concept of norms, so much emphasised in the literature, is too thin for our purpose; we need to acknowledge the broader social structure including powerful, and not so powerful, discourses which both international and domestic norms are part of. Hence, I will work with the broad concept of discourse, which consists of, *inter alia*, story-lines and norms. It is not discourses as such that attract agents, but rather story-lines and certain norms, but together these contribute to the articulation, reproduction and contestation of various discourses. Fourth, I describe my method of analysis. Through the examination of discursive practices primarily in policy documents and interviews I attempt to uncover what discursive identities that make possible the policy choices made. I also investigate in what way story-lines and norms are important in the advocation, contestation and formulation of policy, and how they contribute to change or establish the discursive field.

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46 Ibid.: 13.
47 Putnam 1988.
48 Feindt & Oels 2005: 163.
49 Wendt 1999; Wendt 2003. For a critique, yet from a social constructivist position, of Wendt's idea of a struggle for recognition, see Greenhill 2008.

The more traditional IR theories like neorealism and neoliberalism by and large miss to thoroughly analyse the domestic political answers to international problems at the 'supraterritorial' level.[50] This is due to their tendency to emphasise how state preferences are affected by the international system. Focus is on individual foreign policies, not really on the interaction between the international and the domestic and certainly not on how the international 'hits back' domestically. Neorealists are not really interested in studying domestic society, and treat the state as a unitary actor.[51] Neoliberals conceive the state as a more complex entity and argue that domestic institutions inform state interests and accordingly the content of international norms.[52] The institutionalist strand of liberalism emphasises the importance of international institutions which, if containing proper incentives, can change state and corporate behaviour (neorealism is much more pessimistic regarding these prospects).[53] Implicitly, state interests are crucial for institutionalists' understanding, but this school "takes the existence of mutual interests as given and examines the conditions under which they will lead to cooperation".[54] Yet, neither version of liberalism thoroughly discusses the domestic reaction to international norms. The main reason for this is that they are occupied with state preferences, to be promoted internationally. By and large, these theories neglect the influence of (international) ideas and norms on state behaviour.

Besides this weakness, these theories share some rationalist characteristics that are called into question by constructivists. According to the rationalist theories (but to varying degrees), political actors "are assumed to be atomistic, self-interested and rational". The interests of political actors "are assumed to be exogenous to social interaction" and hence, "society is understood as a strategic realm".[55] Part of the problem with these perspectives, critics argue, is that they take what states are trying to accomplish as given. Thus, their assumptions about states trying to maximize their relative power or absolute wealth "are too general to provide much of a guide to states, even if they are accurate assumptions".[56]

The constructivist response is to emphasize normative and ideational structures just as well as material structures. The assumption is that material re-

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[50] Scholte 2000.

[51] See e.g. Burchill 2001b; Grieco, Powell & Snidal 1993; Mearsheimer 1994/95; Grundig 2006.

[52] See e.g. Burchill 2001; Moravcsik 1997.

[53] See e.g. Haas, Keohane & Levy 1993; Young 1999.

[54] Keohane 1984: 6.

[55] Reus-Smit 2001: 213.

[56] Florini 1996: 365.

sources can be given meaning only through the shared knowledge in which they are embedded. Normative and ideational structures are important because they shape the identities of political actors. Norms can alter state identities even when these norms are not legally binding. Norms, i.e. shared understandings of appropriate or expected behaviour for a given identity in a given situation[57], can independently guide behaviour because they "are collective understandings that make behavioural claims on actors".[58] One of the main contributions from constructivists is that they endogenize state preferences; how states perceive their interests and how they try to achieve them, is shaped by socially constructed norms.

Rationalist approaches would counter that norms are defined by the material base (i.e. 'power and interests'), whereas constructivism states that norms help to *create* that material base, and not least how the material base is understood. Thus, constructivists argue that identities inform interests. It is crucial to understand how actors develop their interests, and that this can explain many political phenomena, including those that rationalists ignore or, according to constructivists, misunderstand. This rests on the ontology that agents and structure mutually constitute each other. Identities and interests are not just out there as the 'outcome' of normative and ideational structures. Identities and interests would simply not be there if it were not for actors' knowledgeable practices. Hence, institutionalized ideas and norms cannot be underestimated. They help to define meaning and identity for individuals, and what is appropriate behaviour in a given situation.[59] Hence, the constructivist research programme wants to explain state policy and national behaviour by focusing on how the norms that guide policy makers are socially constructed. This is my theoretical point of departure, although there are some problems with the constructivist norms literature which has to be dealt with first.

PROSPECTS AND PROBLEMS WITH THE NORMS LITERATURE

Constructivism has broadened our understanding of political processes by problematizing preferences. However, a common critique is that it overemphasizes international normative influence and cannot account for cross-national variation.[60] One reason for this error is that constructivists overemphasise structure and lack a theory of domestic agency. Thus they commit the same mistake as neorealism and neoliberalism, but from a different angle, when they do not sufficiently theorise the international–domestic relation. They are further criticized for underestimating the variance of domestic policy

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[57] See e.g. Cancian 1975; Jepperson, Wendt & Katzenstein 1996; Finnemore 1996; Checkel 1998; Bernstein 2001.
[58] Checkel 1998: 327f.
[59] Reus-Smit 2001: 215ff.
[60] Cortell & Davis 1996; Legro 1997; Risse et al. 1999; Checkel 2001.

change, and therefore they do not even bother to look for change mechanisms, since they seem content with establishing correlations.[61] Critics thus object that constructivists lack a theory of norm change. They may show that norms matter, and why they have causal force. But constructivism has more difficulties explaining why some norms come to prevail over others. There is a tendency in the literature to take the norms that are adopted as given, not asking why these, and not others, get selected. These perspectives thus also run the risk of missing power aspects of political processes.[62]

In the next section the existing constructivist norms literature will be discussed more in detail. The guiding questions here will be: What are the failures in the literature that we could try to overcome? What are the important insights and concepts from constructivism that should not be forgotten? How can the constructivist framework be further developed? I first paint a broad picture of the norms literature by distinguishing two waves in the literature, and point out where I hope to contribute. Then, three crucial—but problematic—aspects of the literature are discussed: (1) the role of domestic society; (2) the cultural match argument; and (3) the lack of power analysis. Each aspect is indeed worth criticising in much of the research. But my conclusion is that constructivist thinking does not necessarily have to end up at these deadlocks. Rather, if some of its core insights are taken seriously, the problems cannot only be overcome, but also lead to a contribution to the research field. For example, several constructivists have themselves not always taken concepts such as identity and the social structure seriously enough. Moreover, despite a lot of talk of 'opening up' domestic society, much more can be done in this vein. Finally, the lack of a sufficient power analysis could at least partly be overcome through the use of discourse analysis.

Universal norms and domestic society

Scholars have identified two major waves of the norms research.[63] The first was primarily interested in the promotion and spread of universal, or moral cosmopolitan norms internationally. These norms were supposed to be promoted by transnational, Western based advocacy networks (moral entrepreneurs).[64] This strand has been heavily criticised. First, for taking-for-granted that the universal norms they study "are considered more desirable and more likely to prevail than norms that are localized or particularistic".[65] Second, an underlying assumption in this literature thus seemed to be that transnational

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[61] See e.g. Checkel 1999.
[62] Cf. Bernstein 2000; Bernstein 2001; Landolt 2007.
[63] Cortell & Davis 2000; Acharaya 2004.
[64] See e.g. Nadelmann 1990; Finnemore 1993; Klotz 1995; Finnemore & Sikkink 1998;
Keck & Sikkink 1998; Risse, Ropp & Sikkink 1999; Barnett & Finnemore 1999.
[65] Acharaya 2004: 242.

agents had to teach the cosmopolitan norms, hence practically ignoring the agency role of domestic actors, but also downplaying the moral relevance of locally rooted norms.[66]

Above I mentioned that the constructivist norms literature has been criticised for not being able to explain why some norms come to prevail over others. Scholars primarily interested in the adoption of international norms in the first place have investigated whether norms with some intrinsic qualities are more likely to gain influence or persuade states. Taken-for-granted norms such as prohibitions on bodily harm, the importance of precedent in decision making, and the link between cooperation and progress have been identified as such norms.[67] This may be true, but I regard such claims on 'laws' less useful for the mission of this study. To be more specific, it is a too one-sided account, because focus is only on the international norm, while domestic society and what arguments that work in this particular setting are by and large ignored. There are no reasons to believe there are 'laws' about which norms that are most popular; this is always a process of interpretation. The same norm can be differently interpreted depending on who you are.

Cortell and Davis argue that the hard test for constructivism is to analyse cases where norms collide.[68] The problem is not necessarily the analysis of 'good' norms, but that many studies have been conducted on countries in the developing world, or in the East European countries in transition to democracy and market economy. What these have in common is the lack of strongly institutionalised norms, at least in comparison with "advanced industrial democracies with a history of national attachment to a competing norm".[69]

Unsurprisingly, following the critique of the first wave of research, the second wave consists of studies that aim to include domestic structures and agents into the analyses.[70] To some extent this observation goes hand in hand with the insight that ratification of international agreements is not the end of the line; post-agreement bargaining and new battles over the precise meaning of the norms in agreements takes place in the subsequent process.[71]

The following three sections discuss this latter literature which, despite overcoming some of the earlier studies' problems, still has some important shortcomings. These concern (1) the treatment of domestic society; (2) the

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[66] Legro 1997; Acharaya 2004; Landolt 2007.
[67] Hawkins 2004. Cf. Keck & Sikkink 1998.
[68] I will return to the issue of 'norm collision' below.
[69] Cortell & Davis 2005: 4
[70] Cortell & Davis 1996; Legro 1997; Hawkins 1997; Checkel 1999; Checkel 2001; Gurowitz 1999; Cortell & Davis 2000; Bernstein 2002; Acharaya 2004; Cardenas 2004; Landolt 2007; Cortell & Davis 2005; Leheny 2006.
[71] Jönsson & Tallberg 1998; Spector & Zartman 2003; van Kersbergen & Verbeek 2007. Post-agreement policy processes are of course also influenced by the pre-agreement processes.

static tendency of the concept of cultural match/norm fitness, and; (3) the lack of power analysis in the literature.[72] After this discussion, I continue with picking up the pieces I consider most fruitful in the literature, while adding some ingredients to my analytical toolkit.

The importance of domestic society

Several studies have shown that international norms do have an influence, but that the influence is not always the same in every country studied. Voices have been raised that we need to take into consideration more actors domestically, as well as to consider domestic structures.[73] At the root of this criticism lies the observation that constructivists de-emphasise the influence of domestic material interests and the domestic political process, thus replicating the rationalist theories' assumptions of a unitary state.[74]

The argument to consider domestic actors has to do with their importance for the process when states form their preferences, which is not done in a domestic political vacuum. Other actors may be important here, as well as the public opinion. Theoretically, influential groups in domestic society can be active in their efforts to influence state preferences.

Critics have not only complained but also tried to conduct research considering these objections. Two main paths can be identified. Most recent studies incorporate domestic agents to a higher extent than previous studies had done. Basically, this has meant incorporating state-level actors in the analysis to a larger extent than earlier. But domestic society has also come to signify domestic structures, such as state-society relations as defined by Jeffrey Checkel.[75] Depending on the state-society relation (i.e. liberal, corporatist, statist, and state-above-society) one can expect different influence for societal actors, and therefore different mechanisms of political change and resistance. The liberal structure allows for most influence from domestic society in the policy process, and the latter the least.[76] The idea is to incorporate domestic structure as an intervening variable, predicting when the rationalist and the constructivist logic, respectively, will be the dominating mechanism.[77]

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[72] The literature can be criticised on more than these three aspects. However, besides this short initial discussion, I consider these three the most important.

[73] For attempts to solve this problem, see Cortell & Davis 1996; Hawkins 1997; Legro 1997; Risse et al. 1999; Checkel 2001; Acharaya 2004; Cortell & Davis 2005; Leheny 2006.

[74] Cf. Landolt 2007; Landolt 2004. Liberals are a partial exception to this.

[75] Checkel 1997; Checkel 1999.

[76] Checkel argues that societal pressure (the rationalist mechanism) is most likely to be the mechanism in liberal and (to a lesser extent) corporatist structures. Elite learning (the constructivist mechanism) will be the mechanism in the latter two categories (especially in the state-above-society structure).

[77] This has its background in the ideal of "bridging the rationalist-constructivist divide", which emerged in the late 1990's, see e.g. Checkel 1997; Finnemore & Sikkink 1998.

Surprisingly missing in the literature, though, is the realisation that domestic actors are important as norm-takers[78] for the success of the international norm diffusion; i.e., the international norm might need to be accepted at more instances than at the state level, even if we still focus on political elites as the 'gate-keepers' in society.[79] Thus, if viewed from the perspective of international treaty makers, the 'international' norms need to be reflected in policy if full implementation is to occur, not least in times of financial distress.

This leads us to another insight; that of the potential clash between the international norm and sub-national norm structures (which will be discussed in the next section). That is not to say that the state level is unimportant; quite the opposite. But even if the state has far-reaching power and authority, it cannot fully control actors' behaviour—or their attitudes—within its area of jurisdiction. For example, different organisational cultures, or past policy, can affect local reaction to international and national norms.[80] This potential clash is apparent in areas which are marked by multi-level governance.

Climate change policy ought to be a field that illustrates the importance of sub-national actors and structures; its multi-level character is quite obvious as we saw in chapter 1. Although it is regarded as perhaps the most global issue there are, many commentators point out that not even states are enough for implementing international commitments. Since GHG's are emitted in a wide spectrum of societal sectors, local communities are conceived as necessary actors for a full implementation. Moreover, it has been recognised that local and sub-national levels of administration sometimes have taken more climate policy initiatives than national or supranational entities of which they are part, e.g. cities in Japan and China, California in the USA, and Germany in the EU.[81]

The cultural match/fitness of norms argument

A progressive step for the literature was when scholars started paying attention to the degree of cultural match. According to this argument, a key to compliance is the degree of match between the international norms and domestic practice and the adopter's experience, norms, values and intentions, which are part of a social environment. Cultural match has been defined as "a situation where the prescriptions embodied in an international norm are convergent with domestic norms, as reflected in discourse, the legal system (constitutions, judicial codes, laws) and bureaucratic agencies (organizational ethos and administrative procedures)".[82] Thus, the preferences of domestic agents, i.e. the

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[78] Checkel 1999: 85. But see Gardner 2008; Parau 2009 for recent exceptions.
[79] Bachrach & Baratz 1963.
[80] Legro 1997 touches upon this issue.
[81] Schreurs 2008. Cf. Weidner & Mez 2008; Qi et al. 2008; Mazmanian, Jurewitz & Nelson 2008; Sugiyama & Takeuchi 2008.
[82] Checkel 1999: 87.

adopter population or norm-takers, depend largely on deeply rooted domestic norms and discourses. This is based on the assumption that "social entities [i.e. actors] belong to a common social category" which "constructs a tie between them"[83]. The core argument for the cultural match hypothesis is that *similarity* between different social entities is predictive of when diffusion is to occur. Further, when international norms have to compete with highly institutionalised norms—and when there is 'mismatch'—the possibilities for policy change decrease.[84] Thus, this hypothesis is more open to national variance when it comes to the diffusion of systemic norms.

It was an important analytical step to take domestic practices, norms and discourses more seriously than merely acknowledging that domestic actors and formal structures matter. A comparison between the emerging international norms—no matter from what sources—and what these actually challenge should be considered crucial for the research field. However, there is a problem with the cultural match argument. It tends towards a static analysis, without any dynamics. What if domestic change actually occurs despite the 'mismatch' between international and domestic norms? And isn't it actually to be expected that this 'mismatch' is at place? If norm A and norm B already match each other, then real change in B does not occur, does it?

Some authors working with the fitness of norms have tried to make the argument more dynamic, thus adding more factors than fitness for diffusion to take place. One of the most interesting contributions concern systemic norms, thus not really including domestic society.[85] Building on the evolutionary theory of Ann Florini, Steven Bernstein has developed what he calls a socio-evolutionary theory.[86] Bernstein turns attention to the transformation of environmental governance ideas at the international level over the last three or so decades. He argues that since the environmental movement got its breakthrough in Stockholm in 1972, it has had to adapt to a social environment emphasising economic growth rather than environmental management. The result is the evolution and legitimation of a norm-complex which Bernstein labels liberal environmentalism.[87] To gain influence on the international agenda, environmental ideas have had to fit with the broader social structure—i.e. institutionalized and thus prevailing ideas and norms—where liberal economic norms predominate.

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[83] Strang & Meyer 1993: 490.
[84] Cf. Goldstein & Keohane 1993; Weber 1994; Checkel 1999; Risse, Ropp & Sikkink 1999; Bernstein 2001; Florini 1996. Cf. also Steinmo, Thelen & Longstreth 1992.
[85] But I don't see why the arguments could not be used in the domestic context.
[86] Florini 1996; Bernstein 2001; Bernstein 2000.
[87] A norm complex "denotes a set of norms that governs relations of authority and the values promoted that define and regulate activities in a particular issue area. A norm-complex need not be stated explicitly, but can be inferred from specific norms". (Bernstein 2001: 6).

Apart from the fitness with international social structure, Bernstein—in short—argues that this happened because actors who were important as norm-takers (i.e. government agencies and the like) considered policy entrepreneurs that operated via the OECD and the Brundtland Commission legitimate. Moreover, governments could identify themselves with these organisations and the values they represented.

The 'socio' part of the approach refers to the interaction of norms with a social structure of already existing institutionalised norms. The approach is 'evolutionary' in that it "identifies a selection process based on the interaction of ideas with their environment". But this interaction is not random; the evolution of norms is a conscious activity and involves purposeful actors that try to "gain legitimacy for the ideas they promote through legitimating institutions, that is, institutions viewed as appropriate or legitimately engaged in the task at hand."[88]

The underlying idea of the power of legitimacy is that it "is a property of a rule or rule-making institution which itself exerts a pull toward compliance on those addressed normatively because those addressed believe that the rule or institution has come into being and operates in accordance with generally accepted principles of right process."[89] However, what is viewed as legitimate among key actors cannot be disengaged from actors' identities as constituted by social structure and as socio-economic identities. These identities include their view of legitimate political and economic order.

To summarise Bernstein's argument: He identifies three factors that determine the selection of new norms, i.e., the perceived legitimacy of the source of new ideas, fitness with extant international social structure, and fitness with key actors' identities at various levels of social structure. None of these factors alone can be enough for policy change to occur, according to the socio-evolutionary approach. However, the drivers of change are "new ideas in the minds of actors and the legitimacy they can gain for such ideas".[90]

Another interesting contribution is Amitav Acharaya's use of the term 'localization', i.e. "the active construction (through discourse, framing, grafting, and cultural selection) of foreign ideas by local actors, which results in the former developing significant congruence with local beliefs and practices."[91] Norms are not simply adopted, but actively fitted into extant structures. Foreign ideas are thus borrowed and fitted into local traditions and practices, and localization (in contrast to adaptation) is more likely the stronger the local norm is.[92] Hence, localization "describes a process in which external ideas are

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[88] Ibid.: 184-85.
[89] Franck 1990: 24. For an interesting critique of Franck, see Reus-Smit 2003: 601f.
[90] Bernstein 2001: 185.
[91] Acharaya 2004: 245. Note that Acharaya's use of the term local is concerned with regional localization, and regional here means two or more states.
[92] Cf. Leheny 2006; Capie 2008.

simultaneously adapted to meet local practices."[93] Then local agents are normally the ones with the initiative, quite contrary to the majority of the norms literature, where transnational agents have been given a central position. Key to their role here is their "sense of identity that facilitates localization, especially if they possess a well-developed sense of being unique in terms of their values and interactions".[94] How legitimate local agents are viewed, and whether they can frame emerging norms as legitimate and compatible with existing local norm structures, are thus crucial for localization to occur.[95] Acharaya therefore contributes both to developing the cultural match argument and to enriching the domestic society trait. Moreover, this contribution is not that dissimilar to Bernstein's. Both these contributions also nuance the picture; it is not either acceptance or resistance, but more often "evolutionary and path-dependent forms of acceptance that fall in-between".[96]

Despite the examples just described, these insights have seldom been taken seriously; domestically rooted discourses' importance for domestic interpretation processes have often been neglected. I find it very plausible to deepen this trait of analysis. Moreover, I would downplay the cultural match/fitness side of the argument; it is not a matter of doing a jigsaw, but more of understanding how the social context shapes and constrains actors' interpretation of their reality. This argument is further developed in the next section, on power.

A lack of power analysis

Another critique of existing research within this new tradition is that it fails to identify power asymmetries, and censors material factors. According to Laura Landolt, social constructivism has a tendency to overemphasise structure and underemphasise material variables. Thus constructivists avoid questions of power and inequality.[97] Landolt tries to overcome this problem through the adoption of a critical feminist framework.[98] In her analysis powerful actors use both material and social incentives for promoting a norm of population control among resistant Third World countries. The constructivist question associated with the norms literature, "How are norms diffused among nations in the absence of material constraint?" is exchanged by Landolt to: "How and why are certain international norms, and not others, successfully promoted, diffused, adopted and implemented by states?"[99] Thus, norm constructivists tend to re-

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[93] Acharaya 2004: 251.
[94] Ibid.: 249.
[95] "[T]he existential compatibility between foreign and local norms must not be ignored" (Ibid.: 250).
[96] Ibid.: 242.
[97] See Landolt 2007; Landolt 2004.
[98] Her research (Landolt 2007) is concerned with politics of population control.
[99] Ibid.: 395; see also Bernstein 2001. Cf. also Foucault 2002 [1969]: 30.

iterate one of the problems with rationalist perspectives on decision making, namely that they do not ask the crucial question "How did the options get specified in the first place?"[100] To understand why social or natural phenomena are perceived as problems, what the problems are about, and in what way they are political, etc., it is too blunt to analyse how actors choose from a set of alternative options.

Although rationalists would criticise the constructivist norms literature for a lack of power analysis, the criticism I am interested in is not of this kind. Rather, what I would like to develop is the notion of power inherent in constructivism. This notion is not possible to develop without considering the constitutive effect of discourses, which are indeed socially constructed. And inversely, discourse analysis is impossible to conduct without the assumption that reality is socially constructed. The vast majority of the norms literature does not elaborate discourse, and how identities are linked to discourses.[101] That is a bit peculiar since it is hard to conduct a 'thick' analysis without considering the social structure actors operate within—no matter if one is interested in power or not. However, the power aspect comes 'for free' with discourse analysis. As I intend to show in the next section, discourse analysis is very much concerned with issues of power.

Landolt's question posed above is relevant but a bit dissimilar to mine. That has to do with my objection against focusing only on norms and norm change; it implies that norms can be easily identified, but also that norms are all there is at stake. Norms are indeed important, since they have the ability to guide behaviour, especially when they become politically institutionalised, i.e. become core parts of policies (it would be hard to imagine policies without their normative underpinnings). But, I argue that norms need to be understood against a discursive background, which privileges some norms over others, makes some norms, and thus policy choices, more 'thinkable' than others.

The starting-point for the empirical analysis in this study is the UNFCCC and the Kyoto Protocol. These agreements are not completely static; some things are open for amendments. But most importantly, they are discursively not coherent, and thus also contain norms that are not necessarily compatible (see chapter 4). This is probably closer to reality than the analysis of how a single international norm is diffused to domestic society, as is so common in the norms literature. We are thus here more interested in how a problem that has been constructed as global[102] is understood politically and administratively within a domestic society. Starting with the assumption that locally rooted discourses constitute actors' identities, these actors cannot understand the political problem of climate change without their available discursive repertoire.

[100] Sylvan & Voss 1998: 3.
[101] For interesting exceptions, albeit concerning how foreign policies are constructed from domestically rooted discourses, see Hopf 2002; Demker 2008.
[102] Cf. Oels 2005.

When asking why these norms are diffused or not[103], as much of the literature does, it is thus not enough to focus on the change mechanisms, but also to seriously identify what is challenged. I see two reasons for this. First, to only pay attention to the mechanisms of policy change, as is the tendency in the contemporary norms literature, there is a risk that the power of social structures is not considered. To say that political actors did this or that because it was in their interest or because they found it appropriate or it was in line with their identity can be quite trivial, not to say ad hoc.[104] Second, such an approach does not properly investigate the power of global forces over (legitimate) domestic structures. This is probably related to the fact that many studies have taken for granted that the global norms are the good ones, and to replace 'backward' norms prevalent in resistant and illegitimate regimes. This study takes another point of departure, following Cortell & Davis's argument[105] that it is just as interesting to analyse countries with a long political history in the particular issue-area, and thus having institutionalised norms in policy. Sweden fits this description well and hence it is relevant to study 'globalisation's' effects in a highly institutionalised policy context.

Despite the potential within constructivist theory, the second wave of norms literature strikingly often contains rationalistic assumptions, i.e., references to notions of the 'rational actor'. Taking constructivist assumptions seriously is not about the exclusion of material interests, as some are inclined to think, but of contextualising these interests, and to analyse the limits of the 'possible'. *That* is a more sound power analysis, in my view.

PICKING UP THE PIECES:
DISCOURSES, IDENTITIES AND EVERYDAY PRACTICE

The above has pointed out three ways of strengthening the literature: first, to incorporate sub-national, as well as state level institutions, in the analysis, second; to develop the fitness argument by analysing domestically salient discourses, and third; a more explicit focus on power. The first point has to do with the design of the study, and thus I include the Västra Götaland region and three municipalities in the analysis (see the end of this chapter and chapter 6). The second and third points are analytical and have consequences for how the analysis is conducted.

In this section I try to pick up the analytical concepts I regard as valuable from the previous sections, as well as to further discuss the advantages with discourse analysis. Given that I build on the norms literature you may find it odd that the term norm is relatively downplayed the way it is in the following.

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[103] Although, as discussed in the previous section, we should be in doubt whether this is an either/or process.
[104] That does not imply that I intend to test any 'predictive' theory.
[105] Cortell & Davis 2005: 4.

Apart from discourses, story-lines, norms, identities and legitimacy, I discuss the importance of everyday practice and habit as guiding behaviour. Why norms are analytically downplayed, but not ignored, is explained in a section below. But first let me further argue why discourse analysis is valuable.

The power of discourses

Discourse analysis was until quite recently regarded with scepticism by a majority of political scientists because it was perceived as not being able to fulfil scientific ideals. Many may still be sceptical but discourse theory is far more accepted nowadays and its focus on discourses has even influenced many other social science theories.[106] Over the last fully decade we have seen a growing amount of studies using discourse analysis of environmental politics.[107] However, the aim here is not to defend discourse analysis against its critics. I intend to introduce discourse theory in order to show how it can be used in this study, with the assumption that it may contribute to the constructivist norms literature. I am interested in public policy discourses and how these articulate and produce social and political identity constructions.[108] Given my analytical assumptions, identities are crucial not only for human life in general, but most importantly for the shaping and reshaping of public policy discourses.

Discourse theory is not a homogenous piece of literature, though. The most famous scholars connected to the so called third generation of discourse analysis[109] are Ernesto Laclau and Chantal Mouffe, who are influenced by post-structuralism, post-Marxism, and post-modernism.[110] They differ slightly from Michel Foucault, the most prominent figure of discourse theory's second generation, most importantly from his distinction of the discursive and the non-discursive. Laclau and Mouffe argue there isn't anything outside of discourse; there are no 'extra-discursive' phenomena. That is, everything is discursive, a matter which I will return to in a moment. The following presentation is based on the works of Laclau and Mouffe, but that should not imply that ideas from scholars more explicitly influenced by Foucault—or from Foucault himself—cannot be used where appropriate.[111] One such example is when I draw on the work of Maarten Hajer, who is influenced by both the work of Foucault and social psychologists as Harré, Billig and Davies.[112] In that sense I consider myself highly unorthodox and pragmatic.

[106] See Torfing 2005.
[107] Feindt & Oels 2005; Hajer & Versteeg 2005. For important contributions, see e.g. Litfin 1994; Hajer 1995. For interesting discourse and social constructivist analyses of climate change politics, see contributions in Pettenger 2007.
[108] Cf. Mottier 2005.
[109] Torfing 2005: 6-9 distinguishes between three generations of discourse theory.
[110] E.g.Laclau & Mouffe 2001 [1985].
[111] Besides, Laclau and Mouffe are also influenced by the work of Foucault.
[112] See Billig 1987; Billig et al. 1988; Davies & Harré 1990; Harré 1993.

Generally speaking, discourse is defined as a 'fixation' of meaning within a specific field, and is thus a reduction of possibilities.[113] It can be defined as "a relational ensemble of signifying sequences that weaves together semantic aspects of language and pragmatic aspects of action." Somewhat less abstract "discourse can be analysed as an ensemble of cognitive schemes, conceptual articulations, rhetorical strategies, pictures and images, symbolic actions (rituals), and structures (architectures), enunciative modalities, and narrative flows and rhythms."[114] Another definition speaks instead of "an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, and which is produced and reproduced through an identifiable set of practices."[115] The point is that 'everything' is discursive; historically specific discourses are the framework of all human practice. They shape and reshape meaning. That is, what we say, do or think is always discursive, although these practices in themselves also are part of the constant reshaping of discourses. Hence, what the norms literature is principally occupied with, ideas and norms, is from this perspective necessarily part of and conducive to a wider discursive understanding of the world.

Further, discourse is constructed in and through hegemonic struggles for the preferential right of interpretation. Thus it is dependent on human action and political decisions. Discourses and their relative position are the result of articulations, and those discourses "that manage to provide a credible principle upon which to read past, present, and future events, and capture people's hearts and minds, become hegemonic."[116] There are potentially many discourses within a specific field, although they do not all have the same power over people's minds. These struggles are analytically important, and I will thus draw on Hajer's conception of argumentative discourse analysis (see below).

Central to the theory of Laclau and Mouffe is the notion of a construction of social antagonism. This implies a manifestation of a threatening 'otherness' which we want to exclude but at the same time need in order to know who 'we' are. That is, the process of 'othering' also serves to define the limits of the discourse, which means it stabilises it. Hence, the necessary presence of the otherness implies that a discourse can never be absolutely closed, because otherness shows what exists outside the discourse.

The logical extension of this argument is that hegemonic discourses become dislocated when "confronted by new events that it cannot explain, represent, or in other ways domesticate."[117] Even though discourses are not fixed in a strict sense, and thus always open to integrate new events and open for poten-

[113] This presentation builds on Torfing 2005: 14-17 except where indicated otherwise.
[114] Ibid.: 14.
[115] Hajer 2005: 300; cf. Hajer 1995: 44.
[116] Torfing 2005: 15.
[117] Ibid.: 16.

tial change, they are not infinite. When confronting such new events that it fails to domesticate, the discursive system will be disrupted.

Inspired by psychoanalysis Laclau and Mouffe underline, because of dislocation of the discursive structure, that the subject lacks 'fullness'—in spite of its pursuit for (the illusion of) a full identity, e.g. by identifying with a political idea or program. The subject is doomed to be a split subject, and has a so called failed structural identity. The last arguments relate to the notion of identity, which I will return to and develop below. The lack of fullness is not restricted to individuals, but is also relevant when analysing society: "Society never manages fully to be society, because everything in it is penetrated by its limits, which prevent it from constituting itself as an objective reality."[118]

One merit with using discourse analysis is the acknowledgement of different discourses that compete/struggle for a hegemonic position via social antagonism. Actors often refer to different discourses, not only to one. Hence, trying to place actors in specific discursive categories is rather unfruitful; they may just as well navigate in between different discourses, depending on the situation or context. Equally, policies, ideas and norms, which are at the centre of the analysis, can refer to different discourses simultaneously; different discourses can be represented within e.g. one policy document. Thus it is not fruitful to look for total coherency, but rather one should ask oneself what is influential under what circumstances. For example, it may be that actors use a discourse that traditionally does not 'belong' to a specific field to legitimise opinions or acts. As we shall see in chapter 3 this has happened to the environmental field, which for a couple of decades has been inflicted by economic discourses and has thus been 'marketized'. This marketization of discourse is not only true for the environmental field, but has had wider implications.[119]

Another important aspect of discourse analysis is that attention is also turned to practices, e.g. strategies and the organisation of politics. Hence, even if ideas and norms are crucial for the analysis, without including their context, the analysis will be poorer. From this perspective it is important to understand how environmental politics is and has been organised in Sweden. Organising politics is discursive, not only a way to shape and execute politics.

Moreover, discourse theory emphasises both continuity and change,[120] which is what we are interested in when studying how the content of international agreements and the phenomena they aim at managing are interpreted in national and local settings. This relates to the central arguments of Acharaya and Bernstein; we seldom face either/or processes of acceptance or resistance but more often the localization of policy novelties.

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[118] Laclau & Mouffe 2001 [1985]: 127.
[119] See Fairclough 1993.
[120] Cf. Torfing 2005: 23.

What makes certain discourses attractive to people, and thus influential? There are of course various aspects explaining this. One is the role of identity, which will be discussed below. Another is the power of legitimacy, which I have hinted at earlier. Legitimacy is hard to disentangle from identity (although I do not argue they are the same thing) in that things are viewed legitimate given a certain identity.

Perhaps relating both to identity and legitimacy, this section deals with Maarten Hajer's discussion of the role of *story-lines*, a kind of narrative that "essentially works as a metaphor".[121] This refers to when the articulations made by actors take the form of narratives that function to simplify a more complex chain of articulations. "Story-lines are narratives on social reality through which elements from many different domains are combined and that provide actors with a set of symbolic references that suggest a common understanding."[122] The important thing about story-lines is that it suffices to utter a specific element to reinvoke the whole story-line. You do not have to articulate it in full; one key sentence and you are evoking this larger chain of articulations. Hence, it functions as a metaphor, which reduces discursive complexity and can be viewed as an (impossible) attempt to problem closure. When story-lines become sufficiently accepted they may "get a ritual character and give a certain permanence to the debate".[123] Consider e.g. the use of the term sustainable development, which 'everybody' (in some industrialised countries) talks about, regardless of what they put in the concept. Nevertheless, in many contexts drawing on the sustainable development story-line is probably a key to be viewed as a legitimate actor. Problems thus seem less complex than they may be. This makes it possible for actors belonging to various discourses of expertise to draw on the same story-line because they can seemingly be understood beyond their scope of activities. "In other words, a story-line provides the narrative that allows the scientist, environmentalist, politician, or whoever, to illustrate where his or her work fits into the jigsaw."[124]

Let's illustrate this by taking a closer look at the empirical case in point. Norwegian political scientist Gard Lindseth has pointed out that there are different discursive understandings of the question of the proper scale for GHG emissions reductions.[125] In his Norwegian regional case the debate concerned whether the local community of interest for the study should have a moral obligation to cut emissions, or whether it could be liberated from such claims because of the inherent nature of global warming, according to the greenhouse

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[121] Hajer 1995: 63; cf. Hajer 2005. Here, Hajer pays homage to Davies & Harré 1990.
[122] Hajer 1995: 62.
[123] Ibid.: 63.
[124] Ibid.
[125] Lindseth 2006.

theory. The attitude that all (industrialised) nations, or all societal units, have a moral responsibility to contribute to the reduction of GHG's, Lindseth calls a *National Action* discourse. Another common opinion is that emissions reductions should be made where they are most cost-efficient. In fact, one of the most commonly used 'stories' in the field of climate change can be labelled *Thinking Globally*, and it goes something like this: "From a climate change perspective it does not matter where on the Globe emissions reductions are made". This simplifies a large chain of scientific as well as normative arguments regarding what climate change 'is' and what should be done about it. It makes possible the articulations of specific policies in the UNFCCC, but also in the Norwegian or Swedish context, namely that measures should be cost-efficient. This, in turn, makes possible that quantitative responsibilities specified for countries in the Kyoto Protocol does not necessarily have to be implemented within that country's borders. Thus emissions trading becomes not only legitimate but also the key to successful reduction of GHG's. In Lindseth's regional case, Thinking Globally thus implies that it makes little sense to force each societal unit to reduce emissions at a flat rate. This 'story' was widely used by those who wanted to see the extension of a natural gas project on Norway's west coast.

I consider *National Action* and *Thinking Globally* useful concepts for the understanding of various perceptions of the proper scale of GHG emissions reductions. They are thus potentially important analytical tools especially when investigating constructions of climate responsibility. However, I prefer to treat the concepts as story-lines instead of discourses. The latter to me is a much broader concept, and something that National Action and Thinking Globally cannot live up to. The point with a story-line is that uttering a few words effectively summarises a larger chain of e.g. moral or scientific arguments. It simply reduces insecurities, and aims to legitimise certain actions and delegitimise others. In chapters 4–6 we will see the usefulness of these concepts.

In that sense, story-lines are key parts of discourses, because it is these simplified articulations that primarily attract individuals to political ideas, and make them able to communicate across different fields of expertise. From the above we understand that a story-line need not be linked to only one wider discourse, but can be drawn on from various discursive perspectives. Hajer regards story-lines as the vehicles of change. I see no reason to contradict. However, he holds that "the power of story-lines is essentially based on the idea that it sounds right", which concerns whether the argument is found plausible according to one's own discursive identity, as well as whether the author of the argument is trusted.[126] He does so without further elaborating on the concepts of legitimacy and identity. Once again, I think that it is difficult to discuss legitimacy without considering individuals' discursive identities, which make

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[126] Hajer 1995: 63.

some actors and the ideas they represent more prone to be viewed as legitimate, and some less so. I will develop this argument in the next section.

Being inspired by Hajer's analyses, which make story-lines the central analytical concept[127], it is fair to call my analytical approach argumentative discourse analysis. It is the linguistic base of politics that I am concerned with, and how actors try to gain influence and legitimacy for their discursive positions, i.e. the material analysed will be impregnated with arguments. However, these arguments are not only about the logical attractiveness of them, but whether they 'sound right', as explained above. "Whether something sounds right is not only influenced by the plausibility of the argument itself, but also by the trust that people have in the author that utters the argument and the practice in which it is produced and is also influenced by the acceptability of a story-line for their own discursive identity,"[128] Thus, the acceptance of policy proposals depends on actors' discursive identity, which defines what is viewed as legitimate or not.

On the link between identity and discourse

Clearly, all individuals have multiple identities. But as stated by Ted Hopf, "if all humans have their own personalities and at least some control over their surroundings, why do we see so much apparently patterned and ordered activity in social life? This question leads to suspect the existence of social structures in any society."[129] Simply put, this implies the social origins of identity. If society consists "of a social cognitive structure within which operate many discursive formations" (which I think it does) then "identities constitute discursive formations".[130] Thus, it is difficult to assume exogenously given identities, without considering the social structure of domestically/locally rooted discourses. And on the contrary, identities help reproduce these discourses, including their incremental change.

Central to identity constructions is the distinction between Self and Other. In order to become, to construct a Self, it is necessary to mirror oneself in the Other. "Who am I in relation to this Other?" is the question individuals ask themselves unconsciously (or perhaps sometimes consciously). This implies that identities are meaningless, or even impossible, without considering the Other. The Swedish state's identity of an outward-looking internationalist state[131] would not exist if it were not for the perception of other states being non-internationalist. But the Other does not have to be something opposi-

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[127] Together with the concept of 'discourse coalitions', consisting, *inter alia*, of story-lines, but I will not use this concept in my analysis.
[128] Hajer 1995: 63.
[129] Hopf 2002: 1.
[130] Ibid.: 3.
[131] Cf. Bergman 2007.

tional to the Self just because identities always are relational; this is in the end an empirical question.[132] The Self can just as well identify with the Other. When the Self finds the Other to be different, this may "result in the alteration of the Self's identity in the direction of that Other".[133] This Other does not have to be a person, but can just as well be an idea, history or place. Hopf exemplifies this by recalling "Antonio Gramsci's theory of hegemony. What most threatens a bourgeois regime is not a coup or an armed rebellion but rather an alternative ideology that can credibly compete."[134] Following this argument, I would depict the notion of the *People's Home* (*folkhemmet*) as an important historical Other for Swedish Social Democracy, who dusted off this image in the mid 1990's and launched the *Green People's Home* in order to legitimise environmental policy measures. This is a historical other which late twentieth century Social Democracy could identify with, even if the image of the People's Home very much belonged to an era at least half a century back in time.

From this conception of identities it is logical that they inform interests. A common misconception of social constructivism, in my view, is that it ignores interests. In my reading, however, it rather does the opposite: it takes interests seriously in that it aims at investigating where interests come from, not taking them for granted. As Hajer explains with reference to Foucault, "the reference to institutional backgrounds or vested interests is an unsatisfactory circular explanation because institutions are only powerful in so far they are constituted as authorities *vis-à-vis* other actors through discourse. [...] The point here is that interests have to be constantly reproduced and will change over time"[135]. Thus, it is via the investigation of identities and public policy discourses that we can understand how Sweden constructs its interests in climate policy. Hence, scholars have suggested that analysis should start with investigating everyday practices instead of looking for e.g. norms or interests. "The exclusive search for norms and rules necessarily precludes the recovery of everyday practice, but the search for everyday practice necessarily will recover the explicit invocation of norms."[136] This is a way to overcome the criticism of mainstream constructivism that scholars have had a tendency to treat identities as fixed and pre-social entities.[137] Thus, by endogenizing identities, domestically and locally rooted discourses can be accounted for.

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[132] Cf. Hopf 2002: 7.
[133] Ibid.:8.
[134] Ibid.: 8.
[135] Hajer 1995: 51.
[136] Hopf 2002: 12. Cf. Hodgson 1997.
[137] Cederman & Daase 2003.

Discourse and norms

Since ideas and norms are important to the analysis a few remarks on their relation are at place. Norms are commonly defined as shared understandings of appropriate or expected behaviour for a given identity in a given situation. I draw on Bernstein's definition when he builds on Goldstein and Keohane (1993) while arguing that ideas can be viewed as proposals for new norms if viewed as "an ideology, worldview, principled belief, or causal belief. Each type of action can be potentially stated as a norm if it provides an orientation to action. The importance of ideas in politics comes about through their collective legitimation—that is, when they take on a normative flavour"[138]. Thus, it seems hard to separate ideas and norms in any meaningful sense for the analysis; if we 'see' a norm, there must be an idea behind. Moreover, when ideas get institutionalised in policies, e.g. in a Protocol, they are directed towards action, and hence necessarily take the shape of norms.

However, I do not make any claims that norms actually guide behaviour, because that would be to pre-theorise what can be hard to identify. As we have seen, it seems that norms sometimes guide behaviour, but sometimes are violated. Rather I start from the assumption that people most often do things—their everyday practices—out of habit.[139] Thus, individuals seldom look at a (new) norm and think: "let's obey this norm!" Instead, in order to understand Others (which can also be ideas or historical places/myths) one first has to understand who oneself is, and this would be impossible without discursive formations. This does not totally rule out norms from the analysis, because norms are subsumed to the logics of everyday practice. But explicitly searching for norms would potentially miss how identities are shaped and how they actually treat norms. Norms—when identified in the data—are important for other reasons; they show us the normative side of politics, and thus what a political society (in discourse) values, how it structures that society.

Finally, my aim has been to link norms to discourses, although I do not consider that norms necessarily guide behaviour in any conscious way. However, as others have recently distinguished, the connection between norms and discourses has "not been sufficiently examined in the constructivist empirical literature."[140] Norms can be said to constitute the underlying expression of discourses, but also the necessary 'oughts' and 'ought-nots' that follow logically from discourses. Political debates are often about exactly these normative ingredients of politics, but cannot be understood without the discursive frameworks within which they operate.[141] At the same time norms, as well as e.g.

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[138] Bernstein 2001: 8.
[139] Hodgson 1997; Hopf 2002.
[140] Cass & Pettenger 2007: 238.
[141] Ibid; Fogel 2007.

story-lines, have the potential of being contested, reinterpreted, and thus re-shape the discursive field which they are part of building up.

APPROACHING DATA

In principal I could analyse a wide spectrum of material in order to conduct a 'thick' description of practices and institutions.[142] However, the analysed material consists essentially of public policy documents but also of interviews with policy actors (politicians and public servants). It should thus be clear that I restrict the study to the public sector, i.e., the political and administrative level of relevance for the policy area in the selected polities. It is primarily the Swedish *polity's* interpretation of climate change that I am concerned with, because it is Sweden as a nation that has behaved unexpectedly in climate politics. What discursive understanding of climate change as a political problem, of the country's responsibility to mitigate climate change, and of necessary and possible action makes Sweden's behaviour possible? Were it only up to the 'concerned interests', not least the industry, it is questionable if Sweden would have acted this way. If anything, I expect that the Swedish polity has made the industry accept Swedish climate policy, rather than the opposite.[143] Thus, although admitting the governance literature's main argument, that politically important actors are manifold, I concur with those who do not see a 'hollowing out' of the state and government agencies, rather that

> the state still plays a key role in local, national and transnational policy processes, but the state is to an increasing extent 'de-governmentalized' as it no longer monopolizes the governing of the general well-being of the population in the way that it used to.[144]

This means I choose not to analyse concerned interests, be that industry, environmental organisations or public opinion. If I have to drop any ambition it is this, since I am particularly interested in analysing public policy discourses, not least because these can be argued to structure society through the establishment of political institutions. The other levels of analysis mentioned above would thus be interesting since they may affect the level of analysis that I am interested in. However, when relevant, I try to get a grip of how political actors

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[142] Cf. Howarth 2005.

[143] That important representatives from Swedish industry (such as BIL Sweden [*Bilindustriföreningen*], the Confederation of Swedish Enterprise [*Svenskt Näringsliv*] and the Swedish Petroleum Institute) by and large accepted the government's climate strategy, as well as the consensual understanding of what climate change 'is', is quite clear; see http://www.bilsweden.se/web/Klimat_1.aspx?Guid=0e6c4e1e-db2a-411a-b4a5-03333bf8cb9d; http://www.svensktnaringsliv.se/multimedia/archive/00012/-M_jligheter_och_kost_12841a.pdf; http://www.spi.se/kommentar.asp?art=73; all accessed on 14 May 2009.

[144] Sørensen & Torfing 2007: 3. Cf. Pierre & Peters 2000.

interpret the concerned interests at stake, not least in that the latter are often included in the policy process by having a say in the Official Reports of the Swedish Government (SOU's) and in an equivalent way sub-nationally.

Analytical proceedings

The guiding principle for the analysis has been to "locate and analyse the mechanisms by which meaning is produced, fixed, contested, and subverted within particular texts."[145] I thus try to show what discursive identities that make possible the policy solutions preferred (and make 'impossible' other policy solutions), but also alternative views advocated. I analyze which story-lines that are principally used and which underlying norms that are influential and hard to break with. Further, in chapter 3 I discuss various environmental discourses, which serve to bring clarity to discursive debates in the field of environmental politics. These environmental discourses differ among other things when it comes to key story-lines and norms, implying different views on nature and environmental problems, how they should be managed and so on. Thus, analysing what story-lines and norms that constitute a certain discourse helps to nuance the picture. My assumption is that norms and story-lines help to reproduce and promote discourses, and in the end it is a question of what discourses that have a hold of international and Swedish climate policy; how is climate change, the question of responsibility for managing it, and the choice of policy measures made sense of discursively?

The material analysed will by all means articulate norms and story-lines that are influential in the domestic social structure, thus affecting the localisation of international climate policy. This does not mean that the domestic social structure will *determine* the interpretation of international climate policy in Sweden, because the domestic social structure (in terms of influential norms, story-lines and discourses) may just as well be affected by the international climate discourse. Moreover, the fitness between international climate discourse and the domestic social structure is important for *how* the former is to be localised in the latter. As will be clear, this certainly is about the contextualisation of material interests. I argue this has to do with discursive power relations, and the limits of what is perceived as possible.

How do I find discourses, story-lines and norms in the material? There's no magic to this. This is my construction of social reality, not admitting this would be foolish. However, while doing this work I subject myself to a science discourse and scientific standards. The reader has to be able to follow my interpretations, although not necessarily agree with them. The analysis is primarily about reading the material carefully. I need to understand and uncover what view on legitimate social order that underlies certain articulations, if

[145] Howarth 2005: 341.

there are patterns in the material, and if there are incoherent or opposing views articulated. That is, it is not the simple search for norms that is the key, but the understanding of who policy actors think they and their polity are, what is viewed as legitimate and reasonable to do given their identity and the context they operate within. Thus, I am interested in articulations that describe interpretations of what climate change 'is', whose responsibility the mitigation of climate change is (especially why the own polity should contribute to this), and what should be done to mitigate climate change (by the own polity). My ambition has been to let the material speak for itself, i.e., not forcing my framework of analysis upon the material. If there are no story-lines, there are no story-lines. Rather, often the articulated norms, story-lines, and discourses were easiest to detect when there were conflicting views on e.g. the question of responsibility. That is, when e.g. responsibility became an empty signifier, i.e., a concept which could have many meanings, the normative underpinnings became clear.[146] The norms themselves did not have to attract policy actors, but rather the story-lines they were part of or helped to constitute. After several readings of the material it became clear that patterns could be identified. For example, the norm of cost-efficiency, regarding how climate change should be managed properly, turned out to be reproduced over and over again, and more emphasised over the years in the Swedish polity. The norm of cost-efficiency also stood out as important in that it often conflicted with a norm of justice, spelling out that responsibility should be distributed to different societal units (including states), even if this would imply emissions reductions that are not considered the most cost-efficient. The conflict between norms of cost-efficiency and justice corresponded to a similar conflict between the Thinking Globally and National Action story-lines. These broader stories actually 'made sense' of norms; norms of cost-efficiency and justice could probably not be articulated without broader stories that could legitimise these norms, and give them content and meaning. This tension between cost-efficiency and justice represent one of the major cleavages in contemporary climate discourse, internationally, as well as in Sweden.

Next, it is important to remember for the analysis how influential discourses are. I draw on Hajer's distinction between *discourse structuration*, i.e. "when a discourse starts to dominate the way a given social unit [...] conceptualizes the world", and *discourse institutionalization*, which takes place when "a discourse solidifies in particular institutional arrangements".[147] This implies different levels of influence for a given discourse, but when both kinds are identified we can conclude that a particular discourse is dominant. The effect of this, in the longer run, is when discourses become so established that one

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[146] Cf. Laclau 1990: 28.
[147] Hajer 2005: 303.

'forgets' their contingency, i.e. when they are 'objective'.[148] Thus, when norms, story-lines, and discourses are reproduced in political discourse—in various kinds of material—I regard them as structured. When they become solidified in policy, e.g. underlying arguments for decided policy solutions, I regard them as institutionalised.

Analysed cases and material

Now, let's see what this implies for the analyses in the various empirical chapters. First, I will analyse international climate policy, which make demands on states participating in the UNFCCC (chapter 4). For the subsequent analysis of Swedish climate policy (chapters 5 and 6) to be meaningful from the theoretical point of departure, international climate policy has to be understood in terms of influential norms, story-lines and discourses. How is internationally institutionalised climate policy interpreted domestically? Do we see a similar pattern domestically in Sweden as internationally? Are the struggles for the preferential right of interpretation internationally reflected in domestic policy processes? Thus, I analyse the UNFCCC and the Kyoto Protocol, but will also draw on other scholars' analyses of international climate policy and politics. This method is quite dissimilar to the one carried out in the chapters to follow. In the analysis of international climate policy I do not make use of interviews, and the primary sources analysed are relatively few. Instead, I make a quite extensive use of secondary sources, like other scholars' analyses of international climate policy. One may object to this strategy, but the aim with the analysis in chapter 4 is not the same as in chapters 5 and 6, when I turn to the case of Sweden. The aim with chapter 4 is to understand international climate policy discursively, and for this I find it sufficient to analyse the UNFCCC and the Kyoto Protocol, as well as other scholarly literature on the processes surrounding these politically important documents.

Second, I analyze Swedish state level policies (chapter 5). Sweden is chosen because it has set up objectives more ambitious than the country has been committed to internationally. Moreover, Sweden will most likely over-implement its objectives in the Kyoto period (1990–2008/2012). From a theoretical perspective this is quite interesting, and I thus argue that it is worth investigating Swedish discursive understandings of climate change as a political and societal problem. Sweden has typical corporatist features and is generally considered an environmental forerunner (see chapter 5). The forerunner feature is not anything new to students of environmental politics, but worth investigating in more detail: How should we understand Sweden's willingness to be an environmental forerunner? What does the special character of interna-

[148] Laclau 1990.

tional climate policy imply for the Swedish polity? Given that parts of it are considered controversial it is interesting how Sweden interprets it.

State Government Bills are above all prepared in the Ministry of Environment and the Ministry of Enterprise, Energy and Communications (both ministries have slightly changed their names over the years), and thus these ministries are at the centre of the analysis. When relevant, I also analyze public Committee reports (SOU's) and other key state authorities' reports, primarily from the Swedish Environmental Protection Agency (SEPA) and Swedish Energy Agency (SEA). To get a better understanding of the potential political clashes and the discursive limits, I analysed interpellations and parliamentary debates on climate change politics. Further, I carried out in-depth interviews with politicians and public servants with a good insight in Swedish climate policy, in order to both get a more nuanced picture of climate policy considerations, and to either test or strengthen my interpretations of policy documents. Together, this is an abundant piece of material.

Of greatest importance are of course Government Bills, which spell out policy proposals, and how the governments 'think'. Therefore Government Bills are more important than most other sources when I identify discourse institutionalisations. Given that climate policy spans over several political areas, and that different Ministries thus had influence over climate policy, I found it important to analyse Bills from several Ministries, as well as to interview staff from the two most important Ministries in climate policy; the Ministry of Environment and the Ministry of Enterprise, Energy and Communications. The public Committee reports (SOU's) are quite important in the Swedish policy process in that they provide basis for the political discussion, which is more detailed than in Government Bills, and because they are circulated for consideration to the parties concerned. The latter could indicate to what extent other policy relevant actors supported or challenged state authorities' discursive interpretation. Interviews gave me a richer description of how key policy actors understood climate change as a political problem, which perhaps was not to be found in policy documents. The analysis of such various sources provided the opportunity to compare different authorities and governments, and to see patterns across these sources—which indeed was found. These patterns relate to power because they indicate what interpretations that are structurated or institutionalised, and thus what is 'thinkable'. When various sources reproduced similar constructions it strengthened my conclusions. When various sources or actors reproduced different constructions, it was telling of the existence of discursive struggles, or that constructions changed over time. Such struggles do not have to imply status quo, but rather that, e.g., one story-line may be structurated, but be significantly challenged by other story-lines.

There is one important difference between texts and interviews regarding the analysis. Textual documents are not unique in the sense that I have not myself been part of their production. I can interpret and analyse them from a distance. The interviews are quite dissimilar because I cannot distance myself

from the material I analyse; I am very much part of the production of this unique material, and situated 'within' the discourse. This does not mean that interview material is of less value to me. But I need to be careful when I interpret interviews. It would be hard to conclude that certain norms, story-lines or discourses are structurated or institutionalised based only on an analysis of interviews; policy documents need to be my baseline. But interviews can potentially strengthen my interpretations of other sources, and provide information that I cannot get hold of elsewhere (e.g., regarding whether there had been conflicting views within or between administrations prior to policy formulation, which was not reflected in documents). The discussion of material qualities in the last two paragraphs is valid also concerning the sub-national level.

Third, at the sub-national level the Västra Götaland Region (VGR) is selected (chapter 6). The VGR mandate comes both from 'above' (the County Board [*Länsstyrelsen*], the state's prolonged arm in the regions) and from 'below' (the Regional Council [*Regionstyrelsen*], which is publicly elected). VGR together with Region Skåne were launched on trial in 1998, and they were fusions of smaller regions (*landsting*). The background was that larger regions would be able to meet demands on administrative capacity, which the older and smaller regions lacked. These larger regions are expected to stand as role-models for the rest of Sweden, although this has caused debate.[149] What makes a region like VGR interesting from our point of view is nevertheless the fact that the Regional Council has gained in power in relation to the former *landsting*, and in relation to the County Board. Thus, we have an interesting tension at one single geographical level between the regional state institution (the County Board) and the Regional Council, which is publicly elected. As I understand it this solution is quite unique for Sweden.[150] What does this imply for the sub-national interpretation of climate change as a political problem? And what does it imply for the municipalities' work with climate change? The material analysed in the study of regional and local public institutions is similar to the material analysed regarding the study of the state level. The difference is that the regional and local levels lack policy documents to the extent that state institutions have produced. Hence, I have had no other choice than to rely on material on websites and interviews to a larger extent here. This is of course not optimal; one can argue that for my purposes such material is of lower quality than policy documents comparative to, e.g., Government Bills. However, what is important is how the polities analysed—be it the state, the regional or local polities—construct and present their views on what climate change 'is', the question of responsibility, and what should be done about cli-

[149] SOU 2007:10.
[150] The Swedish situation is special because the municipalities are comparatively strong, beside the tension at one single geographical level, and that it also varies between different regions. "All in all, Sweden's regional organization is very strange and complicated from a European perspective" (Berg & Lindahl 2007: 35). My translation.

mate change. This can be done in website material and interviews, even if many aspects of climate policy will not get as elaborated in such material as in policy documents. In fact, the analysis will show that there is a difference in terms of elaboration between the state and sub-national levels. This may at least partly be attributed to differences in the material's quality.

Finally (also in chapter 6) I analyze policies in three municipalities in the VGR: first, the region's largest and Sweden's second largest city, Gothenburg; second, the quite small seaside municipality of Stenungsund with the country's major centre for heavy petrochemical industry and thus relatively high per capita emissions, and; third, the inland mid-size municipality, with a history of trade and textile industry, Borås. I wanted to have variation primarily when it comes to size and administrative capacity, and municipalities' economic structure, which could indicate variations in economic dependency.[151] The municipalities also vary regarding environmental record, and have had somewhat different political majorities in a historical perspective. These characteristics are part of what I argue constitute identity constructions and are therefore contributing to the perceptions of specific interests. What do these differences imply for the interpretation of climate change as a political problem?

This design provides the opportunity to 'open up' the state, and thus relate Sweden's discursive understanding of a political problem that has been identified internationally, to that of political entities at the sub-national level, which are to some extent dependent on state policies. The aim is not to generalize across all Sweden's regions and municipalities, but simply to provide examples of how the relation between these political levels *may* look like, and in what way a sub-national analysis could contribute to the literature on the domestic impact of international agreements.

[151] I do not think this economic dependency determines policy outcomes. Rather, I want to explore how such material bases are discursively understood, something I believe vary.

3. Environmental discourses

Before analysing international, national and sub-national climate policy I devote this chapter to discuss more general environmental discourses. The wider aim of the study is to contribute to the understanding of domestic interpretations of the international agreements on climate change. One could argue that the discourse on climate change is what is worth analysing, just like scholars may talk of the discourse of medicine, the discourse of science etc.[152] The guiding question would thus concern how the climate change policy field is structured. The discourse on climate change is probably not disentangled from other discourses. Potentially, climate policy could be constructed in and through a multitude of discourses on e.g. technique, the economy, foreign policy, science, infrastructure, and so on. However, I find it implausible to paint a picture of 'everything'. Instead, I proceed from what is perceived as common knowledge among students of environmental policy; that we can identify various competing discourses on the environment.[153]

Hence, I have restricted myself to describe various *environmental* discourses. There is a variety of environmental discourses with distinct ways of describing environmental problems, why they originate and the solutions to them. Thus, I think it is a more fruitful analytical strategy to investigate which of these environmental discourses that have influence over climate policy, and in what way. While limiting the description in this chapter merely to environmental discourses, it is nevertheless a result of my choices. In order to conduct the analysis in the following chapters I here ask which discourses that are probable to find articulated in the data. An underlying aim has also been to describe the discursive tensions in environmental politics, and implicitly to show what discourses that—at the general level—have been influential at different points of time.

This means that these discourses are not necessarily empirically exhaustive; we may find other discourses when confronted with the material. Neither are the discourses mutually exclusive, like ideal types are supposed to be. Further, the discourses I discuss in this chapter should not be mixed up with e.g. social groups who share a certain view of environmental issues. Rather, the point with discourses is that they are not reducible to (groups of) individuals, but that individuals are discursively incoherent. Therefore, we should not expect

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[152] Cf. Foucault 2002 [1969].
[153] Cf. Hajer 1995: 45.

an individual or an organisation to exclusively draw on one single discourse. This can be contrasted with e.g. ideologies, which are more manifest, and can be argued to guide some people in a more conscious way.

One may object that the environmental discourses presented below are too 'forced' into the analytical framework presented in the next section and summarised in table 3.1. The major point with this organisation is to be as clear as possible, to present the various discourses as fair as possible. One may also object that this presentation gives the impression that the discourse analysis is not about power. That is, the discussion of all these environmental discourses may indicate that they are basically equally influential, that people just pick what they like from this buffet of environmental discourses. That is neither my intention, nor my theoretical position. The fact that a discourse 'exists' does not imply that it has to be as influential as other discourses in the field. Quite the opposite; one major aim with the analysis is to understand the structuration of climate change discourse; internationally, and domestically in Sweden (at the state, regional and local level). Some of the discourses presented in this chapter are not even very likely to be found in the material I analyse in chapters 4–6. Contemporary environmental discourse in Western liberal countries, who dominate international politics, is often said to be highly marked by the discourse of ecological modernisation. Is this true for climate change politics, at all levels (internationally, in Sweden at the state level, in the Västra Götaland region, and in the three municipalities analysed), and regarding all analytical dimensions (what climate change 'is', who should have responsibility to manage climate change and why, and what action that is considered necessary and possible to manage climate change)?

ENVIRONMENTAL DISCOURSES FROM STOCKHOLM TO KYOTO

Clearly, environmental politics is not what it used to be a few decades ago. Core ideas about what constitutes environmental problems and their solution have changed. Scholars have described contemporary dominant environmental discourse as ecological modernisation or liberal environmentalism[154]. In short, this normative shift has been characterized as going from 'environmental protection' via 'managed sustainable growth' to 'liberal environmentalism'.[155] In the 1960's and 1970's a common conclusion was that the existing capitalist

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[154] Weale 1992; Hajer 1995; Jansen, Osland & Hanf 1998; Bernstein 2000; Bernstein 2001. Bernstein uses the term norm-complex instead of discourse.

[155] Bernstein 2001: e.g. Table 1, p. 109. It should be noted that this dominant environmental discourse, although in some sense is international, can be assigned to the Western liberal democracies. These countries are most influential, and the driving forces, in the international environmental cooperation. Since these ideas influence international agreements, they also have some impact on other countries, not least if one bears in mind that other international institutions, like the World Bank and the IMF, promote similar ideas in other policy fields, cf. Woods 2006.

economic state system was the root to environmental degradation. Today the dominant interpretation is that the same institutions are the potential solutions to the problems they cause, a view that opens for conceiving environmental problems as market failures which can be overcome if the right incentives are provided. In that sense, environmental discourse has gone through quite radical changes during the past decades.

The aim in this chapter is not to explain this normative shift. Instead, I intend to describe the discourses which I consider central to the environmental field for the last decades.[156] All of these may be drawn on in policy documents and by policy actors in interviews. In terms of historical epochs the discourses I discuss are nevertheless children of the late twentieth century.[157]

First, I discuss the perspectives critical of what they perceive as the 'dominator culture' of industrial societies. The doomsday discourse of *survivalism* is followed by a discussion of *green radicalism/civic environmentalism*. These discourses are very concerned with global environmental change and (to various extents) identify over-population, over-consumption and industrialism/the capitalist economic order as the main causes of environmental degradation.

Second, this can be contrasted with the minimal-state discourse of *market liberalism*, according to which environmental problems are cured by more economic growth rather than less. Market liberalism in its purest form is not very likely to be a dominant discourse, but I argue that it is has been influential in that other discourses have 'borrowed' some of its core ideas.

Third, I continue with a description of the institutionalist family of discourses, which consists of four discourses divided into two different veins: *administrative rationalism*, *green governmentality*, *ecological modernisation* and *liberal environmentalism*. Green governmentality also has a less influential 'reflexive' version (which may also be called *democratic pragmatism*).

When discussing these discourses I pay special attention to how they conceive of basic entities in society, assumptions of agents and their motives, why there are environmental problems and how one should solve them, and what the key story-lines and norms emphasised are. Attention to which basic entity in society that is recognised is important since it can be argued to signify a dis-

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[156] This discussion of the most common and influential environmental discourses is mainly based on Dryzek 2005; Clapp & Dauvergne 2005; Bäckstrand & Lövbrand 2007. I choose this instead of here going to all original sources. And the reason is simple; competent researchers have already done a pretty good job so there is no reason to reinvent the wheel. To some extent their analyses are overlapping; where not, I try to make sense of them in order to construct the best possible analytical tools. Note that Bäckstrand and Lövbrand are explicitly occupied with discourses relevant in the climate change regime, whereas the others deal with environmental discourses in general.

[157] The presentation no doubt has a slight character of describing the environmental debate throughout these decades.

course's ontology. Various discourses emphasise as different things as the Earth as an eco-system, rational individuals or states.[158] Assumptions of agents and their motives is significant because depending on whether one assume that humans are selfish, altruistic, or have more mixed motives have consequences for how environmental problems are considered to be solved.[159] Next, the perceived causes of environmental problems are important for the understanding of what solutions that are being considered legitimate from various discursive positions. Some discourses may single out over-population and capitalism as the root problem, whereas others point at market failures, lack of knowledge, or inefficiency as the most important causes of environmental problems.[160] This is of course intimately linked with how environmental problems should be solved. The answers are as manifold as there are discourses; some emphasise decentralisation of decision making, others the importance of economic growth (others may see this as the root to the problem), and yet others 'mega-science', planning, and proper incentives to market actors.[161] Dryzek pays attention to the key metaphors of discourses, i.e., "rhetorical devices, deployed to convince listeners or readers by putting a situation in a particular light."[162] This is similar to story-lines discussed in chapter 2. Every discourse has its key story or narrative that attempts to attract people. This story-line is often a rather complex chain of arguments, but which can produce telling and attracting images while only uttering a few words or a couple of sentences. Together with norms, story-lines are important parts of discourses, I argue. They both attract potential audiences and tell what is valued in the discourse, and norms are particularly action-oriented. The presentation of the environmental discourses covered in the following is summarised along the above mentioned analytical dimensions in table 3.1 at the end of the chapter.[163]

Critics of industrialism

The environmental movement is perhaps most commonly associated with discourses that object to industrialised countries' structures and the overarching goal of economic growth. In this section I discuss two discourses—survivalism and civic environmentalism—who are united in their criticism of *status quo* approaches, but who nevertheless are different regarding their view of the root to environmental degradation and, accordingly, how best to overcome it.

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[158] Dryzek 2005: 17.
[159] Ibid.: 18.
[160] Clapp & Dauvergne 2005: 14.
[161] Cf. Ibid.: 15.
[162] Dryzek 2005: 19.
[163] Note that what analytical dimensions of discourses that I pay particular attention to is inspired by various sources. Apart from some of Dryzek's and Clapp & Dauvergne's suggestions I add my key analytical concepts 'story-line' and 'norm'.

The world is finite: survivalism

The survivalist discourse had its heyday in the early days of international environmentalism, i.e. the era of the first UN conferences on the environment, in the beginning of the 1970's.[164] At this time The Limits to Growth was identified as the logical normative conclusion given the consequences of the inherently wasteful sides of capitalism.[165] The Limits to Growth story-line of the survivalist discourse is of course first and foremost assigned to the environmental movement. The early environmental discourse of the 1960's/1970's was to a large extent influenced by survivalism (sometimes called *bioenvironmentalism*) and, to a lesser extent, green radicalism.[166] However, as Jansen et al point out, these ideas did not influence that many of the West European OECD countries' policies.[167]

Survivalism is inspired by the laws in the physical sciences and hence focuses on the biological limits of the Earth. The roots to environmental problems are overpopulation, economic growth, capitalism and consumerism in a world with finite resources. The basic entity analysed is the Earth as an ecosystem which is self-regulating but nevertheless a complex, and holistic superorganism. The focus is on the carrying capacity of ecosystems; there are limits to what ecosystems can withstand and small disturbances can potentially destroy the system. Hence, the obvious conclusion in the survivalist discourse is The Limits to Growth. Economic growth will, if not managed carefully, unmistakably lead to a too severe stress on the Earth's ecosystems.[168]

Drastic changes are needed in order to avoid this doomsday scenario. Therefore, forceful action by an enlightened elite is necessary; humans are generally considered as selfish, not able to act for the sake of common good if not forced to.[169] Thinkers prone to emphasise the conflict over resources and that the solution to this 'race to the bottoms' spells 'Leviathan', are hence

[164] The United Nations Conference on the Human Environment in Stockholm in 1972 is often called the first intergovernmental meeting legitimating environmental issues and global action based on a common framework.

[165] E.g. Meadows et al. 1972.

[166] When assigning 'early environmental discourse' to this period I do not mean that there were no environmental discourses before the 1960's, only that environmentalism was not politically that relevant before this period, which is commonly characterized as the period of 'environmental awakening'.

[167] Jansen, Osland & Hanf 1998: 289. The point here, though, is not that these discursive articulations have wide impact always, everywhere. Rather, it can be expected that the more hegemonic a certain discourse becomes internationally, and accordingly impregnating international accords, the more likely it is that that discourse will influence specific state policies. Nevertheless, that is in the end an empirical question.

[168] Dryzek 2005: 27-50; Clapp & Dauvergne 2005: 9-11. Note that Clapp & Dauvergne labels this discourse "bioenvironmentalism".

[169] Cf. Hardin 1968.

sometimes labelled eco-authoritarians. In this discourse, population and eco-nomic growth as well as consumerism have to be limited. The only way to fulfil these necessary goals is via 'collective coercion'. Some who cling to this discourse hence advocate the creation of a world government.[170]

Linking environmental degradation to inequality: civic environmentalism

The wake of the environmental movement also had another discursive path, often called green radicalism. Green radicalism analyses ecological problems with the tools of radical economic and social theories, thus acknowledging the close relationship between environmental degradation and inequality. Hence, the focus of attention is both nature and humans. Just as the survivalist discourse, green radicalism is critical to what it perceives as the ideology of growth. Economic growth, industrialism and the function of capitalism are the key causes of environmental problems, together with socially unequal relations.[171]

Green radicalism also acknowledges the finite resources of the Earth. But rather than emphasising the conflict over resources per se, green radicalism focuses on the socially unequal relations both nationally and internationally as the root to the problem. These relationships are to a large extent the result of large-scale industrial life which tends to lead to exploitation of e.g. labour, the poor, women, indigenous people, and the environment. Moreover, the conclusion is not that power has to be centralised to some 'enlightened green Leviathan', but rather that power ought to be decentralised and given to those whose voices have been marginalised, and who suffer most from the effects of industrialism/capitalism. From this follows articulations of story-lines on Ecological Justice and that alternative knowledge systems should be upgraded. For this reason, the discourse of green radicalism is not associated with the 1970's in the way survivalism is, but rather has its ideological roots in that decade. This also implies that the social green discourse is nowadays more influential than survivalism.

According to Bäckstrand and Lövbrand's classification there is a challenge to the discourses of green governmentality and ecological modernisation (see below), which are influential in the climate regime (see chapter 4), and which they call civic environmentalism.[172] Although they divide this into two veins ('radical resistance' and 'the reformist discourse') and see them as "counter-narratives aimed at redefining the basic principles of climate towards equity and ecological sustainability"[173] I see many similarities with what others call green radicalism. Let alone that civic environmentalism in the authors' view

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[170] E.g. Hardin 1974; Ophuls 1973: 210.
[171] This section is based on Dryzek 2005: 181-202; Clapp & Dauvergne 2005: 11-16.
[172] Bäckstrand & Lövbrand 2007: 131-36.
[173] Ibid.: 132.

explicitly is a climate change discourse. The focus is still on questions of equity, which in the climate context results in e.g. the strong call for per capita allocations.[174] The reformist stance is more positive to the flexible mechanisms (see chapter 4) than the radical, because "the reformist discourse underlines that sustainable development synergies only can be realized if norms of equity, participation and accountability inform the global carbon market".[175] Thus, the reformist discourse is not necessarily negative to the use of flexible mechanisms, but rather wants to condition them with sound criteria.

Since green radicalism and civic environmentalism are close to each other—one could even argue that they are the same—I will henceforth treat them jointly under the name civic environmentalism. The exception is when I do not explicitly discuss the discourse in climate relevant terms, but in more general environmental terms.

Against politics

An important vein of political thinking is the perspective that wants to minimise the influence of politics. The belief lies instead in the efficiency of the free market. This vein of thinking is perhaps less associated with the environmental movement, and is certainly not the dominating discourse in the environmental field, but its influence on environmental politics should nevertheless not be neglected.

Managing the environment through 'business as usual': market liberalism

Market liberalism is to a large extent a response to environmentalisms of the former mentioned kinds. But it is also a return to neoclassical economics.[176] The fundamental assumption of this discourse is that growth is good. Hence, economic growth is actually good for the environment. Poverty, on the other hand, leads to environmental deterioration. Economic growth is the best remedy for combating poverty *and* environmental problems, say market liberals. The view of nature and natural resources is not as limited; when one important resource, say coal, is on the verge of running out, another one will be found, or better techniques will be developed. The history of mankind is full of such examples. Further basic assumptions are that people are rational ego-

[174] Cf. Roberts & Parks 2007.
[175] Bäckstrand & Lövbrand 2007: 136-36.
[176] Dryzek distinguishes between Prometheans and market liberals, in that the former are less concerned about environmental issues than the latter, who have at least some ideas about why environmental degradation occurs and how this could be avoided. Their basic assumptions about nature and human behaviour are, nevertheless, very similar, and hence I treat them as one here. See Dryzek 2005: 51-71 and 121-42 for a comparison between Prometheans and market liberals.

ists—a.k.a. *homo economicus*—who are sensitive to stimuli, especially economic incentives. Thus, the world consists by and large by market actors.[177]

How, then, are environmental problems—when acknowledged—to be managed according to this discourse? The answer is more or less already given; economic growth should be promoted, poverty should be alleviated (and the best way to do this is through economic growth), and efficiency should be enhanced (efficiency can be considered market liberalism's most emphasised norm). Note, however, that state intrusion is by and large considered as malevolent. Market actors should be provided the right incentives, but e.g. subsidies are generally considered bad and inefficient. As we can see, market liberalism de-emphasises the importance of politics. Implicitly then, while growth is good, societal action against social inequalities and redistribution of resources are not considered main tasks for reaching poverty/development and environmental goals. Rather, The Invisible Hand story-line best describes market liberalism's prescription for a better world. What is sometimes sloppily called globalisation is thus considered good because it contributes to economic growth and efficiency (e.g. through the division of labour).

In its purest form the discourse of market liberalism has a limited influence in the environmental field.[178] However, the point with presenting these various discourses lies not in that they are equally influential. Rather, just as it is probable that actors draw (consciously or unconsciously) on several discourses when describing their reality, it would be to paint a half-finished picture not to include the marginal but not unimportant discourses in the field. Various discourses can neither be understood without the existence of other competing discourses, i.e. we need to comprehend them in relation to others. For example, survivalism has been important because it has lead to the emergence of discursive responses. Likewise, market liberalism has been important in that other, 'upcoming', discourses such as ecological modernisation and liberal environmentalism (presented below), has 'borrowed' some of its ingredients, without replicating the whole concept.

A matter of solving problems: institutionalism

When environmental problems came to the fore in the 1960's/1970's, many Western governments began to organise environmental policy hierarchically, treating the problem as one that ought to be solved by experts, because many environmental problems are technically complex. In other words, faith was put in the rational, administrative state. This view has become criticised from a

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[177] This section is based on Clapp & Dauvergne 2005: passim; Dryzek 2005: 51-71.
[178] But there are examples of quite influential thinkers in this vein of thought, e.g. Julian Simon and Bjørn Lomborg, see Simon 1981; Simon 1996; Simon & Kahn 1984; Lomborg 2001.

more market-friendly stance, referred to as ecological modernisation. I choose to characterise these paths of thinking broadly as *institutionalism*.

As indicated by the name given to this meta-discourse, it stresses the importance of good institutions for managing environmental resources, especially at the international level. No other discourse emphasises as much as institutionalism that global environmental problems need to be coordinated through global environmental regimes or institutions. Thus, it seems fair to say that the institutionalist discourses are very influential in global environmental policy. Institutionalists often seize the middle ground between market liberals on the one hand and social greens and survivalists on the other; thus final solutions to international agreements frequently bear their marks since they (if acceptable) can be considered as compromises for all parts. However, institutionalism is too broad a label to tell us anything meaningful. Within this broadly defined discourse I would like to put four of the contemporary most influential environmental discourses: administrative rationalism, green governmentality, ecological modernisation and liberal environmentalism.

My reading of the literature contends that there are at least two different veins of the institutionalist problem-solving approach. Within the first vein I identify two distinct discourses. First, there is what scholars call administrative rationalism. Second, we have the discourse of green governmentality, and its reflexive version. There is a close connection between administrative rationalism and green governmentality and only after serious consideration I decided to distinguish between the concepts, since there is a slight but important difference between them according to the literature.[179]

Within the second vein of the institutionalist family I discern yet another two discourses. First, we have the upcoming discourse of ecological modernisation, which, second, has an offshoot in liberal environmentalism. Although emphasising various solutions to environmental problems, all these discourses have in common that they take the order of things as given, i.e. liberal capitalism is implicitly or explicitly considered *the* legitimate political and economical system, which can be contrasted with the survivalist and civic environmentalism discourses. On the other hand, they all differ from market liberalism, according to which liberal capitalism is not only accepted but actively held up as *the* model to organise societies. I will return to each of these sub-versions of institutionalism below.

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[179] Dryzek 2005: 75-98; Darier 1999; Luke 1999; Bäckstrand & Lövbrand 2007. Institutionalism is the, slightly vague, term used by Clapp & Dauvergne 2005. Bäckstrand & Lövbrand 2007 among others speak of green governmentality and its reflexive version. Dryzek coins the terms administrative rationalism and democratic pragmatism (Dryzek 2005: 73-142. It is my interpretation that all these authors more or less talk about the same discursive framework. However, note that Dryzek also places economic rationalism in the institutionalist problem solving category. The reason I omit economic rationalism in this section is that I consider it too alike market liberalism as presented above.

Administrative rationalism

When environmental issues became politically salient in the late 1960's it was when the Western, industrialised democracies were marked by a hierarchical bureaucratic ideal that had large faith in scientific expertise and administrative structures. In discursive terms Dryzek calls this administrative rationalism, and it can be argued that it is a more general discourse which has nevertheless affected environmental politics. In this discourse, individuals that are employed by public organisations are thus scientifically educated and possess relevant professional expertise. Both individuals and the organisations as such think that they are operating in a rational manner, and that environmental problems can be managed rationally if we just have all facts on the table. Hence, environmental politics had a legacy back to the natural resource management from the early twentieth century.[180] The 'politics of pollution' were thus fitted into this management style.

The discourse of administrative rationalism has probably been most influential when it comes to how industrialised states' environmental policies have been structured from the late 1960's and onwards. However, its impact has declined since the mid 1980's, not least due to its connection with bureaucracy and problems to manage newer environmental problems.[181] According to this discourse environmental pollution is conceived as a technical problem that needs scientific and technical experts organised in a hierarchical bureaucracy. "Governing is therefore not about democracy, but about rational management in the service of a clearly defined public interest, informed by the best available expertise."[182] The emphasis on the expert is crucial to this discourse and has the consequence of marginalising the importance of citizens or, say, consumers when social problems are to be solved. Administrative rationalism thus "stresses social relationships of hierarchy rather than equality or competition."[183] Such narrative implies a story-line of The Administrative Mind.

The idea that the environment can be rationally managed by experts has consequences for the policy measures preferred. At the centre lie regulations which are supposed to be 'knife-edge standards' that punish polluters. The belief in expert administration is manifested in the launching of pollution control agencies, expert advisory committees, environmental impact assessment and rationalistic policy analysis techniques such as cost-benefit analysis.[184]

In this discourse, there is no environmental crisis, basically because there is no problem that can not be solved in a rational manner. Environmental prob-

[180] Dryzek 2005: 75ff.
[181] Ibid.: 93-96.
[182] Ibid.: 87.
[183] Ibid.: 75.
[184] Ibid.: 77-86.

lems thus emanate from a lack of knowledge. The most important agents, experts and managers, are not only considered competent, but also motivated by the public interest. Interestingly, the public interest is not understood pluralistically, but in rather unitary terms; there is one, rational way to interpret what the public interest is.

Democratic pragmatism

In opposition to administrative rationalism, but still within the problem solving paradigm, is the discourse of democratic pragmatism.[185] In being problem solving, it takes liberal capitalism as given, but focus is largely on citizens, who should be given more influence over policy making, e.g. through the institutionalisation of public inquiries, lay citizen deliberation, or public consultations (like referendums). The opposition against administrative rationalism should here be obvious; the downsides of the latter are the inability to be flexible in responses to environmental degradation, and its democratic deficits, due to the focus on expert knowledge and hierarchical bureaucracies. With the logic of democratic pragmatism, environmental problems are more easily fixed if more power is given to the people. Democratic pragmatism is similar to the reflexive green governmentality discourse, discussed below. After discussing reflexive green governmentality I will decide to henceforth treat it jointly with democratic pragmatism.

Green governmentality: rational administration of life itself

Green governmentality is a discourse I would consider a 'younger cousin' to administrative rationalism. It is also a discourse that is scholarly defined in somewhat different terms. It comes from the term governmentality, launched by Foucault. In short, Foucault was interested in how the modern state exercised power over its citizens and achieved state security. He did not, as traditionally, conceive this as the state being powerful primarily because it controls a territory. Rather, the state is powerful in that it 'controls', shapes people's minds, and an important ingredient lies in the monitoring of human action.[186] *Green* governmentality is thus about "the administration of life itself", it means the "optimization of life to the entire planet and the very biosphere in which people live".[187] Green governmentality is accordingly about controlling not only the human mind and body, but also nature or the planet as such. This leads to a harder emphasis on the global level, and global environmental change.

[185] Ibid.: 99-120.
[186] Darier 1999.
[187] Bäckstrand & Lövbrand 2007: 126-27.

Expert knowledge is important in the discourse of administrative rationalism. The discourse of green governmentality takes this one step further in the promotion of 'mega-science'. Science will guide the world's nature-society relations into sustainability, and in order for this to happen the earth 'system' needs to be mapped. This goes hand in hand with the development of concepts such as sustainability science, Earth system science, Earth system governance, and so on.[188] Thus, we find a discourse with high expectations of what is possible to rationally manage, through an administration of global environmental change based on science.[189]

Green governmentality differs from administrative rationalism in more ways; it does not have a unitary view of the state and its interests. Instead, it "involves a multiplicity of authorities and disciplinary mechanisms that together foster and restrict the possibilities of individual and collective identities."[190] The implication of this is that "the administration of life itself" is far from the rational management towards certain ends as in the discourse of administrative rationalism. This is in line with the scholarly conclusion that there is a tendency in industrialised democracies of going from 'government' to 'governance'.[191] In spite of this seemingly 'local' marker, green governmentality should be regarded a top-down discourse that makes claims to protect the global environment in an instrumental and technocratic manner. It takes a 'helicopter perspective' where states together as stewards analyse the global environmental system and prescribe the appropriate cure.[192]

Administrative rationalism may be considered very alike the discourse of green governmentality, but my reading is that the latter should be regarded a development of the former. Administrative rationalism is more focused on the state and its administrative capacity whereas green governmentality is more focused on mega-science and the mapping of the Earth system, and is thus more concerned with the global and international level. Green governmentality is also considered more 'popular' today than administrative rationalism. This should be understood against the critique of the 'command and control' policy of administrative rationalism, which marked environmental policy-making up until the 1980's. In short, critics argued that such policy-making was not flexible enough, and could thus not prevent environmental degradation to take place. I will get back to this when discussing the discourse of ecological modernisation, which functioned as the agent provocateur at this time, thus taking over the hegemonic position of administrative rationalism.

[188] E.g. Biermann 2007.
[189] Bäckstrand & Lövbrand 2007: 127.
[190] Ibid.: 126; cf. Darier 1999; Oels 2005.
[191] E.g. Rhodes 1996; Pierre 2000.
[192] Bäckstrand & Lövbrand 2007. For a critique of this 'helicopter perspective', see Fogel 2004; Litfin 1997; Smith 2007.

Green governmentality is also closer to the 'alarmist' story-lines of the survivalist and green radicalism discourses, as I interpret it. For example, regarding climate change, I would argue that former US vice President Al Gore's influential film *An Inconvenient Truth* to a large extent draws on the green governmentality discourse, not only due to the references to mega-science, but also in the conclusions drawn from the scientific mappings, that the Earth is not in balance.

Bäckstrand and Lövbrand argue that the UNFCCC and the Kyoto Protocol "have established climate change as an intergovernmental issue that is best managed through a worldwide monitoring and reporting system for national sources and sinks of greenhouse gases."[193] This means they suggest that institutionalised international climate policy is largely permeated by the discourse of green governmentality.[194] I will get back and investigate this in more detail in chapter 4.

Reflexive green governmentality

Bäckstrand and Lövbrand also identify a reflexive version of green governmentality, "in which dominant narratives of planetary management are replaced by an attitude of humility and self-reflection."[195] This reflexive version emanates from academics, who normatively argue that scientific knowledge has limits, something which is not acknowledged in the discourse of green governmentality, which to a large extent influences global environmental governance. Instead scholars such as Jasanoff plea for a more humble attitude.[196] Others advocate the inclusion of local knowledge of e.g. indigenous people in decision-making procedures, or a less masculine approach to global environmental problems.[197] Thus, in the plea for less expert driven political processes, reflexive green governmentality has similarities with democratic pragmatism. For pragmatic reasons—I want to avoid a too voluminous number of discourses—I will treat them jointly under the name of reflexive green governmentality, not least because it seems more relevant to the field of climate politics.

Resolving the ecology-economy conflict: ecological modernisation

Compared to the other discourses presented in this chapter ecological modernisation is somewhat special. It is a concept that was coined in the academic milieu and is a research field of its own within the environmental social sci-

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[193] Bäckstrand & Lövbrand 2007: 126. Cf Miller 2004; Paterson & Stripple 2007.
[194] Note, however, that they view the post-2012 negotiations as a discursive opening where discursive struggles are once again salient.
[195] Bäckstrand & Lövbrand 2007: 128.
[196] Jasanoff 2003; Jasanoff 2007.
[197] Fogel 2004; Litfin 1997.

ences. As such it is harder to handle, since many scholars have reflected on ecological modernisation, and they do not treat it analytically in the same way. For some it is a social theory[198], for others a concept[199] or maybe an ideology[200]. Sometimes it is treated as a discourse[201] in the literature, but this is not the most common treatment. Naturally I treat ecological modernisation as a discourse here, and hence I am not interested in questions regarding its truthfulness or effectiveness, i.e. whether a process characterised as ecological modernisation actually leads to genuine environmental improvement (naturally, that goes for all treated discourses).

Ecological modernisation is first and foremost about technological innovation or change. It involves the state but to a lesser extent than had been customary when this new idea/concept became politically and academically salient. The process of ecological modernisation was to include the private sector in environmental politics with the argument that "pollution prevention pays". The private sector actually has an incentive to undergo long-term structural change, according to the discourse of ecological modernisation. However, the remedy of the discourse of ecological modernisation is not *laissez faire*, but actually contains regulation to encourage "the development and application of innovative technologies and production techniques."[202]

I see two main reasons why ecological modernisation became prominent in the 1980's and early 1990's. The first reason has to do with the for some time regarded as unsolvable ideological conflict between 'environment' and 'development', where no-one seemed to find a way out of this zero-sum game. The second reason has to do with the increasing objections against what was perceived to be the failure of 'command-and-control' politics, which discursively can be related to the discourse of administrative rationalism.

According to the earlier environmental discourses, although not necessarily that influential on state policies (except for administrative rationalism), the environmental conflict was perceived as a zero-sum game rather than a win-win situation. Concern for the environment and development were juxtaposed but could not easily be solved simultaneously, and hence a delicate problem was at hand for those caring both for the environment on the one hand and poverty and development on the other.[203] How was poverty to be diminished

[198] E.g. Mol 1995; Mol 1996, who also views ecological modernisation as a political programme.
[199] E.g Langhelle 2000.
[200] E.g. Weale 1992.
[201] Hajer 1995; Dryzek 2005.
[202] Murphy & Gouldson 2000: 33. Cf. Murphy 2000; Andersen & Massa 2000; Hajer 1995; Dryzek 2005.
[203] Although there certainly were other discourses than survivalism and green radicalism around at this time, e.g. various versions of institutionalism, especially administrative rationalism, none had the ideological/theoretical solution to this dilemma.

(through economic development) while environmental pollution (which in itself could aggravate poverty) needed resources to be managed? Often the environmental arguments were connected with industrialised countries in the North, while development arguments had its advocates in the developing South. When it appeared in the mid 1980's, the discourse of ecological modernisation became the 'solution' to this dilemma, since it recognised the possibility of both considering the environment and development. Hence, the wide appraisal of the concept sustainable development is hardly a surprise.[204]

A second main reason why ecological modernisation could gain ground pertains more to a critique against the failure of what was sometimes wickedly called command-and-control politics, executed by a hierarchical bureaucracy. Environmental policy was, according to critics, too focused on end-of-pipe solutions, and did not sufficiently acknowledge non-state actors' involvement in environmental policy, not least corporate interests.

What, then, were the new ideas that came to revolutionise environmental policy in the mid 1980's? Characteristic of the discourse of ecological modernisation, besides the belief in a win-win situation, is that it "frames environmental problems combining monetary units with discursive elements derived from the natural sciences."[205] It also gives science a new role in environmental policy making; in short, the role of determining the level of pollution nature can withstand, i.e. not only delivering the proof of when human action have environmentally damaging effects. The discourse of ecological modernisation can thus be argued to appeal more widely than core ideas of the environmental movement had done up until then. Although ecological modernisation can be regarded a problem-solving approach, it is quite different from the other of these approaches when it comes to how environmental problems are framed.

Further, ecological modernisation should be analysed in light of wider societal changes at the time. First, end-of-pipe solutions were generally criticised for being too reactive and no real solutions to environmental pollution; thus, ecological modernisation prescribed more preventive and anticipating policy measures. Second, deregulation was ideologically gaining ground in the mid 1980's, and the underlying belief regarding environmental policy was that individual organisations (both public and private) should integrate environmental concerns in their costs and risks. Third, decentralisation was cherished as a way to solve environmental problems. Thus, apart from identifying new actors—environmental organisations, firms, local residents etc.—as important

[204] Some, like Dryzek, would regard sustainable development as a proper discourse. However, I think the concept sustainable development is too broad and perhaps blurry to call a discourse. I find it more fruitful to treat it as a story-line which with a few words abbreviates a longer chain of descriptive and normative propositions. Hence, it functions to attract actors with various discursive attractions. It is more of a 'buzz' word than a discourse, I argue.

[205] Hajer 1995: 26.

in this process, participation by and cooperation between these actors was emphasised. Together, these developments led to the introduction of principles such as the polluter pays principle (PPP), cost-benefit analysis, the precautionary principle, tradable pollution rights etc.[206]

In light of the discourses discussed above we can see that ecological modernisation not only criticises but also has some roots in several other discourses. This seems obvious concerning especially administrative rationalism and green governmentality, but also traces of market liberal thought can be identified. However marginalised in this sense, survivalist and (especially) social green thought is not dead (the latter is still alive in the form of civic environmentalism). For example, the precautionary principle is more compatible with the civic environmental and survivalist discourses than with market liberalism. According to the former it is more important to be certain about new technologies' benign impact (or at least that they are not malign) on the environment than is their effects for economic growth. The market liberal view is by and large that the precautionary principle is in opposition with the function of a free market, which is as we saw above the single most important factor for improving environmental quality within this discursive framework.

Even the polluter pays principle (PPP) is appraised by civic environmentalism and survivalism. However, it should be noted that this principle does not really question the contemporary capitalist system as these perspectives otherwise do; the PPP actually takes it implicitly as a given. As long as you pay for it, you are allowed to pollute the environment, thus internalising environmental costs into economic activities.[207] On the other hand, the most radical strands of the market liberal discourse stress that no intrusions in the free market—such as environmental costs—is desirable at all.[208] Although the PPP is appreciated by more than institutionalists, it is most compatible with their core ideas, which say that institutional arrangements smartly designed are both a legitimate and an efficient way to manage environmental problems.

Hence, although the civic environmental and survivalist discourses are not totally marginalised, activists, scientists and politicians appealing to these discursive frameworks should be considered critics of contemporary environmental discourse. If we expect to find resistance where there is power, it should come as no surprise.

The antagonistic relation between the competing discourses emphasising environmental protection and development/poverty reduction respectively,

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[206] Ibid.: 26ff. See also Weale 1992; Jansen, Osland & Hanf 1998: 291ff. Note that these principles are not necessarily unaccepted in other discourses, but characterising ecological modernisation is that it whole-heartedly embraces all these principles.

[207] The PPP was 'invented' by the OECD in the mid 1970's, with the explicit objective of promoting economic growth and minimising market distortions from environmental protection (OECD 1975). Cf. Bernstein 2001: 196ff.

[208] Cf. Clapp & Dauvergne 2005: 4-7, 88f., 98f., 223.

was hence resolved through a hegemonic intervention, making the discursive field less ambiguous. The solution spelled ecological modernisation. That, however, should not be considered 'the end of history'. My reading of the ecological modernisation literature indicates that there are two major strands. First, we have the first version of ecological modernisation, which is rather technical in its nature, appealing mostly to engineers. Here, buzz words are technological innovation, the precautionary principle, and science. Second, there is a more economical side to the discourse of ecological modernisation, which has been increasingly emphasised over the years. According to this strand, pursuing economic efficiency is a key norm. Scholars have noted the tension between ecological modernisation's preoccupation with the precautionary principle on the one hand, and economic efficiency on the other. These are in many ways at odds with each other.[209] Hereafter I treat these strands as two different discourses, because otherwise the discourse of ecological modernisation would be too broad and hence analytically less fruitful. Next, I will develop this economic efficiency version of ecological modernisation, which I label liberal environmentalism.

Stretching ecological modernisation to its extreme: liberal environmentalism

The story of the rise of ecological modernisation is slightly—but not explicitly—modified by Steven Bernstein in his argument for what he calls the compromise of liberal environmentalism. According to Bernstein's analysis, "economic ideas overshadowed scientific ideas and ecological thought in producing normative compromises at key junctures in the evolution of the environmental norm-complex over the last thirty years."[210] Hence, even though environmental discourse is framed in both economic and natural scientific terms, the *solution* to environmental problems is more influenced by the former than the latter. Actually, one of Bernstein's major conclusions is that natural scientists'—and their professionally derived ideas—influence on environmental *policy* is rather limited.

It should now be clear that the 1980's entailed a marketization of discourse[211], and as in many other political spheres, this is true also when it comes to environmental discourse. The success of economic ideas in environmental policy had its first major impact in the Brundtland Commission's report in 1987[212], and was further institutionalised at the United Nations Confer-

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[209] Andersen & Massa 2000: 339.
[210] Bernstein 2001: 190.
[211] Fairclough 1993.
[212] World Committee on Environment and Development, WCED 1987.

ence on Environment and Development in Rio in 1992.[213] The Brundtland Commission together with the OECD symbolized values that leaders of most (Western) states could identify with. They were legitimate institutions through which entrepreneurial leaders pulled the new sustainable development ideas together. These entrepreneurs and institutions tied together liberal economic ideas supporting the predominant economic system with environmental protection ideas in an unprecedent manner.[214] In short, Bernstein argues that this normative development of environmental policy—the compromise between environmental concern and economic growth—actually put environmental issues on the top international agenda; without it, environmental issues would probably not have been the legitimate concern it is in today's politics (practically 'everyone' talks about the environment).

After first introduced in the 1980's, ecological modernisation hence became more focused on market mechanisms when entering the 1990's. This became quite clear in Rio. Moreover, what we can conclude from Bernstein's analysis is that the importance of politics and the state in environmental discourse declines over time, which marks a difference between liberal environmentalism and ecological modernisation as discourses. If the core of the discourse of ecological modernisation is concerned with technological innovation, long-term structural change that to some extent could be planned by governments (but importantly: through providing incentives to market actors as well as cooperating with them), liberal environmentalism is mostly concerned with efficiency in environmental policy. Hence, market mechanisms are emphasised, bringing liberal environmentalism closer to market liberalism. One main difference between market liberalism and liberal environmentalism is that the latter is far more concerned with (global) environmental change, i.e., more obviously admits environmental problems. Significative of both ecological modernisation and liberal environmentalism, however, is that neither of them is concerned with issues of democracy or justice. In the case of liberal environmentalism it seems that what can be regarded as efficient is also just.

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Below in table 3.1 I summarise the environmental discourses examined in this chapter. As explained earlier in the chapter I have examined the discourses as regards their conception of basic entities in society, their assumption of agents and their motives, why environmental problems arise and how they should be

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[213] If the Brundtland Committee represented 'managed sustainable growth', the Rio Declaration went one step further towards the market liberal paradigm, and is thus labelled 'liberal environmentalism' by Bernstein (Bernstein 2001: e.g. 109).
[214] Ibid.: 196-202. Cf. Bernstein 2000; Carruthers 2001; Bernstein 2006.

solved, what key story-lines they express and what norms they emphasise. The table summarises each discourse along these dimensions.

Table 3.1. Overview of environmental discourses.

Discourse and analytical dimensions	Survivalism	Market liberalism	Civic environmentalism	Administrative rationalism	Green governmentality	Reflexive green governmentality	Ecological modernisation	Liberal environmentalism
Basic entities in society	Planet Earth as an eco-system; A self-regulating, complex, and holistic super-organism	Rational individuals; Market actors	Humans; Nature	Administrative state; Experts	States in international society; Scientists; Global environmental system	Citizens	States; Private sector; Corporate interests; Civil society	Market actors; States
Assumption of agents and their motives	Selfish	Selfish and rational	Mixed motives	Experts/public servants: rational and benign; The rest: rather selfish	Mixed motives; Rational and benign experts/scientists	Mixed motives	Mixed motives; Selfish	Selfish; Mixed motives
What causes environmental problems?	Over-population; Planet with finite resources; Economic growth; Capitalism; Consumerism; Globalisation	If acknowledged, it is due to market distortions	Socially unequal relations; Capitalism; Industrialism; Economic growth	Lack of knowledge	Complex Earth system with many actors/activities that are hard to steer/motivate; Lack of knowledge	Top-down policy measures are inflexible and hence ineffective	Inefficiency; End-of-pipe solutions; Wrong incentives	Inefficiency; Wrong incentives
How should environmental problems be solved?	Collective coercion	Economic growth; Minimal regulation; Globalisation	Decentralisation; Power given to marginalised groups	Scientific and technical expertise; Hierarchically organised bureaucracy; Precaution	Mega-science; Science-based administration; International cooperation; Precaution	Decentralisation; Citizen influence; Precaution	Technological fix; Prevention; Planning; Right incentives; Public-private partnerships; Precaution; Polluter pays	Increased use of market mechanisms; Right incentives; Polluter pays
Key story-lines	The limits to growth; The Earth has a carrying capacity	The invisible hand	Ecological justice	The administrative mind	Balance; Human stewardship	Humble and self-reflective science	Win-win situation between environment and development/growth; Pollution prevention pays	Win-win situation between environment and growth
Emphasised norms	Respect for biophysical limits to growth	Efficiency	Justice/equity (Climate equity/ sustainability)	Rationality	Scientific monitoring and management of Nature	Democracy	Efficiency; Rationality	Efficiency

Note: The table's boxes are not necessarily exhaustive. The most salient features are indicated in the table. E.g., 'polluter pays' are only indicated for the discourses of EM and LE, but can potentially be accepted also in other discourses.

4. The structuration of international climate policy

In this chapter I analyse international climate policy as manifested in the UNFCCC and the Kyoto Protocol, and in the process of formulating these documents. I put emphasis on how climate change is discursively understood. In chapter 2 I explained that I will structure the analysis along the empirical questions regarding what climate change 'is', and constructions of responsibilities and what needs to be done. The environmental discourses examined in chapter 3 will help me to structure the analysis, i.e., the discourses, including key story-lines and emphasised norms, help me to make sense of the material. Yet another aim is to analyse influential discourse(s)in climate policy, both internationally and domestically. Is the discourse of ecological modernisation, which is said to be so influential in contemporary environmental policy-making, 'hegemonic' in climate policy or does that picture need to be nuanced?

The analysis in this chapter is different from the analyses in chapter 5–6. The aim of the thesis is to understand how Sweden's relatively exceptional behaviour in the emblematic social dilemma issue of climate change politics is possible. The reason to analyse international climate policy is that I consider it as institutionalised in core policy documents. It is thus the starting point, having to confront an environment of already institutionalised social structures of potentially powerful and unfitting discourses. This *affects* how climate change is interpreted as well as which policies that are preferred, but does not *determine* it. This starting point has to be carefully analysed in order to be able to conduct a satisfactory analysis of domestic climate policy. I will to a large extent analyse what has already been written on international climate policy by other scholars, beside core policy documents. The material analysed in this chapter is thus quite different from the material analysed in chapter 5–6. This is less of an empirical analysis, but rather an attempt to discursively understand the institutionalisation and structuration of international climate policy, which is important to have in mind for the analysis of Swedish climate policy.

CLIMATE CHANGE: POLICY PRESSURE FROM ABOVE

In chapter 3 we could at least implicitly see that environmental policy has gone through a discursive shift over the last decades. It has been stressed that climate change is the area *par excellence* of this normative shift within environ-

mental policy.[215] The flexible mechanisms in the Kyoto protocol are of special importance here. Michael Grubb et al. argue that this flexibility

> specifically reflects the general process of economic globalization culminating in the 1990s [...] Many of these [market-friendly] ideas had been anathema a generation earlier; by the mid-1990s, when the [Kyoto] Protocol's core ideas were born, they had become almost hegemonic in economic but not in environmental policy. [...] The Protocol is essentially an agreement to extend economic globalization to environmental policy: to establish a global emissions market to counter the global environmental consequences of global economic growth.[216]

Thus, the Kyoto Protocol—and the Framework Convention of which it is part—is politically important in more ways than usually acknowledged. However, others argue

> that the trading of emissions permits is a market mechanism in name only. [...] *Prima facie*, emissions trading appears to work with the grain of the market. However, this ignores the fact that emissions trading rewards economically unsuccessful countries and companies, while punishing successful ones.[217]

These authors are concerned with what they perceive to be a one-sided design of the Kyoto Protocol; it is not enough market oriented. It may be true that the Protocol's mechanisms do not function optimally from a market point of view, but that does not change the fact that the climate change regime to a large extent (but not only) frames the problem through a market discourse, and that it does so more than any preceding environmental treaty.

It is doubtless that transformations have occurred internationally, but how they affect different societies is less well known, and more debated. In this chapter I will analyze more thoroughly the discursive articulations in the climate regime, and conclude that the normative shift internationally just mentioned implies a pressure on countries with different political traditions.

Participating in international institutions and the subsequent signing of agreements, with the purpose of influencing state behaviour, constitutes a challenge to existing social structures and democratically (or undemocratically) decided policies. Complying with international agreements might signify adapting to ideas and principles that clash with deeply institutionalised ideas and principles in domestic society. In that sense, transnational governance should be taken seriously, since it has important democratic aspects, and concerns political autonomy. This aspect of international agreements especially concerns *how* the issue at hand is to be managed. Thus, post-agreement proc-

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[215] Bernstein 2001; Bernstein 2002; cf. Oels 2005.
[216] Grubb, Vrolijk & Brack 1999: 136f.
[217] Verweil et al. 2006: 832.

esses are interesting not only if we are concerned with paths of compliance, but also when discussing state autonomy and democracy in a globalised world.

Although it can be argued that international climate agreements support some ideas over others, it should be rather clear that it is not discursively coherent. Hence, I will not only look for hegemonic discourses, but also identify inconsistencies and ambiguities in the data. There are various claims of what climate change is, and what should be done about it. This struggle for the preferential right of interpretation is just as important to analyse as the core ideas that finally get institutionalised in policy documents. It can as well contribute to the understanding of how the internationally agreed treaties are interpreted domestically; the latter interpretations can hypothetically be a reflection of the same struggles internationally. Such analysis can thus potentially contribute to the understanding of the interplay between international and national politics.

What 'is' climate change?

The Earth's climate system has always varied. What became politically salient in the 1980's was the perception that it was changing faster than ever before, and that this was due to human activities, i.e. to a large extent not natural. This implied a threat to ecological systems, as well as to human societies.

An overwhelming scientific consensus contends that the greenhouse effect creates a mean temperature on Earth of about 15 degrees Celsius, making it a quite comfortable planet to live on for many species, not least for humans. The greenhouse effect mechanism has been known to scientists since the late nineteenth century.[218] Simply put, "[t]he greenhouse effect is caused by the Sun's radiation that is reflected off the Earth's surface and trapped by carbon dioxide (CO_2) and other greenhouse gases (GHG's) in the atmosphere."[219]

However, this knowledge has become more sophisticated since the late nineteenth century, making most scientists more certain about the human impact on the greenhouse effect that causes climate change. The basic principle of the greenhouse effect thesis can simply put be condensed to this condition: If greenhouse gases are accumulated in the atmosphere, the mean temperature on Earth will increase. Scientists have since then discovered that humans actually to a large extent contribute to the concentration of greenhouse gases in the atmosphere, which accumulates the greenhouse effect.[220] The world's glaciers and ice sheets will most likely be reduced in amount during this century.

[218] Arrhenius 1896.
[219] Oberthür & Ott 1999: 3. Cf. IPCC 2007b.
[220] IPCC 2007b. I am aware that some observers are highly critical of the IPCC, its political role, and its conclusions. The point with referring to IPCC here is that regardless of its critics, it is generally considered as a legitimate institution, with sound scientific conclusions. IPCC's work no doubt affects people's understanding of what climate change 'is', regardless of whether they deliver the 'truth' or not.

This, in turn, implies a risk for, among other things, drought in some regions, and more rainfall in other regions of the world. Accordingly, this would cause social problems such as failure of crops and hence famine, which could lead to a large increase in the amount of 'climate refugees'. Diseases will increase, especially in tropical regions. High-risk regions are the more vulnerable the poorer they are, and to a large extent these high-risk regions are located in already poor and vulnerable communities.[221] Accordingly, a common understanding of climate change is that it ironically implies the most severe effects in the poor world, while mostly the rich world has caused the problem through the emission of greenhouse gases (GHG's).

Climate change is thus, according to this dominant view, basically about the impact of increases in this greenhouse effect. This led to the set up of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations Environment Programme (UNEP) and the World Meteorological Organisation (WMO) in 1988. Members of the IPCC are all members of the UN and the WMO (i.e., states, not individuals). However, IPCC's task is to gather and review the scientific knowledge on climate change. Although the task is scientific (it is scientists who compile the research), one cannot disregard the political or intergovernmental aspect.[222] IPCC's analyses are commonly regarded as the basis for action in the UNFCCC.

Despite the consensus on the human impact on climate change, there are some 'climate sceptics', emphasising the scientific uncertainty on which action is currently based. These can be divided into three groups. First, there are those who are critical of the thesis of climate change (regardless of what is said to cause it).[223] Second, there are those who may agree with this thesis, but who are sceptical about whether climate change is caused by human action. Instead they view climate change as natural variations that have always been going on.[224] Third, there are those who agree that climate change is caused by human action, but criticise the mitigation strategy. Instead, they argue that since the scientific knowledge is very uncertain, it is more cost-effective to adapt societies to climate change, i.e. when and where we know damage is done.[225] The latter group clearly clings to a market liberal discourse, where precaution is not given priority, and where being cost-efficient in responses is more important than preventing damages no matter what the costs are. At the bottom line, however, may be different beliefs regarding the truthfulness/seriousness of the human-induced climate change story-line.

[221] IPCC 2007a.
[222] Cf. Siebenhüner 2003; Malnes 2006.
[223] E.g. Michaels 2004.
[224] E.g. Svensmark & Friis-Christensen 1997; Svensmark 2007; Pallé, Butler & O'Brien 2004 on the impact of cosmic ray flux and global cloud coverage, but see Sloan & Wolfendale 2008; Erlykin, Sloan & Wolfendale 2009 for opposing views.
[225] E.g. Bradley Jr 2003.

The consensual answer to the question of what climate change 'is' is implied by the main objective of the Framework Convention, which is the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[226] In this statement the story-line of 'human induced climate change through emission of greenhouse gases' is thus accepted. In other words, officially all countries that have ratified the Convention are benevolent to the story-line of man-made influence on the climate system. This does not imply that there are no objections to this consensus, but one can hardly say that these objections really modify the dominant story-line about what climate change 'is'.

Climate change is also commonly constructed as a global issue, which calls for scientific mapping of the Earth, but also cooperation between all the world's states in order to manage the problem.[227] Hence, this aspect of the internationally institutionalised discourse of climate change nicely reproduces the discourse of green governmentality, where mega-science and international cooperation are key ingredients.[228]

However, although some consider the climate change thesis controversial, the major political conflicts lie in the interpretation of what level of concentrations of greenhouse gases in the atmosphere that should be considered "dangerous", and not least what should be done about this problem, and by whom. Although the vast majority of the world's states agree rhetorically about what climate change 'is', they are divided concerning what should be done about it. This emphasis on consensus is probably not unique for climate change politics. Rather, it is quite common that politicians emphasise commonalities on an overall level, even though it may seem obvious that they have totally different views about how to handle the problem in question.[229] As will be illustrated more thoroughly below, the great cleavage regarding how to manage climate change draws on two rather different discourses, with different story-lines salient, emphasising norms of cost-efficiency and justice, respectively. First, however, let's analyse how the responsibilities for managing climate change are discursively debated.

Responsibilities for managing climate change

The 1992 UN Framework Convention on Climate Change (UNFCCC) identifies the "common but differentiated responsibilities and respective capabilities" of states.[230] This explicitly gives the industrialised countries the major but not

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[226] The United Nations Framework Convention on Climate Change (UNFCCC), Article 2.
[227] Paterson & Stripple 2007; Oels 2005; Miller 2004; Smith 2007.
[228] Bäckstrand & Lövbrand 2007.
[229] However, the opposite may as well be true; politicians may emphasise differences from opponents, whereas others would say the differences are over-emphasised.
[230] The United Nations Framework Convention on Climate Change (UNFCCC), Article 3.1.

exclusive responsibility to combat climate change.[231] This is in line with the discourse of liberal environmentalism that, according to Bernstein, was institutionalised in Rio the same year.[232] This is not that self-evident, so let's investigate it further.

While the UNFCCC implies that all states thus share the responsibility to adapt to and mitigate climate change, it is nevertheless evident (and it became even more so in the years up to the Kyoto Protocol in 1997) that the dominant norm within the UNFCCC is that industrialised countries are expected to act firstly since it would be most fair. This is because industrialised countries have disproportionately contributed to (and developed while contributing to) the concentration of GHG's in the atmosphere, and because the countries most vulnerable to expected climate change are generally the poorest and already most vulnerable countries in the world.[233]

This explicit acknowledgement of "common but differentiated responsibilities" was at the time quite new to international environmental policy. The Brundtland Commission report from 1987,[234] expressed that states have a "common" responsibility to "revive global growth" and "participate in shared responses to global environmental problems", whereas in Stockholm in 1972 the emphasis was on the "different" responsibilities for developed and developing countries.[235] "Common but differentiated responsibilities" is a statement more ambiguous than the others, and it is not such a big surprise that a struggle about what this should imply can be witnessed (see below). Bernstein's analysis can be contrasted with Bäckstrand and Lövbrand's, who argue that the formulation "common but differentiated responsibilities" is more informed by the discourse of civic environmentalism. The reason for this is that it appoints industrialised countries the major responsibility to manage climate change, which is quite true. Hence, it is difficult to analyse what the allocation of responsibilities signify discursively. Bernstein's analysis is interesting because he actually shows that the purpose with this formulation ("common but differentiated responsibilities") is to please a large crowd, and ultimately make possible policy solutions in line with the discourse of liberal environmentalism. The solutions regarding allocation of responsibilities in the Framework Convention and the Kyoto Protocol are hardly exclusively articulations of the discourse of civic environmentalism, as will be clear below. Rather we see a mix of elements from liberal environmentalism and civic environmentalism.

Although this was the final outcome of the negotiating process, it was not uncontested. The Kyoto Protocol also deliberately leaves open specific issues

[231] Rio Declaration on Environment and Development, Articles 3, 7 and 11; Bernstein 2001.
[232] Note that Bernstein labels liberal environmentalism a norm-complex, not a discourse.
[233] UNFCCC Article 3.1-2; The Kyoto Protocol, passim.
[234] WCED 1987.
[235] Bernstein 2001: 109.

of responsibilities, which explains the cleavage between first and foremost the North and the South concerning who should have the biggest responsibilities to start reducing emissions. It can also account for why it has been so difficult to negotiate a follow-up agreement to Kyoto.

The fact that developing countries had no quantitative commitments was the explicit US motivation not to ratify the Protocol: "[T]he United States will not assume binding obligations unless key developing nations meaningfully participate in this effort".[236] The key developing nations President Clinton had in mind were first and foremost China and India. It seems clear that the latter countries are perceived as competitors in both political and economic respects, at least in the long run.[237] The US, often backed by its partners in the loosely organised group JUSSCANNZ[238], framed its opposition to the idea of letting developing nations slip away 'meaningful efforts' as a question of truly international cooperation as a necessity for effectively managing the long-term problem of climate change: "The United States believes that international cooperation on this challenge remains critical to any effective response and that all nations—developed and developing—must contribute to the solution to the problem".[239] In other words, this statement can be interpreted as a further emphasis of the injustice of not including all nations—i.e. even developing nations—in the global effort to combat climate change already from the start. The norm of common responsibilities to manage climate change was thus cherished by the US, whereas the addition "differentiated" responsibilities became more problematic. The arguments that were coined at a G8 summit in Denver in June 1997 spelled "meaningful, realistic and equitable targets"[240], which were then referred to repeatedly, framing the issue as a question of justice, legitimacy and feasibility. Things could not be that way if developing countries did not contribute with emissions reductions.

Interestingly, developing countries and some EU countries used similar language to legitimise that developing countries should be *excused* from committing to quantified targets. Practically all so called developing countries' rhetoric starts out from the assumption that the rich industrialised countries of the North have caused the problem. The latter should thus be responsible for overcoming it, both in terms of action and in terms of standing for the costs. Climate change is thus a matter of structural inequality because climate change is an effect of the rich North's development at the expense of the poor South,

[236] Remarks by the President [Clinton] on Global Climate Change, National Geographic Society, Washington, D.C., 22 October 1997, quoted in Oberthür & Ott 1999: 57.
[237] Cf. Mearsheimer 2001.
[238] Comprising of Japan, United States, Switzerland, Canada, Australia, Norway and New Zealand.
[239] Speech by US Under Secretary of State of Global Affairs, Timothy Wirth, before the second COP to the FCCC, Geneva, Switzerland, July 17, 1996, see Wirth 1997.
[240] http://www.g7.utoronto.ca/summit/1997denver/g8final.htm. Accessed January 2008.

who will also suffer most from climate change.[241] This opposition thus clearly bears marks of the discourse of civic environmentalism (or green radicalism), although I think it would be incorrect to infer that this opposition is restricted to the 'green' field of politics. It rather has to do with the North–South cleavage in world politics, which is, naturally, much broader than environmental issues. Thus, I would interpret this South opposition as an articulation of a post-colonial discourse, which is applicable also in the environmental field.

It seems that to be considered legitimate, arguments for how responsibilities should be distributed need to be perceived as just, although what is perceived as just obviously varies as we saw above. Regarding responsibilities for managing climate change, developing countries and to some extent the EU cling to norms and story-lines from the discourse of civic environmentalism. Although the US and JUSSCANNZ also used justice arguments, it makes no sense to view their arguments as belonging to the discourse of civic environmentalism. Rather, if it fits in with anything at all from the discursive repertoire from chapter 3, their justice arguments may disguise elements from market liberalism or liberal environmentalism. As we will see more examples of later, a common understanding of the management of climate change is that GHG emissions reductions ought to take place where they are most cost-efficient, since it does not matter where on the globe gases are emitted from a climate change perspective. Thus, from this position, most efficient would be to cut emissions where it is cheapest, which is often in developing countries. However, this justice framing of the issue by the US and its allies should not veil their interest in maintaining their hegemonic position in world politics.

Given that Annex B countries[242] are only industrialised countries we can see the principle of "common but differentiated responsibilities" still at work. However, even though obligations in the Protocol are differentiated, it is rather difficult to see any sophisticated principle behind the final solution. A so called flat rate, i.e. that all industrialised countries should reduce their emissions by the same percentage rate, proved impossible because most countries perceived it as an obviously unfair distribution of burdens. Annex B Parties' differentiated quantitative obligations are hence probably based on some considerations about emissions per capita and emissions per gross domestic product (GDP), and to historical emissions, but it is hard to see that these considerations are systematic and coherent. For example, the fact that some countries (e.g. Australia, Norway and New Zealand) are allowed to increase or stabilize their emissions, have upset quite a few environmentalists.[243] The principle of per capita allocation of emissions is in line with the discourse of civic

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[241] Cf. Roberts & Parks 2007.

[242] Annex B countries are countries that have quantitative targets according to the Kyoto Protocol. Annex I countries refer to industrialised countries in the UNFCCC. The latter are slightly more numerous than the former.

[243] Oberthür & Ott 1999: 128ff.

environmentalism and was actually one important principle for distributing responsibilities in the pre-Kyoto negotiations, although it was finally downplayed.[244] However, it has returned to the debate's surface in the post-2012 pre-negotiations as a critique against many industrialised countries' call for "broadened participation" by developing countries.[245]

Although it is hard to see any clear guiding principle for the allocation of responsibilities, the political solution can be argued to be a rather individualistic principle of allocating responsibilities. However, Article 4 of the Protocol gives Parties the possibility to meet their targets jointly, if they report this intention to the secretariat at the time of ratification. This opportunity of 'bubbling' obligations was quite obviously considered with the EU in mind. The EU (and its member states) is also the only group of actors that has used this possibility to collectivise responsibilities. This is probably an important factor for the possibilities to harmonise climate policies among different countries.[246] Despite this tendency to collectivise responsibilities, however, each Party is "responsible for its own level of emissions set out in the agreement" if an agreement to bubble emissions reductions should fail.[247] However, Article 4.6 specifies the rules for a "regional economic integration organisation" (which implies the EU) wanting to bubble its member states' commitments: Both the member state and the organisation as such are responsible for any failure to fulfil a single country's obligations. This collective responsibility applies only to the EU, not to other groups of countries. Plans within the 'umbrella group'[248] to form a bubble, and hence pass over the rules of Emissions Trading under Article 17, have therefore by some scholars been perceived as quite risky, since these countries lack a common economic, political and legal framework.[249] Nevertheless, the possibility to bubble emissions reductions indicates that there is an alternative articulation of responsibility, opening up for a collective responsibility to reduce emissions alongside the dominant individualistic approach.

I conclude that final solutions reflect the norm of justice—although there was no consensus on the definition of justice—in that it was institutionalised that industrialised countries should act first. This is also conducive to the National Action story-line (developed below), according to which industrialised countries should not only take the first step, but also show that they are willing

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[244] Paterson 2001.

[245] Bäckstrand & Lövbrand 2007: 133.

[246] For a further discussion on harmonisation see below, in the section 'Policies and measures within domestic society'.

[247] The Kyoto Protocol to the UN Framework Convention on Climate Change, Article 4.5.

[248] JUSSCANNZ plus Russia and Ukraine.

[249] Oberthür & Ott 1999: 149. The US even "insisted that there was no difference in principle between bubbling and Emissions Trading and that the same limitations on their use for achieving compliance with the targets should apply." (Oberthür & Ott 1999: 145).

to change their domestic structures. Interestingly, this was negotiated when turning attention to policy measures.

Let's make it flexible!

Climate change discourse clearly illustrates the wider change in environmental discourse (cf. chapter 3). Hence, language from the market sphere is often used when the solutions to climate change are to be spelled out. Quite logically, in the following we will see that the promotion of flexibility and/or cost-efficiency implies the framing out—or at least a reinterpretation—of other norms, such as norms of justice. More precisely, when analysing climate change discourse we can identify the tension between the National Action and Thinking Globally story-lines, emphasising norms of justice and norms of cost-efficiency, respectively. Cost-efficiency is related to flexibility; flexibility is often perceived as a necessity for a cost-efficient implementation of targets.[250] Although some heavily emphasise cost-efficiency they also try to frame arguments in justice terms. Thus, it seems that arguments need to be perceived as just to become legitimated; it would not suffice with cost-efficiency.[251]

The Kyoto targets, which are at the core of the climate change regime, are supposed to be reached in two principally different ways: First, Annex B parties shall adopt measures to reduce GHG emissions domestically. Second, emissions reductions can be carried out through what is called flexible mechanisms, i.e., states and firms can initiate GHG reductions abroad through emission reduction units that are tradable. The proportion of the reductions that should be made by the flexible mechanisms has been debated. The Kyoto Protocol states that "the acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3."[252] At COP 7 in Marrakesh in 2001 it was decided that

> the use of the mechanisms shall be *supplemental* to domestic action and that domestic action shall thus constitute a *significant* element of the effort made

[250] What flexibility might imply in practice can be illustrated with an example from the negotiation process. Contemplate that, depending on how many gases that should be included in the 'basket' (i.e., which gases that should sum up to reductions with x percent) the more or less flexible are the opportunities to fulfil the targets. The initial suggestion by EU and Japan that the emissions reductions of three gases (including CO_2) should be measured, was less flexible than the counter-suggestion by the US and Canada (which later became included in the Kyoto Protocol), that four gases plus two groups of gases (HFCs and PFCs) was the more sound solution, securing more flexibility in the implementation process (Oberthür & Ott 1999: 124ff.).
[251] This does not imply that there is only one way to perceive what is equitable, but many.
[252] The Kyoto Protocol to the UN Framework Convention on Climate Change, Article 6.1 (d).

by each Party included in Annex I to meet its quantified emission limitation and reduction commitments.[253]

Unconfirmed sources have argued that a country's domestic policies and measures should sum up to at least 50 percent of that country's targets. The reductions through flexible mechanisms (called Certified Emissions reductions—CER's) are hence not allowed to exceed 50 percent of the commitments of any individual (or collective) state. However, this has never been established in policy decisions. "Exactly how many CERs can be used by an Annex I Party to meet their emission reduction target has never been quantified."[254]

The flexible mechanisms were controversial because they concern questions of justice, and the cleavage between industrialised and developing countries. Basically, the mechanisms have been criticised because they give the industrialised countries the opportunity to 'slip away' emissions reductions in their own emitting activities. At the same time, they might consolidate the unequal relation between industrialised and developing countries, since the former might buy themselves free from commitments through e.g. investing in emissions reducing projects in countries with no quantified targets. The point that critics stress is that the richest countries can more or less go on with business as usual, without changing their basic structures. Moreover, reductions will be less cost-efficient for the developing countries when they will have quantified targets of their own in the future. With the flexible mechanisms the most cost-efficient reductions will be taken by industrialised countries.[255]

The major argument in favour of the flexible mechanisms, however, spells cost-efficiency. Emissions reductions should be carried out where they are cheapest. This is in contexts where technical equipments and solutions are least developed, i.e. often in developing countries. In turn, this would maximize emissions reductions per spent amount of money. From the overall climate change perspective, it does not matter where on the globe emissions and reductions are made. Thus, we need to Think Globally, the argument goes.

The latter story-line is dominant in the climate change regime, i.e., institutionalised in the core policy documents. The cleavage between these two major ways to perceive how climate change should be managed—efficiently or just—is discursively interesting, and worth analyzing in more detail.[256] First, I ana-

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[253] UNFCCC: FCCC/CP/2001/13/Add.2. Italics mine. Exactly the same words were used in a COP decision in 2005 (Montreal): UNFCCC: FCCC/KP/CMP/2005/8/Add.1.

[254] Quoted from the CDM Rulebook's section on Supplementarity, available at http://cdmrulebook.org/379. Accessed on 22 November 2009.

[255] Cf. Roberts & Parks 2007.

[256] It is of course theoretically possible to argue that it is worth considering both cost-efficiency and justice simultaneously. However, although some do this, it is hard to ignore the theoretical tension between these two normative concepts; when emphasising one of them, it is often at the expense of the other. The more important justice is perceived, the more problematic the emphasis on cost-efficiency as a normative guideline becomes.

lyze the field of policies and measures that are expected to be adopted domestically, before turning further attention to the flexible mechanisms.

Policies and measures within domestic society

The Kyoto Protocol is legally binding but does not specify certain actions from the parties (other than fulfilling their quantitative commitments). What the Protocol does, however, is to describe possible kinds of measures, which can be expected to normatively frame the actions taken by states.

The EU pursued to include common and co-ordinated policies and measures in the Protocol, although the final Protocol text does not call for this.[257] However, practically every other actor (single or group of countries) opposed this position.[258] The politically important JUSSCANNZ group was against the idea of harmonising policies and measures, with the partial exception of Japan. The largest emitter, the US, argued that targets "must be met through maximum flexibility in the selection of implementation measures", and went on:

> In our view, the significant differences in national circumstances and individual national approaches to these matters suggest that few, if any, individual measures are likely to be applicable to all countries. Therefore, as a general proposition, the United States opposes mandatory harmonized policies and measures.[259]

The arguments could hence be interpreted, once again, as framed in both justice and efficiency terms. It would not be just to force countries to use measures that were not suitable for their political and cultural circumstances. Nor would it be efficient to enforce one 'grand solution' upon nations that vary in important respects. However, the possibility that policy harmonisation could be important for efficiency reasons, was framed out in this statement.

The EU found some support on this issue from the Alliance of Small Island States (AOSIS)[260] and some East European countries hoping to become members of the EU, but this was not sufficient for the idea to survive into the Protocol. The EU lost this battle, as is shown in Article 2, which does not prescribe what policies and measures to be used to reach individual country targets.

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[257] The following is based on Oberthür & Ott 1999: ch. 10.

[258] First and foremost it is the idea of *common* policies and measures that is disliked, indicating a fear of losing flexibility. The solution became to frame it as *coordinated* policies and measures, which also means something different; it requires *similar* instruments in different countries (e.g. the introduction of a CO_2 tax) but *without harmonisation* (in this case of the tax level). However, the idea of coordination is not uncontroversial.

[259] Speech by US Under Secretary of State of Global Affairs, Timothy Wirth, before the second COP to the FCCC, Geneva, Switzerland, July 17, 1996, see Wirth 1997.

[260] These states are generally considered the greatest losers of climate change, since they run the impending risk of being drowned or devastated due to rising sea levels.

With reference to the above discussion of perceptions of the responsibilities to manage climate change, we find that behind this solution lies a rather individualistic norm. It is likely that the unease to accept something else than this solution has to do with the power of the norm of sovereignty in international politics. To mess with countries' domestic politics is not perceived as legitimate, especially not when democratic countries are concerned. The norm of sovereignty thus seems to trump other norms in international politics.[261] Even the UN charter clearly spells out this norm of sovereignty: "The Organization is based on the principle of the sovereign equality of all its Members", which further emphasises the power of this norm in the international community.[262]

However, this analysis should not be accepted too easily. Karen Litfin et al. put forward several arguments for the 'greening' of sovereignty. The recognition of global environmental problems that do not respect political borders challenges the norm of sovereignty understood as states' right and capacity to control their territory. The writers further point out that sovereignty as a socially constructed concept is not static, but has actually been given different meanings in different historical and cultural contexts. Accordingly, sovereignty can, and is continuously being reconstructed as a social institution.[263]

What does the anxiety with common policies and measures in international climate politics mean? The emphasis on flexibility, i.e., that the supranational level should not interfere with details in states' internal affairs, ought to mean that sovereignty, as traditionally understood, has not had its day. Hence, climate change discourse has to be understood against the limits of this robust normative framework. However, the increasing role of international institutions in world politics, and the increasing number of international agreements (including UNFCCC and the Kyoto Protocol) are in themselves proof that the norm of sovereignty is taking new guises. These developments highlight that states may also perceive that they have responsibilities, not just rights in relation to others.[264] The discursive struggle is hence moved to other issues; if international environmental regimes constitute a loosening of sovereignty as traditionally understood, the discursive border line may now concern how big

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[261] Cf. Bernstein's and other constructivists' distinction between norms at different levels of fundamentality. At the deepest level of international social structure are norms of identity, or constitutive norms. "In the contemporary period, constitutive norms have institutionalized sovereignty as the organizing principle of the international system" (Bernstein 2001: 187). See also Kowert & Legro 1996; Ruggie 1998.

[262] Charter of the United Nations, chapter 1, Article 2:1. This gets even clearer when the purposes of the UN are laid out in the same chapter's Article 1:2: "To develop friendly relations among nations based on respect for the principle of equal rights and *self-determination of peoples* [...]" (italics mine).

[263] Litfin 1998.

[264] Cf. Wapner 1998.

intrusions in domestic politics these regimes can legitimise. The evidence from the case of climate change implies that this is not uncontroversial.[265]

To conclude, the legally binding Kyoto Protocol does not prescribe *what* a single country should do to reach its quantified commitments. This may be due to some influential parties' scepticism towards common policies and measures, which is largely perceived as a too big intrusion in domestic affairs, hence symbolizing the power of the norm of sovereignty. The importance and buzz word character of flexibility in the climate change regime should thus be understood against the taken for granted norm of sovereignty in world politics. This is of course even more obvious regarding the flexible mechanisms that are discussed below. Without the flexible mechanisms, one would hardly talk so much about flexibility in international climate change politics; if anything constitutes flexibility in the Kyoto Protocol it is its flexible mechanisms. This also has consequences for the domestic implementation process. If the Kyoto protocol does not specify what countries should do, it opens up for an interesting process of interpretation of what this commitment consists of. It means that domestically salient discourses probably have a hold of this process, thus making possible both several paths of compliance as well as resistance.

Flexible mechanisms—emissions reductions in other countries

International climate change policy, with the Kyoto Protocol at its core, is considered special in environmental treaty making. The uniqueness concerns partly the issue at hand, almost limitless in its scope, and the global character of parties involved in the process of managing the problem, but mostly the measures through which global climate change should be managed. The Kyoto Protocol is the first global environmental treaty that so heavily relies on market mechanisms to solve global problems. This comes in the guise of the flexible mechanisms, which besides being the most controversial part of the Kyoto Protocol also practically intertwine countries with each other. Thus, they manifest the major (Thinking Globally) story-line of climate change: "From a global perspective it does not matter where on the globe emissions are made or reduced". The mechanisms are thought to be flexible in that they do not force countries with quantified commitments to actually reduce all their GHG emissions domestically; the flexible mechanisms imply that emissions reductions are of most value when they are cheapest. Thus, they provide the opportunity for countries that have quantitative targets to buy and sell emissions permits, and be credited for paying for emissions reducing projects in other countries.

The flexible mechanisms are the two project mechanisms, Joint Implementation (JI) and Clean Development Mechanism (CDM), and the rather logical

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[265] The case of human rights clearly adds to this picture of 'threatening' state sovereignty.

complement of Tradable Emissions Permits. I will start discussing Tradable Permits before continuing with the project mechanisms, which I treat jointly.

Pricing and trading with the right to emit greenhouse gases

Article 17 of the Kyoto protocol allows for emissions trading: "The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitments under Article 3." But this does not mean that countries can solely rely on emissions trading in order to fulfil their quantitative commitments: "Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments under that Article."[266]

The Kyoto Protocol is not the first attempt to introduce emissions trading regimes in order to reduce polluting emissions. Several regional examples can be found in North America. However, it is certainly the first time it is introduced on a global scale, thus contributing to the 'revolutionary' face of the Kyoto Protocol. And yes, although 'putting a price on the environment' did not exactly revolutionize environmental politics in the late 1990's, it has been controversial: Supporters have unconditionally embraced this novelty, arguing that it brings efficiency into environmental politics, while critics dislike the fact that Nature gets a price tag. Environmentalists drawing on the discourses of survivalism or civic environmentalism have difficulties accepting that environmental problems should be solved by the market. That would be too risky, contemplating the strong interests involved, more concerned with making profit than with promoting social and environmental quality. According to such critical views, solving environmental problems with market mechanisms equals forgetting what actually created the problems in the first place.[267] Supporters, who are obviously on the winning side, claim that leaving the solution to the private sector is the most efficient way, thus giving the concerned actors the appropriate incentives for reducing GHG emissions.

Regardless of the different views, the Kyoto Protocol explicitly introduces tradable emissions permits as a flexible way to manage climate change. Hence, climate change and its solution are privatized, in that power and control of the problem is implicitly taken from governments and communities and given to private actors—or the more vague market. When looking at these details of international climate change policy, we can thus see another triumph of the discourse of liberal environmentalism. Critics often refer to exactly this point, and conclude that when power is transferred to the private sector, and the major incentives to reduce emissions are cost-efficiency and profit, there is an impending risk of overestimating reductions, inaccurate reporting etc.[268]

[266] The Kyoto Protocol to the UN Framework Convention on Climate Change, Article 17.
[267] See e.g. Bachram et al. 2003; Pettit 2004; India-Resource-Centre 2002.
[268] Cf. Bachram et al. 2003: 3.

The prominent appearance of emissions trading should be viewed as a manifestation of the emphasis on flexibility and cost-efficiency in the climate regime. The underlying idea behind this solution is of course that it is perceived to make the combating of climate change less costly. More specifically, if emission permit units are tradable, then under the market logic emissions reductions will appear where the marginal costs are lowest, i.e. where technology is least developed and energy savings easiest (= cheapest) to do. Following this logic, we understand that such reductions are most likely to be made in developing countries. Considering the centrality of tradable emission permits it is close at hand to conclude that a discourse of liberal environmentalism has a hold on international climate change policy.

Despite this strong position of liberal environmentalism in the climate regime, it should be noted that the truthfulness of this discourse is not uncontested, as just indicated above. Climate change discourse's dominant storyline, which depicts that GHG's are global in character, and that the effect on the global climate is the same regardless of where GHG's are emitted or reduced, is hardly questioned by anyone. However, if emissions trading is the logical conclusion in the Kyoto Protocol, there is critique of emissions trading coming from an environmental justice perspective. Bachram et al. make the link between GHG emissions and other toxic co-pollutants; GHG's seldom come alone, but have other co-pollutants more injurious to health. Nevertheless, there are toxic co-pollutants not recognised in the climate change regime (in fact, none are). Thus, critics like Bachram et al. argue that emissions trading will imply that industries can basically buy themselves free from this problem, and such toxic co-pollutants will continue to affect communities around factories that buy and sell carbon credits. Unsurprisingly, people with low income and/or people of colour are over-represented in these areas.[269]

We have seen that tradable emission permits are at the heart of the Kyoto Protocol. Industrialised countries' targets can be translated into emissions permits which each country can buy and sell. Correspondingly, this lays the foundation for the other flexible mechanisms, which are based on the idea that emissions permits can be bought and sold.

Buying the right to emit greenhouse gases through the investment in cuts abroad:
Joint Implementation & Clean Development Mechanism

The idea of Joint Implementation (JI) dates back to the Framework Convention from 1992, whereas the Clean Development Mechanism (CDM) and Emissions Trading were introduced internationally by the Kyoto Protocol.[270] In the UNFCCC, JI means what in the Kyoto Protocol became divided into the catego-

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[269] Ibid.: 4.
[270] Oberthür & Ott 1999:151; 158.

ries JI and CDM.[271] The JI definition in the UNFCCC is thus broader than the definition in the Protocol. The basic idea of JI is that countries that have quantitative emissions targets can invest in projects in other industrialised countries (JI) or in developing countries (CDM) that lead to GHG emissions reductions that would not take place if the projects did not exist (the principle of environmental additionality). In the following I will at some points discuss Joint Implementation generally (i.e. what concerns the perceived benefits and downsides of both what is defined as JI and CDM in the Protocol), and where appropriate distinguish between JI projects in Annex B countries, and CDM projects in non-Annex B countries.

JI is based on the notion that emissions reductions should be carried out where they are cheapest. Hence, it is more rational to cut emissions in countries that are less industrialised. Given that countries with quantitative commitments in the Kyoto Protocol (Annex B countries) are the most industrialised, JI projects can be used to invest in emissions reductions in other countries, where these reductions are cheaper than they would be domestically. Obviously, this is in line with the discourse of liberal environmentalism, with a great belief in market mechanisms. The underlying assumption is that investors (private businesses or sometimes governments) will contribute to the reduction of emissions out of sheer self-interest.

Like the idea of tradable emissions permits, JI and CDM have been criticized (if nothing else is indicated I refer to both mechanisms when writing JI).[272] Among the controversial issues are first that JI is criticized for the risk of not being cost-efficient in the long run. This is because industrialised countries get fewer incentives to change their structures and at the same time can benefit from cheap investments in poorer societies (JI projects are supposed to be run especially in countries from the former Soviet bloc; CDM in developing countries). The latter, however, will be in a disadvantageous position when they are to begin their emissions reductions; they will be left with the relatively more expensive measures to implement. This critique comes from a South perspective emphasising the unfairness *and* inefficiency of JI. I think this criticism holds both civic environmental and liberal environmentalism elements. It consists both of the identification and a fear of structural inequality, and arguments very much in line with the opponents' who—typically for liberal environmentalism—emphasise the norm of cost-efficiency. Dressing one's rhetoric in the language used by the opponents is harder for them to ignore.

Second, there has been some concern with a possible development into neo-colonialism. This is based on the observation that there are asymmetrical power relations between industrialised countries and the poorer target coun-

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[271] The Kyoto Protocol to the UN Framework Convention on Climate Change, Article 6 and 12, respectively..
[272] The following is based on Oberthür & Ott 1999: 151ff.

tries. Hence, there is a risk that the specific JI agreements will be conditioned by the more powerful countries. Also this objection uses a civic environmental language, but could also be based in a post-colonial discourse as was discussed regarding articulations of responsibilities to manage climate change above.

Third, critics have argued that it is hard to determine the so called baseline scenario, i.e. what the result would be if JI projects did not exist. They are concerned about that JI partners might end up in collusion, exaggerating the emissions reductions through their projects.[273] Fourth, some have been concerned about the transaction costs of the agreements, which might considerably reduce the financial benefit of the projects. These objections regarding efficiency could be attributed to any of the institutionalist discourses.

Finally, critique comes from indigenous leaders in countries targeted for CDM projects, e.g. tree planting projects. They are very concerned with the fact that the 'local' is erased from international climate change discourse, and with it their unique and valuable traditional knowledges. In its eagerness to map and steward the earth with a 'global gaze', and to promote market efficiency, local people in the developing world are practically ignored. The implicit argument here is that this is both genuinely undemocratic and environmentally harmful.[274] I interpret this critique as a manifestation of the discourse of reflexive green governmentality, where emphasis is put on local knowledge systems, bottom-up processes, including more public involvement in policy processes, and a sceptical attitude towards rational expert governance. First and foremost the critique concerns the part of the climate regime that draws on a discourse of green governmentality, which puts faith in the possibilities to govern the Earth through scientific mapping of the 'system', and in general solutions. The latter would be ruled out by critics as being too blunt. The critique also concerns the solutions laid out by the discourses of liberal environmentalism or ecological modernisation, i.e. that market efficiency is the soundest solution to climate change. This indicates that international climate discourse as institutionalised in the UNFCCC and the Kyoto Protocol is by and large informed by the discourses of green governmentality and liberal environmentalism, where the former first and foremost frames the problem, and the latter frames the solutions. The discourse of civic environmentalism is somewhat influential regarding how the responsibilities should be allocated.

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Below I summarise the results of the analysis of international climate policy in table 4.1. The analytical dimensions regarding what climate change 'is', how al-

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[273] Cf. Hovi, Stokke & Ulfstein 2005: 7; Mitchell 2005: 69f.
[274] Fogel 2004.

locations of responsibility are constructed, and interpretations of what needs to be done to mitigate climate change have guided the analysis. For each dimension I have analysed structurated and institutionalised policies, norms, story-lines and discourses. As shown in the analysis, and illustrated in the table, what norms, story-lines and discourses that are powerful depend on which analytical dimension we focus at. Following the table I spell out the concluding analysis of this chapter.

Table 4.1. Analysis of international climate policy. Articulated discourses, story-lines, norms, and policies.

Questions and analytical dimensions	Discourses	Story-lines	Norms	Policies
What 'is' climate change?	Green governmentality	The Earth is not in balance	Scientific monitoring and management of Nature	Not applicable
		Human induced climate change through emissions of GHG's	Stabilization of GHG concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with the climate system	
Responsibilities	Civic environmentalism	National Action	Justice (contested): common but differentiated responsibilities	Quantified targets
	Liberal environmentalism		→**industrialised countries to act first**	
			vs.	
			→ meaningful participation by all countries	
What needs to be done?	Liberal environmentalism	**Thinking Globally**	Flexibility	Quantified targets
		vs.	Cost-efficiency	Flexible mechanisms
		National Action		
			Justice	
			Sovereignty	

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

International climate change policy should be considered institutionalised in core documents. Thus, having this context clear is highly important for the analysis of Swedish climate policy to follow. The first major conclusion from this chapter is that there is generally a tension between norms of justice and cost-efficiency in the climate change regime. Second, various story-lines help to promote certain norms, which together with the story-lines contribute to the reproduction of various discourses, and which thus influence international climate policy. Naturally, it is the structurated power of a discourse that makes possible the attraction to story-lines and norms, but a discourse cannot stay powerful if not continuously reproduced. For this, story-lines and norms are of key importance. Moreover, the analysis has shown that three different discourses have a structurated impact, depending on which research question we have focused.

First, regarding what climate change 'is', we saw that the discourse of green governmentality by and large frames the problem. Through 'mega-science' the Earth has been—and is continuously being—mapped, and through central story-lines we are told that 'the Earth is not in balance' and that this is human induced due to anthropogenic emissions of GHG's. Further, the concentration of GHG's in the atmosphere need to be stabilised in order to prevent dangerous anthropogenic interference with the climate system, and here we get the normative flavour. The Earth needs to be (scientifically) monitored and nature rationally managed. Science and rational administrations thus have key positions according to this discourse.

Second, I investigated articulations on the allocation of responsibilities. This was not as straightforward as articulations on what climate change 'is', but quite contested. However, it was evident that the debate on responsibilities has centred on the norm of justice. The emphasis on justice should come as no surprise in the field of international environmental politics. Besides, who really wants a policy solution to be perceived as unjust? Including and not including developing countries in the mission to reduce global GHG emissions have both been argued to be just solutions. The final outcome can be characterized as something in between. Developing countries do not have quantified targets but are anyhow involved through the introduction of the Protocol's CDM and tradable emissions permits. It is nevertheless important to acknowledge that developing countries do not have any quantitative commitments in the Kyoto Protocol. Thus, "common but differentiated responsibilities" actually means that countries do not have the same responsibility to manage climate change.[275]

[275] In contemporary climate discourse (regarding post-2012 commitments) the role and involvement of developing countries is once again open for contestation. Cf. Bäckstrand & Lövbrand 2007.

The norm of justice partly corresponds to the discourse of civic environmentalism. When justice is alluded to in critical terms, i.e. when drawing on the narrative of "the rich industrialised world has been able to develop at the expense of the poor world", implying that it is now time to consider the poor countries' interests, this resembles justice in the language of civic environmentalism. According to this line of reasoning it is the industrialised countries that should act first to mitigate climate change. This is also institutionalised in climate change policy, thus spelling out the National Action story-line through the quantified commitments of industrialised countries. Annex B countries (to the Kyoto Protocol) are thus committed to reduce their GHG emissions by the figure spelled out in the Protocol. As we will see below, this National Action is to some extent counterbalanced by the function of the flexible mechanisms.

But not all mean the same by referring to justice. Mentioning justice is not the same as drawing on the discourse of civic environmentalism. Rather, what we have seen in this chapter is that the norm of justice is central but at the same time difficult to eventually define. Justice has also been understood (primarily by USA and its allies in the 'umbrella group') as 'meaningful participation' by developing countries, although this was not institutionalised in the UNFCCC or the Kyoto Protocol. The argument is that some of these countries are developing rapidly and hence importantly contribute to global GHG emissions, and this can not go on as were it not a problem. This group of industrialised countries hence put greater emphasis on "common" than on "differentiated" responsibilities. But such an inclusion of developing countries is not considered legitimate in the climate regime. Despite the denial of this argument's moral value, significant countries such as USA declined to ratify the Kyoto Protocol, officially with reference to this argument.

Latent in the debate is the norm of converging per capita emissions in the long run. Given that GHG emissions by and large correlate with level of economic development, if such a norm should be institutionalised in the climate regime it would be politically very radical, since it would overthrow contemporary international power relations.

Third, when analysing the presented solutions to climate change we saw that it contrasted with the view on how responsibilities should be allocated. It is in this context that the norm of cost-efficiency enters the scene. The norm of cost-efficiency effectively reproduces the discourse of liberal environmentalism, according to which environmental problems (and solutions) are about (fixing) market failures. The norm of cost-efficiency is backed up by the most common story-line in climate change discourse: "From a climate perspective it does not matter where on the Globe emissions are made or reduced"; what I have called the Thinking Globally story-line. This story-line effectively makes possible the emphasis on flexibility in managing climate change, because it constructs climate change as a truly global issue. The story-line further gets legitimacy from its roots in science, and thus helps to intertwine the discourses of green governmentality and liberal environmentalism. Further, my interpre-

tation is that cost-efficiency is constructed as being not that far from justice. What is cost-efficient is also just, the logic goes.

Another important norm in international climate policy is the norm of flexibility, which is also backed up by the Thinking Globally story-line. In fact, the norms of flexibility and cost-efficiency are intimately connected. If the allocation of responsibilities could be interpreted as constraining by some parties, the 'solution' comes in the step to follow, when the quantified targets are to be implemented. The institutionalised solution in terms of norms is no doubt flexibility. This works in correspondence with the strong norm of sovereignty in international politics, according to which states are not that keen on letting their sovereign power over their territory become circumscribed. The more the commitments according to the Protocol can be reached in a flexible way, the better. Enter the flexible mechanisms, which are motivated not least according to the Thinking Globally story-line, which in turn promotes the norm of cost-efficiency. In my interpretation, the norm of cost-efficiency is easier to legitimise than the norm of flexibility, in the eyes of critics. Who wants 'us' to spend more money than necessary on mitigating climate change? Isn't it better to invest x amount of money in mitigation and getting more emission reduction units for it? The power of such an argument should not be underestimated. Thus, one can be flexible and implement measures outside domestic society.

The critique of international climate policy, and especially the flexible mechanisms, draws to a large extent on a civic environmental discourse, emphasising the mechanisms' unjust impacts. But the criticism can also, when referring to inefficient effects and not to the basic premises of policy measures, come from the broad discursive landscape of institutionalism, and especially the discourse of ecological modernisation. According to the latter, which not only values economic incentives, but also rationality and planning, the principle of environmental additionality would be embraced. Hence, doubts regarding the environmental additionality would be a serious matter prom the ecological modernisation position.

To conclude, when it comes to allocating burdens internationally, the norm of justice is especially prominent. It would not be legitimate to ignore the justice aspect; solutions have to be recognised as reasonably just. My guess is that especially distribution of burdens is viewed this way, and that this explains why the norm of cost-efficiency is not that emphasised in this context. However, cost-efficiency is probably the single most important norm in international climate discourse. In the end, the burdens that are shared can be implemented in many ways, and the UNFCCC and the Kyoto Protocol lay out some ways, hence blurring others. The solutions spelled out in global fora, in promoting flexibility and cost-efficiency quite heavily, thus markedly draw on the discourse of liberal environmentalism. This is especially true—obviously—for the flexible mechanisms of the Kyoto Protocol.

The Kyoto Protocol represents, perhaps more than any other international environmental agreement, the idea that environmental degradation is about

market failures that need to be dealt with by integrating environmental costs in economic activities. In a sense, then, these documents do not call for any structural change, i.e. they do not question the contemporary capitalist system as inherently wasteful. Hence, although some traces of civic environmentalism can be identified, climate change discourse can not be said to be permeated by it. Capitalism in itself and a liberal economic order is instead perceived as the solution to its self-generated problems, in this case what is perceived as human induced climate change. Understood this way, the politics of climate change probably stretches the discourse of ecological modernisation—said to be so influential in contemporary environmental policy—to its empirical 'extreme', what I thus call liberal environmentalism. That way international climate policy also implies a normative challenge to a country like Sweden, which although it is known as an environmental forerunner has also been known as a friend of state regulation of the market and its externalities, not quite in line with the discourse of liberal environmentalism.

International climate change policy cannot be understood without reference to wider environmental discourse—and its changes—as depicted in chapter 3. To think that environmental issues simply are about 'saving the environment' is rather misleading. Quite the opposite, the way society deals with these issues is normatively impregnated. It tells us what is valued, who has responsibilities, how power is structured, and so on. The environment is certainly valued in mainstream environmental discourse, as reflected in UNFCCC and the Kyoto Protocol, but so is growth and development. This implies a normative tension that should not be underestimated when trying to understand environmental politics and its implementation process. Concerning responsibilities we can see that 'everybody' has a responsibility to take environmental consideration, even if this in practice is negotiated when it comes to specific treaties. Although industrialised countries are often singled out to have the biggest moral responsibility to manage global environmental problems, it is hard to ignore that international environmental politics is to a large extent shaped by the richest and most powerful states. This becomes clear when the institutionalised solutions to global climate change are analysed. Hence, international power relations and social structures are reproduced through the creation of international environmental agreements. Climate change is hardly an exception.

5. Sweden: climate policy as a window of opportunity

"If it doesn't work in Sweden, it won't work anywhere"[276]

Now, let's begin with the main task of this thesis: to analyse the discursive foundation of Sweden's theoretically unexpected behaviour in climate policy. At the core of the analysis are the questions regarding what climate change 'is', how the own responsibility is interpreted, and what—if anything—ought to be done by the Swedish state in order to mitigate climate change. These questions will be analysed by considering first and foremost what discourses, story-lines and norms that are drawn on, and the relation between these.

Further, the next question concerns the institutionalisation and structuration of discourses, story-lines and norms in Swedish climate policy. The assumption is that there will be a struggle for the preferential right of interpretation along all analysed dimensions. However, not all articulations have the same influence in the end; thus my concern with institutionalisation and structuration. To recapitulate what was explained in chapter 2: when norms, story-lines, and discourses are reproduced in political discourse I regard them as structurated. When they become solidified in policy, e.g. underlying arguments for targets or other policy solutions, I regard them as institutionalised.

Finally, I will investigate the role of domestic social structures when international policies and problem definitions are to be transformed into domestic policies. This concerns how extant discourses and corresponding identities and the view of legitimate order and/or actors help to filter international policies and problem definitions. The other side of this coin, of course, has to do with how the international affects domestic social structures, i.e. if and in what way important aspects of environmental and climate policy is affected by this 'pressure from above'. For example, in what way is international climate discourse, as analysed in the previous chapter, reflected in Sweden? In what way does climate discourse in Sweden differ from the international? To give a more concrete example, the Kyoto protocol separates domestic measures from the flexible mechanisms, (JI, CDM, and emissions trading) which are measures not restricted to domestic society (in fact, most of the flexible mechanisms' emis-

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[276] Anders Ygeman (S), Chair of the Parliamentary Committee on Environment and Agriculture, interview 2008. My translation.

sions reductions will be conducted in other countries). Since the flexible mechanisms in themselves place flexibility and cost-efficiency in front of norms of justice (see chapter 4), they are interesting when confronted with social structures that have at least partly held on to an opposite priority structure (see further below). Further, one of the tasks in this study is to analyse how interpretations of climate change as a political problem to Sweden has resulted in the urge for *over-implementation*. How was that possible, given Sweden's relatively low absolute and per capita GHG emissions (compared to other industrialised countries), and the social dilemma character of climate change policy?

Given the theoretical starting-point in this study, in order to conduct a profound analysis it is important to understand the historical roots of the present. As explained in chapter 2, before conducting the analysis, I need to give a sufficient description of predominant political ideas and norms in the Swedish polity, and how politics is organised. Further, we also need to recognise Sweden's environmental policy tradition, both regarding the normative content and how it has been organised. Together these descriptions constitute the social structure which is crucial to understand for the analysis because it constitutes power, without which we cannot sufficiently understand the domestic interpretation/implementation process, and its outcome.

AN ANXIOUS GREEN WORLD CONSCIENCE

In this section I discuss typical features of Sweden's polity, with special emphasis on its environmental legacy from a discursive point of view. I do this because it gives us a sense of the relevant Swedish social structure, against which I will analyse constructions of climate change policy.[277] It seems obvious that Swedish politics is clearly marked by the Social Democratic Party's 'hegemony' throughout large parts of the twentieth century. I also conclude that Sweden's environmental policy has two rather different discursive legacies; a rational administrative and later ecological modernisation legacy regarding domestic environmental policy, and a legacy closer to green radicalism regarding international environmental policy. This implies an interesting tension when climate change is to be dealt with, since international climate change policy is both about domestic and international policy measures. In what way does this legacy mark Sweden's response to global climate change policies?

The Swedish polity

Sweden is often characterized as a consensus democracy, with corporatist features. That is, cooperation and consensus involving all levels of government as

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[277] It is practically impossible to here give a full account of what Sweden 'is' in terms of influential norms, story-lines and discourses.

well as private interests is a typical Swedish political feature.[278] When major political decisions are to be taken, politicians often want them to be anchored, i.e. supported by relevant interests; political parties, the industry and organised labour. One example of this deep rooted concern is the importance of Committee reports (SOU's) which are circulated for consideration to the parties concerned, and the relative importance of these reports for the policy process.

Apart from this typical feature when it comes to organise the way policies are formed, there is a special Swedish feature when it comes to the content of policies and government programs.[279] The Social Democratic Party has been in government from 1932, with non-socialist parties 'interrupting' this hegemonic position in Swedish politics only during 1976-1982, 1991-1994 and from 2006 to the present. Obviously this has marked Swedish society and the policies preferred. Thus, Rothstein concludes that the non-socialist governments 1976-1982 "neither challenged social democratic hegemony nor altered any established government programs".[280]

This is not the place to tell the story of Swedish Social Democracy, but suffice it to say that values such as equality, fair distribution and solidarity are important, at least rhetorically. The manifestation of such values can be seen in egalitarian policy programmes such as the relatively progressive taxation system, or the goal of full employment, the latter officially adhered to at least until the beginning of the 1990's.[281] Being to a large extent marked by Social Democracy, Swedish political society can be characterised as rather collective-oriented, implied by the important position of the discourse of the *People's Home* (*folkhemmet*). An important story-line in this discourse, I argue, is the Building the Good Society story-line. According to this story-line the state (as seen by the Social Democratic Party) is able to rationally plan society so that everyone is better off materially as well as socially. Building the Good Society relies on active participation by citizens. Although the discourse of the *People's Home* can be argued to be outdated in contemporary Sweden, it still implies the collective character of Swedish political society.

These values of equality, fair distribution and solidarity have also not least been prominent in international issues, especially in the post World War II period. Scholars have argued that according to Sweden's self-narrative it is a country that is "an outward-looking internationalist state whose commitments to justice and equality are not confined to co-nationals".[282] It seems that public opinion has played an important role here; although it is difficult to tell whether the hen or the egg came first, without a public opinion supporting

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[278] See Rothstein 1992; Rothstein 1996. However, the corporatist feature has recently been de-emphasized, see Rothstein & Bergström 1999.
[279] Tilton 1990; Rothstein 1996.
[280] Rothstein 1996: 3.
[281] Ibid. On the abandoning of the goal of full employment, see Lindvall 2004.
[282] Bergman 2007: 74.

these values (whether by deliberation or by propaganda) they would probably not be that long-lived. Public opinion has been crucial to push the Swedish state to run a foreign policy promoting all humans' equal value and state sovereignty (states' right to self-determination). This has been particularly manifested in issues such as the war in Vietnam, the dictatorships in Greece, Spain and Portugal, as well as concerning foreign aid assistance.[283] Besides the public opinion, internal party opinions have been important for pushing the Social Democrats to be more positive to foreign aid assistance.[284]

The environmental forerunner

Sweden is generally considered an environmental forerunner.[285] But every story has its beginning. As early as the beginning of the twentieth century, there was some societal interest for the environment (i.e. before the reign of the Social Democrats). This mostly concerned nature conservation, not environmental protection. The problems with industrial society were not acknowledged on a large scale, and environmentalists had quite powerful enemies who fought them back.[286] Furthermore, Sweden was not a democracy until 1921, which stopped any potential public opinion from promoting environmental values. The concern with nature and environment was, at least until the late 1960's, supposed to be met without preventing economic or social progress. This perception of the environmental problem was even more emphasised when the Social Democrats came to power in the 1930's. The main political objective was first and foremost to liberate people, to provide them opportunities to lead a materially better life, with the depression and the historical image of Sweden as a poor agricultural country fresh in mind. Environmental protection was thus generally considered as an obstacle to economic progress, so important for combating poverty.[287]

The political answer to the 'environmental awakening' in the 1960's was to manage environmental problems via the creation of central agencies with overall responsibilities. Not less important to understand this solution is the fact that the boards of these agencies contained representatives of concerned interests. Hence, just as well as the corporatist way of doing politics concerns

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[283] See Bjereld 1992; Lödén 1999; Ekengren 2005. The opinion against the war in Vietnam was very loud, but not that widespread, see Salomon 1996.
[284] Ekengren 2005.
[285] See e.g. Yale Center for Environmental Law and Policy & Center for International Earth Science Information Network 2005; Eckerberg 2000; Eckerberg, Forsberg & Wickenberg 1998; Kronsell 1997; Lundqvist 2004.
[286] More powerful and loud enemies than had nature conservationists, who were not considered a threat to industrial progress, see Lundgren 2005b.
[287] The historical description of Swedish environmental policy is based on Lundqvist 1971; Duit 2002; Lundgren 2005b; Lundgren 2005a.

politics in general it is true also regarding environmental politics,[288] and climate change is no exception.[289] The Environmental Protection Act that came into force in 1969 and the environmental institutions, most importantly the Swedish Environmental Protection Agency (SEPA), that were created in the same era stand out to be the epicentre of the formative moment of the 1960's; they were to have a wide impact on environmental politics and policy in Sweden in a path-dependant way. Significant of this initial large-scale way to perceive and manage environmental problems was that it was seen as a malfunction of production processes that could be repaired through end-of-pipe solutions. Further, these institutions manifest the belief in state capacity to regulate human behaviour, and the market in particular. The early environmental movement regarded capitalism and economic growth as the root cause of environmental degradation (cf. chapter 3). Western governments, Sweden's is no exception, believed that market externalities could be regulated; economic growth was hence not to be compromised. The Swedish way was to regulate environmentally unsound activities with the industry's consent, which seems obvious given the corporatist character of the Swedish polity. This is in line with the problem solving discourse of administrative rationalism, which does not question the system, but rather tries to solve technical problems in a manner as efficient as possible. The corporate element of Swedish environmental politics should not be neglected. The dialogue with the industry, economic subsidies together with regulation based on sound science, was early on maintained by Swedish Environmental Protection Agency's director-general Valfrid Paulsson, who headed the agency 1967–1991.[290]

Thus, there is a prominent self-image of the rational state that is both seeking and able to find the most effective remedies for environmental problems. Swedish environmental policy thus clearly has its roots in a discourse of administrative rationalism, but quite early this was accompanied by some elements of ecological modernisation. The reason for this, I suspect, is the corporatist feature of the Swedish polity, which e.g. values cooperation between government and industry. This is also an important ingredient of ecological modernisation, but the latter in addition emphasises the incentives of private actors much more.

However, administrative rationalism is not the only heritage for Swedish environmental policy; there are also signs of a different discourse. In the previous section I argued that Sweden is a country oriented towards international cooperation. Issues such as international equity and solidarity with poorer countries are relatively important, both in political rhetoric and in the public opinion. The international orientation concerns environmental issues too, and

[288] Lundqvist 1971; Duit 2002; Uhrwing 2001.
[289] Lundqvist & Biel 2007a.
[290] Lundqvist 2005. Note that the SEPA board for some time had a corporatist composition of concerned interests.

public opinion is also relatively pro-environmental.[291] International environmental cooperation is politically high-ranked.[292] Sharon Witherspoon discusses possible explanations to the high profile of environmental issues in Sweden and other countries, and argues that "the link between altruism and environmentalism may explain why the smaller democracies of northern Europe—Norway, Sweden, the Netherlands—have been more active in promulgating policy discussions about environmental issues which involve regulation of market externalities and making the distributional costs of environmental programmes more transparent."[293] This speaks in favour of a political-cultural explanation of Swedish environmentalism, manifest not only in state policies, but also in support for these by the public. According to surveys, environmental issues have been of less relative importance for the public through the 1990's but the trend shifted in 2004 (both trends partly correlate with decreased reporting in the media), maybe due to more diffuse problems and an economic recession. However, this has not had any significant effect on public environmental behaviour.[294]

This internationalist and solidarity tradition of Swedish environmentalism can hardly be said to cling to the problem solving discourse of administrative rationalism. Neither would ecological modernisation be a fruitful label. There are traces of norms of justice apparent here; which neither of the aforementioned discourses pays particular attention to. If we look more carefully at things, we see a concern for at least other humans in other parts of the world, as well as in the future. Implicitly, more than humans are included in the sphere of solidarity, i.e. the environment seems to have a moral value here. This, together with the promotion of justice indicates that the discourse of green radicalism has a hold of this part of Swedish environmental policy. In climate policy terms this would imply clinging to the discourse of civic environmentalism.

Implications for climate change policy

Hence, we can characterize Sweden as a homogenous, consensus style political community, with an environmentalist and internationalist national identity. In climate change politics, its ambition was to decrease GHG emissions by 4 percent (1990–2008/2012), although the EU 'bubble' allowed an increase by 4 percent. According to Inventory reports Sweden will over-implement its minus 4 percent target.[295] Since we know that many countries have difficulties to ful-

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[291] E.g. Bennulf 1994; cf. Jagers & Martinsson 2007.
[292] Cf. Kjellén 2007.
[293] Witherspoon 1996: 65.
[294] Jagers & Thorsell 2002; Jagers & Martinsson 2007.
[295] Aggregated GHG emissions decreased by 9,1 percent between 1990 and 2007, see SEPA 2009.

fil their quantitative commitments according to the Kyoto Protocol, it is interesting to note that Sweden manages relatively well despite comparatively large decreases of GHG emissions 1970–1990, as mentioned in chapter 1. Per capita emissions, moreover, are among the lowest in industrialised countries with Kyoto commitments.[296] My mission is not to explain why Sweden has managed relatively well, but rather to understand why Sweden has had such high ambitions, relative to other states, and over-implemented national targets. Remember that the most common description of global environmental problems is through the notion of a social dilemma, predicting that countries would rather try to free ride on others' action than to contribute to the common good.

However, Sweden's social structure implies that some ideas in the new environmental discourse, as the ones inherent in UNFCCC and the Kyoto Protocol, could theoretically have difficulties to take root. That is, Swedish environmental policy has borne clear marks of two distinct discourses: Regarding domestic environmental policy administrative rationalism (and more recently: ecological modernisation) has been prominent, whereas regarding international environmental policy one has been closer to the discourse of green radicalism (or perhaps a post-colonial discourse). Hence, it seems plausible to argue that the notion of rational planning and large faith in state capacity as well as norms of justice, fair distribution etc., traditionally have been more important than norms such as cost-efficiency and flexibility. The latter, drawing on a discourse of liberal environmentalism, which we could see in chapter 4, are central in international climate change politics. However, as illustrated by especially the work of Lundqvist, Sweden has incorporated many key features of ecological modernisation into its domestic environmental policy at least since the beginning of the 1990's.[297]

But from my point of departure, this is not sufficiently theorized. As described in chapter 4, climate change is a critical case of the 'new' environmental discourse, and thus provides us with a good opportunity to study discursive interpretations of international ideas that in important respects challenge traditional discourses. In other words, what are the domestic effects of such processes at the global/international arena? How does it affect state policies, in a wide sense? Given Sweden's background, climate change policies imply a normative challenge. This would further imply discursive struggles about what climate change means and how it ought to be managed, which should be interesting to study in a consensus-style polity. Further, above we saw that the environmental tradition in Sweden draws on two rather different discourses, which might be influential when Sweden creates 'new' environmental policy. But how influential are they, and in what way?

[296] EEA 2008; SEPA 2009. Swedish per capita emissions are the lowest in EU-15.
[297] Lundqvist 1998; Lundqvist 2001a; Lundqvist 2004a; Lundqvist 2004b. Cf. Cederlöf 2001.

In the following I will analyse how Sweden interprets (1) the problem climate change; (2) what Sweden's responsibility ought to be; and (3) what policy measures are preferred both domestically and internationally. What will be clear in the analysis is that Sweden more and more constructs climate change as an Opportunity rather than a Sacrifice. In that way comparatively ambitious climate policies can be legitimised in the eyes of a broader public. That does not mean that the Sacrifice story-line is not present, quite the contrary. What it means is that the Sacrifice story-line over time is downplayed and the Opportunity story-line gets more salient.

What 'is' climate change?

Prominent Swedish scientists from Svante Arrhenius in the late nineteenth century to meteorologist Bert Bolin who headed IPCC from its creation in 1988 until 1997 have acknowledged and promoted the greenhouse theory/climate change issue. Hence, it is perhaps no surprise that the official Swedish articulations markedly draw on a science discourse. Says the Head of the Environmental Quality unit at the Ministry of Environment:

> The climate discussions started already in the 1980's in the Swedish political circle, and this growed. We've had successful climate researchers in this country. And Bert Bolin, who took the initiative to launch the IPCC, was for a long time adviser to former governments, and he influenced Swedish politicians in a constructive way. So for Sweden's part it wasn't hard to join this international climate council.[298]

There were never really any hesitations regarding the truthfulness of the greenhouse theory, which emphasises the human impact on the climate system through emissions of greenhouse gases, and the negative effects of this on ecological systems and human societies. Sweden has throughout the studied years admitted the risks following climate change, and has recognised the long-term perspective of the issue; it will imply a restructuration of Western societies as we know them and thus hard efforts for many decades if this should be sufficiently mitigated. The introduction of the 2001 Government Bill is telling of how Sweden understands the severity of climate change:

> Climate change following increased emissions of so called greenhouse gases caused by human activities is one of the greatest challenges facing humanity in the twenty-first century. No other environmental issue so fundamentally affects all parts of society. The effects of climate change on agriculture, the building of societies, culture and economy, as well as on the ecosystems, can

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[298] Lars Ekekrantz, interview 2008. My translation.

be large and negative. Therefore, every long-term decision has to be made in light of the risks that increasing emissions of greenhouse gases conveys. [...] The long-term management of the climate issue will be of great importance to the general development of society. The necessary emissions reductions in order to stop global warming demands changes in our societal system. Since fossil fuels stand for more than 80 percent of the world's energy supply, the world's countries have an extensive and complex task at hand.[299]

This certainly is an articulation of the Sacrifice story-line. Climate change is depicted as "one of the greatest challenges facing humanity", implying that important decisions have to be made for a long period of time, and which is demanding to society if the worst risks are to be avoided. In this articulation there is no sign of the Opportunity story-line. But as we will see below this picture can no doubt be balanced.

Sweden has also been convinced by climate science, especially the findings presented by the IPCC, which have become expressed with more certainty over time (cf. chapter 4). This has been increasingly manifested over the years, not least in the mission given to, and the conclusions of, the Scientific Council on Climate Issues in December 2006 and succeedingly in the report of the parliamentary based Climate Commission, which scientifically built its conclusions on the writings of the Scientific Council and the IPCC.[300] Clear references to consensual expert knowledge probably functions legitimising when actions against climate change are to be taken.[301]

However, there have been some attempts to at least question the consensual scientific knowledge presented by IPCC. For example, when the Parliament in March 2002 debated the climate policy Government Bill, the Moderate party MP Lars Lindblad pointed out that "several" scientists have criticised the IPCC reports, and that IPCC's view should not simplistically be recognised as *the* truth in this matter. Although he and his party thought that the IPCC's conclusions were too serious to be ignored, and accordingly that GHG emissions should be reduced globally, Lindblad argued that

> the issue needs to be managed with caution. Imagine that we are wrong. What if we have spent multi-Billions, moved jobs abroad, and created a much harder economic situation for our citizens, and it proves we were wrong?[302]

No doubt, Lindblad here reproduced the Sacrifice story-line. Nevertheless, he adhered to the Precautionary Principle, i.e. that no matter our imperfect knowledge, it would be too risky not to act. Despite this conclusion no-one in this debate was willing to nuance IPCC's consensual knowledge, apart from the

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[299] Government Bill 2001/02:55, p. 8. My translation.
[300] Miljödepartementet Rapport 2007:03 and SOU 2008:24 [Klimatberedningens betänkande].
[301] Cf. Bauhr 2005.
[302] Riksdagens protokoll 2001/02:77, anf. 127. My translation. Cf. anf. 143.

spokesperson of the Green Party (MP) Maria Wetterstrand.[303] Interestingly, Social Democrat Ingemar Josefsson accused Lindblad and the Conservative Party for "trying to launch doubts that will make citizens unsure whether this is necessary or not."[304] If it was still possible to identify articulations that questioned the established truth regarding climate change at this time, it has ever since been practically impossible to officially utter anything else than the GHG theory in the Swedish polity. This is indeed a manifestation of the discursive power of the greenhouse theory in Sweden.

According to this consensual science on climate change it is a global issue, but with varying consequences regionally. Not all parts of the world will necessarily suffer from the worst effects of global warming.[305] Swedish policy actors have recognised that Sweden is favoured compared to other countries and to some extent might even benefit from these changes: "If we are really cynical we can say that a certain climate change doesn't have to be negative for Sweden. But for other parts of the world it can be catastrophic."[306] In the years around 2000 there were several grave floods in the north and middle parts of Sweden. According to the IPCC scenarios Sweden can expect more of this in the future, following global warming. However, it seems that these floods were taken as evidence of imminent human induced climate change. For example, in an interpellation to former Minister for the Environment Kjell Larsson (S), MP Marie Engström from the Left Party (V) made the implicit link between global climate change and floods in the provinces Värmland and Dalsland in fall 2000.[307] The Minister for the Environment did not contradict this link in any way (practically all scientists would be cautious with making such links, because single occurrences can not be taken as evidence for a general pattern), which I interpret as a silent consensus.[308] Once again, climate science and the greenhouse theory have a strong position in the Swedish polity, perhaps so strong that science based caution with connecting floods with human induced climate change is not considered.

Although Swedish policy actors consider climate change a severe problem, there really are no doubts that Sweden can handle the negative effects of climate change. In the words of the Head of the Climate Policy Unit at the Swedish Environmental Protection Agency (SEPA): "As a rich industrialised country

[303] Ibid., anf. 133. This could of course be viewed as a paradox, since the Greens were the most eager advocates of both national and international measures against climate change.
[304] Ibid., anf. 142. Cf. anf. 144.
[305] As we remember from chapter 4 there is not total consensus that global warming is the result of increased GHG's in the atmosphere. However, within structured climate discourse the question is constructed as being solved, implying that the greenhouse theory explains the rising average temperature on Earth. In recent years, the consensus of climate science is constructed perhaps even more in the Swedish polity than anywhere else.
[306] Lars Ekekrantz, interview 2008. My translation.
[307] Interpellation 2000/01:115.
[308] Riksdagens protokoll 2000/01:34.

we have very large possibilities to actually adapt to the changes that are going to happen."[309] And in monetary terms, the costs of the negative impacts of climate change are expected to be more or less compensated by the increased production etc. that will also result from a warmer climate.[310] Hence, here the Sacrifice story-line is markedly softened, and the ever-growing Opportunity story-line appears.

However, mitigating climate change is not the same as adapting to it nationally in Sweden. The fact that Sweden is a rich industrialised country that to some extent even benefits from global warming, also raises the issue of its moral responsibility for contributing to solving the problem, as we shall se further below.

If we stick to the issue of mitigation of climate change, it is commonly regarded as implying a big sacrifice for societies, states, companies, and individuals. But it is also possible to view it as an opportunity, which would be in line with some core elements of the discourse of ecological modernisation. According to ecological modernisation, as we remember from chapter 3, the choice between protecting the environment and emphasising economic growth rather constitutes a Win-Win situation; we need not choose between them.

It should be underlined that the Swedish governments throughout the years of analysis are well aware of the sacrifices that have to be made and that mitigating climate change will be costly. Still, it is notable that Sweden quite early identified possibilities with being in the 'frontline' of adapting to the demands this implies: "An early adaptation ought to imply, in the long run, economical advantages for those countries that have started early to restructure their systems."[311] But these opportunities were not crystal clear; when it came to allocating responsibilities internationally in the Framework Convention, Sweden as well as all other countries were anxious not to become 'suckers'. Taking on commitments would be costly, and e.g. domestic industries operating in an international market would be vulnerable to (CO_2) tax levels that competitors in other countries do not have. Hence, Sweden recognised that the overall responsibility to manage climate change was initially to be shared among the industrialised countries, as international consensus contended. However, when Sweden in principle discussed the distribution of burdens among industrialised countries, the norm of justice was emphasised. The distribution of burdens needed to be 'just', i.e. considering per capita emissions and emissions reductions already made.[312]

Here it is interesting to note that Sweden had cut its CO_2 emissions by 40 percent from 1970 to the beginning of the 1990's, and had among the lowest

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309 Lars Westermark, interview 2008. My translation.
310 SOU 2007:60.
311 Government Bill 1992/93:179, p. 37. My translation.
312 Ibid.

per capita emissions compared to other industrialised countries. This happened with increased emissions from the transport sector notwithstanding; behind this emission cut lies the political will to decrease Sweden's dependency on oil with the 1970's oil crisis fresh in mind. From 1970 to the mid 1990's the dependency on oil decreased from 75 percent to around 40 percent mainly due to the expansion of nuclear power in 1976–1984.[313] The reduction of GHG emissions was hence not due to climate concerns. But whether this should be used in the negotiations to get any gains is unsure; it seems that any such claims were not uttered officially, only that the Swedish circumstances had to be 'noted'.

Hence, Swedish policies drew explicitly on the Greenhouse Theory storyline[314], and referred to the IPCC and science to legitimise this position. Further, Sweden largely perceived climate change as an Opportunity. But nevertheless, in some situations voices were also prone to emphasise the sacrifices connected to combating climate change. Despite some hesitance, however, Sweden rhetorically emphasised the importance of being in the frontline in climate friendly technology, thus looking at climate change through the window of opportunity. This will be much clearer in the analysis below, regarding Sweden's responsibility and how the choice of policy measures were understood.

Sweden's responsibility

Sweden's perception of its responsibility in this issue is related to how one understands what climate change 'is'. First of all, as we saw above the effects of climate change are supposed to be worst for already poor and vulnerable countries, and Sweden to some extent might even benefit from climate change. Together with the social dilemma character of climate change—what Sweden does is of little importance alone—we should theoretically expect little action from a country like Sweden, rationalists would argue. However, it should be clear that this is not the case. How does Sweden understand its own responsibility in the climate change issue? This is a crucial question for us to answer.

This section on responsibility is largely based on interviews and parliamentary debates, because the construction of responsibility is more elaborated in this material than in other policy documents. In Government Bills and reports etc., Sweden's responsibility (both as a country and individuals, organisations, companies etc.) is often expressed as something that is more or less 'self-

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[313] Elzinga & Nolin 1998: 54. The transport sector's share of total GHG emissions increased from 20 percent in 1970 to 40 percent in 1990. See e.g. Government Bill 1992/93:179.

[314] That is, that increased emissions of GHG's accumulate in the atmosphere and affect the global mean temperature and correspondingly the Earth's climate system, causing malevolencies such as more extreme weather, ice melting and rising sea levels, floods, droughts, famines, leading to a rise of 'climate refugees', loss of biological diversity, and so on.

evident'. The formulation in the 2001 Government Bill is telling for Sweden's way to understand its responsibility for the global climate. The global character of climate change is emphasised, and the global arena is depicted as the most important political level if climate change is to be successfully tackled. Hence, the Thinking Globally story-line is clearly drawn on. But quite importantly, the normative implications is that 'everyone' has to contribute to the management of climate change. That is, all countries and all societal actors have to do their share (which does not necessarily mean that all have the same responsibility). Thus, Sweden here reproduces the National Action story-line.

> Emissions of greenhouse gases and the reinforced greenhouse effect these emissions contribute to affect the whole globe, all nations and people, independent of their individual contributions. The climate issue therefore must be solved in a global context. At the same time every single country and every single actor has to take its share of the responsibility for minimising the risks for climate change.[315]

Quite simplistically put, Sweden takes on a responsibility because the country is rich, it has contributed to the problem by getting rich, and poor countries are supposed to be worst off from climate change. The following quotes from persons with a good insight in Swedish climate policy can illustrate this.

> Sweden as a developed country must think about, what is our role in this, how do we affect this change that is going on and that we see? [...] I think the climate change issue concerns Sweden to the highest possible degree because we contribute to aggravate the conditions for developing countries and other regions in the world. Not necessarily our own situation, in the short run. [...] And I think this is decisive for the political commitments that actually have taken place. [...] I don't think politicians reason that way [that Sweden should be a 'world conscience']. Rather, one says that 'we can afford to take responsibility also for others, and therefore we should do that'.[316]

> The question is whether this in Sweden is not also raised as an issue of taking responsibility. I think there is a moral obligation to this, to leave something for the next generation, and to take responsibility for the Earth. Of course, there are other countries who feel this too. But at the same time we are a rich country. It has become evident that we can combine high economic growth with forceful climate measures.[317]

The last sentence quoted by the Chair of the 2008 Climate Commission Hans Jonsson reveals an argument that has turned out to be very important in

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[315] Government Bill 2001/02:55, p. 56. My translation.
[316] Lars Ekekrantz, interview 2008. My translation.
[317] Hans Jonsson, interview 2008. My translation.

Swedish climate politics, and it is a 'story' which policy makers have reproduced repeatedly in recent years.[318] I will return to this in more detail below.

Although the moral aspects of the Swedish construction of its climate responsibility are important to the wider picture (see above) it can be further analysed. As we saw in the previous section on the nature of climate change, climate change is basically constructed as a global phenomenon in the Swedish polity. Hence, Sweden cannot solve it alone, but is dependent on action in the rest of the world. The only way to do this in the long run is to contribute to an internationally sustainable solution, and this is not possible without including USA and the most significant growing economies, such as China, India, and Brazil etc. How does one get these countries on board? The Swedish answer to this dilemma has been to show the world, first, that it is possible to reduce GHG emissions (to be a role model), and second, that a rich country actually takes climate responsibility. The latter is also understood to be the only fair solution, and it was furthermore promised at the Earth Summit in Rio de Janeiro in 1992. So, basically, in the mind of the Swedish state the only way to make progress at the international level is to appear as a *trustworthy actor*. And to appear as trustworthy you have to do your homework, the logic goes. Former minister for the Environment, Social Democrat Lena Sommestad, explains that this strategy was well considered:

> We shall aim high from the beginning. That decision was taken very deliberately, it was totally deliberate that we should go ahead. And behind that idea was, first, an idea of developing new techniques, i.e., we should be first in this restructuration. We know that this restructuration has to be done, and we are gained by going first. We are going to export environmentally friendly techniques; we are going to be best at this. Second, there was also the idea of being a role model. All our experience from environmental politics shows that if you are to pursue anything internationally you first have to manage it at home. Or, you gain confidence if you can show that you have managed it at home.[319]

This 'story' is corroborated by Social Democrat Ingemar Josefsson's statement in the 2002 Debate of Parliament regarding Sweden's climate policy, when he argued in favour of the Government Bill:

> The starting-point is that if we start this restructuration early it will be cheaper and better. The countries that wait will have to do their restructuration during a shorter period of time, and it will be more costly. The countries that will take the lead in this restructuration and invest in new environmentally friendly techniques can sell their products and knowledge to other coun-

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[318] When putting the prefix 2008 on the Climate Commission I refer to the year its report was published (SOU 2008:24). The Commission got its assignment in April 2007.
[319] Lena Sommestad (S), interview 2008. My translation.

tries. It will be beneficial for them, and it will be beneficial for Swedish competitiveness.[320]

However, Josefsson in the same debate played down the Swedish long-term ambitions to go ahead of the rest of the world. This was probably to calm down the more sceptical parties (and perhaps sceptics within his own party) and to legitimise this relatively ambitious first step. Critics like the Green Party were on the other hand upset by Josefsson's remark:

> Once the Protocol is adopted we will act within its frames. There is no point in the longer perspective to have higher ambitions than other countries. The important thing is that all countries start doing something. That little Sweden alone would have another objective—now I do not mean in the shorter perspective but in the longer run—than the rest of the world is not meaningful. Therefore it is a matter of phasing in Sweden's actions in the international commitments.[321]

Yet, as long as the Social Democrats were in power they actually never changed this ambition of being an international forerunner in climate policy. The picture is not that clear regarding the currently in power centre-right government, but my impression is that both that government and the preceding Social Democratic, over time have discovered the advantages of having this position and this reputation internationally.[322]

Thus, despite some vacillation and not at all consensus within the Swedish polity, making progress internationally has implied National Action in Swedish climate discourse. We can see two major and rather different ways to legitimise this strategy. The first concerns the idea of being a role model especially for the rest of the industrialised world, which can thus follow Sweden's example of combining GHG emissions reductions with high economic growth. This has to do with constructing climate change policy as an opportunity. Taking the lead will, at least in the long run, imply gains for Sweden and Swedish industry. The other way to legitimise comparatively ambitious national targets concerns Sweden's ambition to be a 'world role model'. Climate change policy is thus also constructed as a moral responsibility that rich and developed countries have vis-à-vis poorer countries. This implies a dilemma, because it is believed that the developing countries soon have to take action against climate change too, but they are reluctant as long as they do not see industrialised countries' action. Sweden is well aware of this dilemma and sympathises with

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[320] Riksdagens protokoll 2001/02:77, anf. 136, Ingemar Josefsson (S). My translation.
[321] Ibid., anf. 138 by Ingemar Josefsson (S). My translation. Cf. anf. 140 by Ingemar Josefsson (S), and anf. 139 for a critique by Maria Wetterstrand from the Greens.
[322] Cf. the discussion and the quote by former Minister for the Environment Lena Sommestad (S) later in this section. The ambition to be a forerunner in climate politics is somewhat downplayed by the current centre-right government, which is most manifest regarding the discussion on targets and the use of the flexible mechanisms. See further below.

developing countries' view but seem to think that letting the developing world remake the industrialised countries' mistakes would be too risky:

> Let's say that China and India are most important because they are half of the Earth's population. How do we get them onboard to limit their emissions? Today they emit about 2–3 tons per capita. Sweden emits 6 tons. How can we meet them in international negotiations and tell them that they should reduce their emissions when we emit twice as much as them? It's not possible; we have to manage our own burden.[323]

> We fully understand the developing countries' view that it is we, i.e. we in the EU and some other countries that have caused the change we can witness today. But we also have the opinion that this will not last. We can see China, Brazil, and India, who are drastically increasing their economic growth and thus also drastically are increasing their emissions from the industry. So from that perspective we try to convince the developing countries that we are all on the same boat. Regardless who caused it initially we will all be affected by the consequences.[324]

Lars Ekekrantz also thinks that (internationally) too much effort is put on the question of who is to blame for human induced climate change and too little on how the current development can be changed. But this does not change the fact that the dominant norm regarding the responsibility to act first concerns justice, and that the poor countries should not be the first to take the burden. This relates to a norm that is not often expressed but that is always latent in the debate, namely the norm of viewing GHG emissions in per capita terms, i.e., that every individual in the world should have the same right to emissions that together sum up to a sustainable emissions level:

> We are six Billion people on this Earth and every single person has to take responsibility, that's just it. Maybe not always through individual decisions, but as humans. We have to take our share. We have to demand from Americans or Europeans etc. to take their share. Therefore I argue that we have to rearrange so that we do not consume more than our share of the scope of carbon dioxide emissions.[325]

The international justice argument is thus intertwined with the national role model argument in that the latter is perceived as necessary if Sweden is to be considered a trustworthy actor internationally:

> There really is no moral right to make demands on the rest of the world as long as you haven't delivered. So, to deliver has sort of been a mantra in the international climate policy negotiations. And almost no-one has delivered.

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[323] Anders Ygeman (S), interview 2008. My translation.
[324] Lars Ekekrantz, interview 2008. My translation.
[325] Anders Ygeman (S), interview 2008. My translation.

But Sweden *has* delivered, and that has created confidence in us that has been very important.[326]

A civil servant at the Ministry of Enterprise, Energy, and Communications further points out the connection between the national and the international:

A motive for acting domestically is the international work; that we can serve as an example, show that it is possible to combine growth with reduced emissions. [...] It's because... Sweden wants to contribute to the international work through national efforts and by showing that it works.[327]

From several quotes we have seen hints of the fact that Sweden in later years has proven to reduce GHG emissions while economic growth has been stable. This fact has beyond doubt functioned to legitimise Sweden's actions and Sweden's position internationally. Former Minister for the Environment Lena Sommestad makes clear that her Social Democratic government as well as the currently in charge centre-right government have pointed out this. "And I experienced many, many times that it was fantastically effective in the climate negotiations."[328]

It seems that Sweden's combination of GHG reductions with high economic growth not only legitimises the country and its actions among developing countries, but also among industrialised countries and among domestic actors. What Sweden emphasises with more strength over the years is the economic advantages of being in the frontline of restructuring society into a fossil-free society. In the words of the Social Democratic Chair of the Parliamentary Committee on Environment and Agriculture:

While we have decreased emissions with 10 percent our economic growth has increased with 36 percent. Thus, we've had one of the West's highest growths and we've had the West's most radical reductions of GHG emissions. So there doesn't seem to be a high price in terms of employment or welfare sacrifices for those who do something. Quite the contrary, the countries that have chosen to stick with old techniques have been worse off economically. [...] We see new jobs and new welfare opportunities rather than threats and sacrifices.[329]

Former minister for the environment Lena Sommestad used similar language in an interpellation, and from her words we get the impression that there is consensus regarding Sweden's ambition to be a forerunner (she addressed a MP from the opposition):

In Sweden we have done something remarkable in the world. We have increased our GDP by over 20 percent at the same time as we have reduced our

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326 Lena Sommestad (S), interview 2008. My translation.
327 Elisabeth Lidbaum, interview 2008. My translation.
328 Lena Sommestad (S), interview 2008. My translation.
329 Anders Ygeman (S), interview 2008. My translation.

greenhouse gas emissions. We have shown that it is possible to do this, and I think it is magnificent that we have done this. But we have to do more. On that we totally agree. We have to continue this work with great intensity.[330]

Although not everyone in the Swedish polity has viewed (and do not view) climate change policy as an opportunity, the above quotations represents the contemporary and established construction of climate change, where it is striking how 'necessary' a progressive climate change policy is. According to Elisabeth Lidbaum at the Ministry of Enterprise, Energy and Communications, Sweden's contribution to international climate policy thus implies "an opportunity for Sweden and Swedish industry, and increased growth and market shares if we participate in a way that favours our industry:"[331] Lena Sommestad concludes that the 'mantra' of economic growth and environmental protection has resulted in a strategic way to deal with these issues:

> It became as if you had to justify all environmental policy by its positive effects for economic growth and for other things than the environment itself. It is as if it is not sufficient to say 'we do this simply because the environment has a value in itself'.[332]

Sommestad partly laments this because it has implied the denial of the potentially necessary restrictions of people's lives, and she sees the connection with the traditional 'engineer' side of environmental politics; environmental politics has been for specialists, not for the common politician. However, with the previous chapters in mind we should not be surprised by the power of justifying climate policy measures with the argument that it leads to economic growth and development. It nicely fits to the Bernsteinian picture of the present liberal environmental Western society.[333]

Referring to international agreements functions legitimising in an internationally oriented country like Sweden. But regarding the country's responsibility and more specifically regarding its national target of GHG emissions reductions we see a more ambiguous pattern. Remember that Sweden according to the EU's burden sharing agreement (i.e. EU's 'operationalization' of the Kyoto targets) has the right to *increase* its emissions by 4 percent, but decided to aim at *reducing* them by 4 percent. Practically all of my interviewees argue that domestically, "those who could have leaned on the Kyoto Protocol were those who don't want to do that much. They have been able to say: 'but we can *increase* [our emissions]!'"[334] Hence, they argue that international agreements do *not* function legitimising in this case. In a sense they are right. But I think that is a narrow view of international agreements. They are not merely about,

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[330] Riksdagens protokoll 2004/05:125 , anf. 28, Lena Sommestad (S). My translation.
[331] Elisabeth Lidbaum, interview 2008. My translation.
[332] Lena Sommestad (S), interview 2008. My translation.
[333] Cf. Bernstein 2000; Bernstein 2001.
[334] Anders Ygeman (S), interview 2008. My translation.

in this case, quantified commitments of emissions reductions, but rather about normatively specifying a problem and who is obliged to do something about it. In this case the UNFCCC is just as, or maybe even more important than the Kyoto Protocol. The spirit of the UNFCCC and the Kyoto Protocol is to reduce GHG emissions, and in that sense they are easy to implicitly or explicitly refer to by Swedish policy actors. Without this moral and political obligation it would be difficult to imagine Swedish climate policies of the kind we have witnessed. Of course, anyone promoting the minus 4 percent reduction target has little to gain by referring to the Kyoto Protocol, because Sweden has the right to increase GHG emissions by 4 percent. But my point is that Sweden's actions can be legitimised by reference to the spirit of international climate agreements, not to the specific targets. Furthermore, as we will see below actors can try to legitimise specific actions, like making use of the flexible mechanisms, because they are part of *what was agreed on* in the Kyoto Protocol.

To conclude this section, it should be clear that both the discourse of civic environmentalism and the discourse of ecological modernisation influence Sweden's construction of its responsibility to mitigate climate change. The discourse of civic environmentalism is drawn on when the Ecological Justice story-line is alluded to, which is done when climate responsibility is constructed as a question of justice. It also influences, I argue, the quite heavy emphasis on the National Action story-line throughout the studied period. This was manifested in the minus 4 percent reduction target, without the use of the flexible mechanisms. Thus, the National Action story-line has been institutionalised as regards the construction of Sweden's climate responsibility.

These aspects of Swedish constructions of its responsibility in this issue is in line with its identity as an "outward-looking internationalist state" which historically has implied a relatively strong position for the discourse of green radicalism regarding international environmental policy. Thus, the localisation of the UNFCCC and the Kyoto Protocol as regards climate responsibility was fitted into this policy tradition.

However, we have also seen the interesting construction of climate policy along the Opportunity story-line, to be contrasted with the Sacrifice Story-line. The former construction has been more articulated over time, but we saw that the government made such analysis of climate policy already in the early 1990's. Following this analysis is the belief in the Win-Win situation; i.e., there are no trade-offs between climate responsibility and economic growth. To be clear, the norm of economic growth is just as important to Sweden as is the norm of justice. They both help to construct Sweden's quite special climate strategy. Thus, there is also a normative ingredient emphasising the need to modernise the Swedish (and in the longer run the world) society; to make it more efficient and environmentally clean. No doubt, this aspect of Sweden's construction of its responsibility (the Opportunity path) is conducive to the discourse of ecological modernisation.

Swedish climate policy targets 1988–2009

After the analysis of how Sweden has constructed climate change and its own responsibility, it is time to focus on Sweden's climate policy measures. Before going into the details of domestic and international policy measures, respectively, I start with a brief recapitulation of Swedish climate policy targets over the last 20 years. This confirms the analysis of Sweden's construction of its responsibility, but will also be the fundament against which the upcoming analysis of policy measures should be viewed.

Sweden initiated its climate policy in 1988, when CO_2 emissions were recommended to be "stabilised".[335] In 1991 the target was modified to comprise all GHG's, which should not exceed the 1990 levels in 2000, and thereafter be further reduced.[336] International climate discussions had at this time started, but the UNFCCC was not negotiated until the following year. When it was settled, the government launched a new climate policy Bill, which explicitly referred to the UNFCCC targets, and by and large replicated the previous national goals, i.e. that CO_2 emissions ought to be stabilised at the 1990 level no later than in the year 2000.[337] The long-term targets formulated by the 1993 centre-right government could nevertheless be seen as relatively radical:

> In order to stabilise the carbon dioxide level in the atmosphere and to counteract serious effects, I [*Minister for the Environment, Olof Johansson, (C)*] argue that global carbon dioxide emissions ought to be reduced by 50–80 percent within 50 years. These indicated levels should be the basis for the Swedish climate policy.[338]

The Swedish strategy to mitigate climate change should from the time of signing the UNFCCC be aimed at finding measures that "significantly" reduce GHG emissions.[339] In 1995 Sweden joined the EU. This together with the Kyoto Protocol in the making seem to have made Sweden a bit hesitant in its climate change policy for the next few years. Apart from some 'climate adjustments' of the energy policy, the government pointed out that the EU is part of the climate convention and is working on a common standpoint in the international climate negotiations. Both Sweden and EU were obviously waiting for 'the rules of the game', i.e. what was finally negotiated in Kyoto in December 1997.[340]

In the 1998 general environmental policy Bill this insecurity was still apparent. According to the Kyoto Protocol the EU common target is GHG emissions

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[335] Government Bill 1987/88:85.
[336] Government Bill 1990/91:88. Note that the aim to stabilise emissions at the 1990 level only referred to CO_2, the target concerning the rest of the GHG's was more vague.
[337] Government Bill 1992/93:179, p. 6.
[338] Ibid. p. 32. My translation.
[339] See Ibid.
[340] Government Bill 1996/97:84. Cf. Zannakis 2001; Marshall 2007; Molin & Wurzel 2000.

reductions by 8 percent as an average during the years 2008–2012 as compared to the base year 1990. This was not hard to accept for Sweden given its identity as an international rule follower. But it was not clear what this should mean as a concrete target for Sweden. Interestingly, the government started to use a scientific language, referring to the international work:

> The level of greenhouse gases in the atmosphere shall, in line with UN's framework convention on climate change, be stabilised at a level that implies that the human impact on the climate system will not be dangerous. [...] The policy measures aim at a stabilisation of carbon dioxide in the atmosphere at a level lower than 550 ppm [particles per million], and that the rest of the greenhouse gases in the atmosphere do not increase. The target's fulfilment is crucially dependent on measures in all countries.[341]

The last sentence is illustrative of Sweden's way of Thinking Globally in climate politics; what Sweden does alone can do very little to overcome the problem. However, as we saw above this does not belittle Sweden's National Action as an important strategy for creating an image of being a role model which in turn is understood to be important for international success.

In terms of quantified targets, not much new happened compared to earlier policy decisions, apart from a goal to stabilise CO_2 emissions from the transport sector in 2010 at the 1990 levels.[342] The Bill also appointed a parliamentary based Climate Commission, which presented its work in 2000.[343]

Based on that, in 2002 the government's next major step (together with the Left Party) in its climate strategy was launched. Now Sweden somewhat controversially decided to reduce its GHG emissions by 4 percent, without making use of carbon sinks or the flexible mechanisms (e.g. investing in activities in order to reduce emissions in other countries, a measure which is considered cheaper than reducing emissions domestically).[344] Furthermore, the EU's burden sharing agreement allowed a Swedish *increase* of emissions by 4 percent. The Climate Commission's proposal was a *reduction* by 2 percent. The government thus trumped the Commission. The Commission also proposed a long-term target (2050) of cutting emissions by 50 percent, which would cor-

[341] Government Bill 1997/98:145, p. 145. My translation.
[342] Government Bill 1997/98:56.
[343] SOU 2000:23.
[344] Government Bill 2001/02:55, presented late 2001 but approved by the parliament in 2002 (Riksdagens protokoll 2001/02:77). Despite that the minus 4 percent objective was generally considered ambitious and perhaps controversial, the spokesperson of the Green party (MP), Maria Wetterstrand, officially argued that this objective should at least be minus 10 percent, and minus 75 percent for the year 2050. See Betänkande 2001/02:MJU10, Reservation 3, pp. 53f. Interestingly, Swedish GHG emissions seem to be cut by at least 10 percent in 2008/2012, and according to SOU 2008:24 the objective for 2050 ought to be minus 75 percent. In 2009, the centre-right government's vision for Swedish net GHG emissions was that they ought to be "close to zero" (Government Bill 2008/09:162, p. 35). The green demands from 2002 may not have been that radical after all.

respond to 4.0–4.5 tonnes of CO_2 equivalents per capita annually.[345] The government did not decide on any quantitative target calculated as percentage-wise emissions reductions. However, the long-term target of approaching a globally equal emission level per capita was recognised. Thus, up to 2050 Swedish emissions should be no higher than 4.5 tonnes of CO_2 equivalents per capita annually. Estimations were that this would lead to a development of accumulated GHG's in the atmosphere of around 550 ppm.[346]

The short-term (2008–2012) targets were the same in the following climate policy Bill, but a medium term target for 2020 was launched; GHG emissions should be reduced by 25 percent compared to the 1990 levels.[347] Following the elections in fall 2006, a new centre-right government came to power. The new government initiated a parliamentary based Climate Commission, whose report concluded that the national target for 2008–2012 would most probably be over-implemented, without further measures. However, the minus 4 percent objective was not changed. The Commission also suggested emissions reductions by 38 percent from 1990 to 2020, including the use of so called flexible mechanisms, and conditioned on the forthcoming decision that the EU as a whole commits to reduce its emissions by 30 percent.[348] The latter is in turn dependent on the international negotiations within the UNFCCC. When launching the climate policy Bill in spring 2009 the government changed the 2020 target to 40 percent emissions reductions compared to the 1990 levels.[349] Two thirds of the cuts was to be implemented domestically, whereas one third in other EU countries and in developing countries. Hence, the government meant to account for the use of project mechanisms to a significant extent. The former opposition, now in government, here seemed to have higher ambitions (40 percent vs. 25 percent) than the former Social Democratic government. This may appear strange, since the centre-right parties formerly never criticised the Social Democrats, the Greens or the Left Party for not having enough ambitions in climate policy (if anything, quite the contrary). A probable reason for the change of targets for 2020 lies in the boom of 'climate alarmism' that started in the media the same fall as Sweden saw a change of government. This coincided with the popularity of former US vice president Al Gore's film *An Inconvenient Truth* and the academically more influential report by economist Nicholas Stern, who argued that costs of inaction would far exceed the costs of implementing climate policy measures.[350] A government not taking climate change seriously at this time in Sweden would practically be committing political suicide. Despite that the former climate target of 25 percent emissions

[345] SOU 2000:23, p. 46.
[346] Government Bill 2001/02:55, p. 39.
[347] Government Bill 2005/06:172.
[348] SOU 2008:24.
[349] Government Bill 2008/09:162; Government Bill 2008/09:163.
[350] Stern 2007.

reductions for the year 2020 was only three years old the responsible Social Democratic Party together with its allies in opposition were quite upset with, *inter alia*, the 40 percent target most importantly because it should be reached with the use of so called flexible mechanisms. Hence, the Swedish 2020 objective meant 27 percent reductions domestically and 13 percent in other countries. The opposition, together with environmental organisations and the Swedish church commented that Sweden ought to cut emissions domestically by 40 percent but on top of that invest in GHG emissions reductions and adaptive measures in poor countries—some even meant that this share should be as large as the 40 percent cuts in Sweden.[351]

The ambition to be a forerunner was thus slightly downplayed by the centre-right government, and it is doubtful whether its ambition was to push other EU countries into advocating a tougher objective when 'a new Kyoto Protocol' was to be negotiated within the UNFCCC. Rather, the government seemed to await the result of this process.[352] This was definitely the critics' interpretation. However, it was striking how their view differed from the government's own: "The proposition we present altogether constitutes the most ambitious climate and energy policy that any European country has presented."[353] The centre-right government is nevertheless more positive about using the flexible mechanisms for achieving Sweden's objectives (than former Social Democratic governments), which is definitely in line with the Thinking Globally story-line. This was criticised by the opposition as not being ambitious enough, but rather a way to slip away from responsibility. Underlying this argument is the view that not reducing a significant share of GHG's domestically implies chipping away ambitions, which are so important for being trusted internationally, especially among third world countries. This is also key to the understanding of whether Sweden was ambitious enough when entering the post-Kyoto negotiations.

Responsibilities within domestic society

The first comprehensive climate policy Bill came from the Social Democratic government in power in November 2001. Of course, the governments from the late 1980's had all paid attention to climate change, but it was here that a de-

[351] See their dissenting opinion to the Commission's proposal in SOU 2008:24, p. 435ff. and Naturskyddsföreningen 2009; Socialdemokraterna 2009; Miljöpartiet 2009; Vänsterpartiet 2009; Greenpeace 2009; Svenska kyrkan 2009. The Federation of Swedish Farmers, on the other hand, lamented that the new tax levels were unreasonable to bear for farmers and consumers, and the climate policy would moreover counteract the opportunities for positive development in the bio-energy sector, see LRF 2009.
[352] This resembles the situation before the Kyoto Protocol was negotiated. Moreover, Sweden was the chair of EU during the COP meeting in Copenhagen. It is considered customary that this country has a low profile.
[353] Regeringskansliet 2009: 1. My translation.

scription of how climate policy responsibilities should be allocated and organised first saw the day's light. Quite unsurprising, "all sectors" in Swedish society were acknowledged to have a responsibility to contribute to the mitigation of climate change. Moreover, sector integration of climate considerations, as well as cooperation between different levels in society, were also pronounced aspects of climate change policy in Sweden.

> A limited influence on the climate can be reached through an active climate policy which is integrated in the whole society. Each and everyone have to take its part of the responsibility. This concerns public authorities, municipalities and companies, as well as organisations and individuals.[354]

Considering the collective character of Swedish political society, and the Building the Good Society narrative, it seems logical to include 'all' sectors in this mission. Of special importance are the energy and transport sectors. Even the public was supposed to be included in the restructuration of Swedish society. Hence, the importance of information to the public was over time more and more politically acknowledged.

This inclusion of all sectors in society in climate politics smells a lot of ecological modernisation. But it may be wrong not to acknowledge that this also draws on a national discourse of the *People's Home* (*folkhemmet*).[355] Former Social Democratic leader and Prime Minister Göran Persson alluded to the *People's Home* when he launched the notion of a *green* welfare state.[356] Thus, such a strategy, which has some coverage in international climate policy, may have fitted Sweden like a hand in glove.

In the rest of this section I will, first, discuss the national organisation of climate policy, and what the potential discursive conflicts are. Second, I will analyse what the government's climate policy and organisation imply for the regional and local levels.

National organisation

Given Sweden's perception of what climate change is, i.e. a problem cutting through the heart of industrialised societies, it affects practically all ministries. Remember that all society, all sectors should be included in the mitigation of climate change. The effect is that there was more inter-ministerial work than usual in Sweden. The most striking example of this was the so called Kyoto group, which contained representatives from the Ministry of Environment

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[354] Summary of Government Bill 2001/02:55, p. 2. My translation. Cf. Government Bill 2005/06:172, p. 87-88. This has of course implications for local policy, a matter to which I will return shortly below, and more thoroughly in the next chapter.
[355] Note that the notion of *People's Home* is closely connected to the Social Democratic Party.
[356] See e.g. Lundqvist 2000; Lundqvist 2001b; Lundqvist 2004b: 76ff.

(shortly called Ministry of Sustainable Development by the Social Democratic government before the centre-right government re-launched the Ministry of Environment from 2007 after winning the elections in September 2006), the Ministry of Finance, the Ministry of Industry, Employment and Communications (now divided into the Ministry of Employment and the Ministry of Enterprise, Energy and Communications, respectively), and the Ministry of Foreign Affairs, as well as from the Swedish Environmental Protection Agency (SEPA) and the Swedish Agency for Economic and Regional Growth (NUTEK). Of course this was not the first inter-ministerial cooperation group in Sweden, but this group was tighter and more formally organised than what is common. Moreover, it was quite hard for other groups to get access to the Kyoto group, which prepared the Swedish positions in international climate negotiations.[357] Later on, a new group called the Copenhagen group was created, with the same purpose as the Kyoto group but focusing on the negotiations leading up to the COP (Conference of the Parties) meeting in Copenhagen in 2009, where the 'next Kyoto' was expected to be signed.[358] The COP in Copenhagen also coincided with Sweden's chairmanship in the EU.

Interestingly, related to the existence of the Kyoto group is the question of who has the main responsibility/privilege to formulate Swedish climate policy. If climate change cuts through practically all sectors in society, who should be in charge? The Ministry of Environment has traditionally 'owned' environmental issues. But climate change is not an environmental problem like any other. Other Ministries want to have a say too, which is manifested in the composition of the Kyoto and Copenhagen groups. Official cabinet policy was that the Ministry of Environment/Ministry of Sustainable Development had the overall responsibility, and owned the issue within the government. This was probably in order to legitimise the organisation in the eyes of critics, who thought that the Ministry of Industry, Employment and Communications (now Ministry of Enterprise, Energy and Communications) in reality had the power to dictate the terms of policy. When pressured on the issue, the then Minister for the Environment, Lena Sommestad (s), admitted that the Ministry of Industry, Employment and Communications had the overall responsibility over

> the part of climate policy that concerns the application of the flexible mechanisms. This is because of the energy policy efforts within the climate area that are included in the energy policy agreement and which are decided by the *riksdag*. [...] It is the government that runs climate and energy policy in Sweden and has an allocation between the ministries where we cooperate, in an extraordinary way, I think.[359]

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357 Vifell 2006.
358 Elisabeth Lidbaum, interview 2008.
359 Interpellation 2003/04:160, anf. 82, Lena Sommestad (S). My translation.

From this statement it is tempting to conclude that the Ministry of Industry, Employment and Communications thus had a big say in the issues related to the flexible mechanisms, even though the self-image of the consensus-minded collective is promoted. Critics, however, argued that the Ministry of Industry, Employment and Communications not only was disproportionately influential, but also had a different policy agenda than other ministries:

> We all know that two different kinds of climate policy are pursued in Sweden. The Ministry of Industry, Employment and Communications opposed the cabinet's climate Bill and wanted us to use the space that was given to us by the EU's burden sharing agreement, i.e. to increase [GHG emissions] by 4 percent, and moreover that the goal should be formulated so that flexible mechanisms are allowed.[360]

By referring to the parliamentary decision, MP Ingegerd Saarinen tried to give a negative image of the Ministry of Industry, Employment and Communications. Moreover, stating that "we all know" how things are, functioned persuading on the audience when she wanted to point out 'the bad guy' in Swedish climate policy. In terms of the objective, the Ministry of Industry, Employment and Communications was beaten, as manifest in the parliamentary decision, and the follow-up Government Bill on climate change.[361]

When I interviewed former Minister for the Environment Lena Sommestad (S), she admitted that there sometimes were conflicts within the Social Democratic government, or more precisely conflicts regarding overall worldviews between different ministries under the government. The Ministry of Finance emphasised cost-efficiency in a neoclassical manner, i.e. cost-efficiency in the short run. This theoretical school clashed with that predominant in the Ministry of Industry, Employment and Communications (now Ministry of Enterprise, Energy and Communications), who worked with issues such as innovation, research and support, which are by definition long-term. However, there were also a conflict between the Ministry of Industry, Employment and Communications and the Ministry of Environment regarding the Government's overarching policy goal;

> We from the Ministry of Environment argued that Sustainable Development should be the government's primary policy goal, whereas the Ministry of Industry, Employment and Communications emphasised competition issues quite heavily. And these had sturdily 'got stuck' in the government offices. Simplification and putting things under competition, and so on, were superior values. And of course those things didn't correspond, so there were conflicts one could say.[362]

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360 Ibid., anf. 83, Ingegerd Saarinen (MP). My translation.
361 Government Bill 2005/06:172.
362 Lena Sommestad (S), interview 2008. My translation.

Yet, Sommestad says that during those years in the government (2002–2006) she often had the support of the then Prime Minister Göran Persson in these intra-governmental conflicts concerning environmental or climate issues. This was not least evident in the case of the local climate investment programs (Klimp), which will be further discussed in the following section. The Ministry of Environment regarded these investment programs as an important structural and social planning tool which in addition supported and stimulated local ideas and considered local circumstances. On the other hand they were highly questioned by the staff at the Ministry of Finance, who considered them socioeconomically inefficient. In Sommestad's view this was because they had no models to evaluate the cost-efficiency of investments (which were inefficient by definition, as Sommestad understood the Ministry of Finance's perception).

> I remember that I went back, because I saw what the Ministry of Finance referred to. And then I found a PM by Per Molander, where they sort of made a principal declaration for what should be counted as cost-efficient, and it was terrifyingly neoliberal, neoclassical, economic thinking. And this was established as principles for what should be approved, you could say.[363]

Needless to say, such principles were not advocated by Sommestad and her Ministry of the Environment. This conflict between different theoretical perspectives within the government is of course very interesting and is indeed about power. The normally strong Ministry of Finance stood against the weaker Ministry of Environment:

> In the normal political machinery the Klimp projects were always tried to be defined out, so every time they were to be extended or so, you had to lift it to the highest political level to get them approved.[364]

This is how Prime Minister Göran Persson became an important person in Lena Sommestad's view, since she always felt she had Persson's support, both within the government and in the parliament (not only regarding the Klimp projects but climate and environmental policy in general). He could simply decide that this was "nothing to discuss"; the government had decided to have an ambitious climate policy and "this is the right thing to do".[365]

Many public authorities are involved in climate policy. Of most importance are nevertheless the Swedish Environmental Protection Agency (SEPA) and Swedish Energy Agency (SEA). The Head of the Climate Policy Unit at SEPA emphasises that they work closely and have generally quite similar points of view in these issues. The only thing he can recall they have slightly differing views on is the Environmental Code.

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[363] Lena Sommestad (S), interview 2008. My translation.
[364] Lena Sommestad (S), interview 2008. My translation.
[365] Lena Sommestad (S), interview 2008. My translation.

SEA prefer general measures, like taxes and other general measures that should be at work. Then you could see the Environmental Code as slightly 'disturbing' in that you are supposed to regulate individual industries regarding energy efficiency and such things. So that is sort of a conflict area, but I mean, the legislation is as it is.[366]

Westermark seems to mean that this minor conflict does not imply anything in practice. Even the SEA has to follow legislation, regardless of whether it prefers one type of policy measures or not. The difference between the authorities thus may not be of great importance directly, but in the longer run, if we take into account that public authorities can also suggest policy measures, it would be wrong to call them powerless.

To conclude, all interviewees emphasise the overall consensus on Swedish climate policy, which is also in line with the parliamentary statement by Lena Sommestad quoted above. However, Sommestad's statements in my interview with her to some extent contradict this consensual image. Important ministries had rather different ways of understanding the best ways to deal with climate change. In the Ministry of Finance the norm of cost-efficiency (in the neo-classical manner) was strong, whereas the Ministry of the Environment was more 'Keynesian' in that it not only preferred structural socio-economic planning in the name of the environment, but also in that it intended to incorporate environmental policy—not least the Klimp projects—in employment policy. The Ministry of Enterprise, Energy and Communications shared the more long-term view with the Ministry of Environment as compared to the Ministry of Finance, but it disagreed regarding the Government's primary policy objectives. The Ministry of Enterprise, Energy and Communications heavily emphasised market competition and policy flexibility, which sometimes clashed with the Ministry of the Environment's view.

This latent conflict can also be seen below, in the section that deals with the flexible mechanisms. There is an ambivalent position regarding these mechanisms over the years. The norms of cost-efficiency and flexibility together with the Thinking Globally story-line have gained in influence over the years. This is manifested first and foremost in the termination of the Klimp programme and in the increasing embrace of the flexible mechanisms. In this section we have seen that different ministries and public authorities have different ways to perceive the problem. Thus, this slight change of policy should be viewed against the background of discursive struggles within state authorities.

The involvement of the local levels

The national emphasis on sector integration, and the inclusion of 'all levels' of Swedish society that we have seen in the strategy to mitigate climate change

[366] Lars Westermark, interview 2008. My translation.

has of course some implications for local policy. Since 1998, the County Boards have the responsibility to adapt the national environmental policy targets into regional targets, and since 2005 they are responsible for developing regional policy measures. The municipalities on the other hand do not have a mission comparable to the County Boards; municipalities, with some restrictions, can more or less themselves choose their level of ambitions.[367]

Hence, in order to involve all municipalities in the national climate policy ambitions—let alone to reach the national targets—the state has realised that municipalities need incentives. One of the most pronounced state policies for involving the local level (including companies and civil society) has been the cross-sectoral Local Investment Programme for Ecologically Sustainable Development (LIP) 1998–2002, succeeded by the local climate investment programs (Klimp) 2003–2008 (the last programmes will be finished in 2012). In these programmes local governments in collaboration with private actors could apply for state (part) funding of projects that reduce GHG emissions.[368] The essential idea of the Klimp programmes was to invest in infrastructure, techniques, and activities that significantly reduce GHG emissions, and reduce energy use. As such, it was an important ingredient in the Swedish climate strategy to reduce GHG emissions domestically, and was launched in the 2001 Government Bill.[369] As is apparent in contemporary climate discourse, taking measures to reduce GHG emissions and saving energy equals a Win-Win situation. Hence, some would question subsidising efforts that would pay off anyhow. Such considerations were included in the grant instructions; grants were not to be given to projects that were estimated to provide profit in the short run, only to those that needed subsidies to get initiated.

Public authorities estimated that these programmes have considerably contributed to reduce Sweden's GHG emissions. Among the calculated effects were GHG emissions reductions of approximately 2.1 million tonnes annually and a reduction of energy use by 1.2 TWh annually—besides contributing to other environmental policy goals such as pursuing cleaner air, and targeting acidifi-

[367] Municipalities are e.g. entitled to perform supervision according to the Environmental Code (*Miljöbalken*) and to have energy plans according to the Code of Municipal Energy Plan (*Lagen om kommunal energiplanering* [1977:439]). Planning is also a local matter, although state regulated (*Plan- och bygglagen* [1987:10]). Planning legislation was changed from 1 July 2008, upgrading the role of economic sustainability in relation to ecological and social sustainability, and that the consequences of climate change in the planning process should be more emphasised (Government Bill 2006/07:122).
[368] See e.g. SOU 2000:23; Government Bill 2001/02:55; Government Bill 2005/06:172. For both LIP and Klimp projects, grants summed up to about 25 percent of total investments. In total, SEK 4.3 Billions were granted as LIP allowances (summing up to around 16 Billions in total), and SEK 1.8 Billions (summing up to about 8 Billions in total) have been allocated for Klimp programmes during 2003-2008 (for programs to be implemented until 2012), see SEPA 2008.
[369] Government Bill 2001/02:55.

cation and eutrophication. These emissions reductions stand for nearly 75 percent of Sweden's climate policy target (i.e. minus 4 percent) for the years 2008–2012.[370] Moreover, it

> is also believed that the work carried out on the LIP and Klimp applications has strengthened environmental work in the municipal organisations, increased awareness of the climate issue among important players in the municipalities and improved knowledge about potential local environmental measures and their effects.[371]

Thus, it has not only meant reduced emissions in the short perspective, but also capacity building in the municipalities including the 'right' knowledge, but not least experience with cooperation in climate change mitigation measures.[372]

Nevertheless, despite some good grades in the evaluations, the Klimp projects have also been criticised, above all because they do not live up to standards of cost-efficiency. Compared to economic policy measures like the CO_2 and energy taxes, the Klimp projects come out relatively bad in terms of cost-efficiency, largely because there are overlapping policy measures and because of high administration costs. Therefore, it was recently suggested by the Swedish Energy Agency and the Swedish Environmental Protection Agency that the Klimp projects should be exchanged for more targeted local monetary support, which is not local by definition. The money for local climate investments was recommended to be redirected to support specific measures and sectors that are not comprised by other effective policy measures and where, thus, these efforts can be expected to be important for the reduction of GHG emissions.[373] This view was shared both by the parliamentary based Climate Commission[374], and later the government:

> The climate investment programme was terminated in 2008, and now it is important that municipalities release funding within their own budgets in order to integrate climate aspects in municipal activities.[375]

More targeted support was to replace the Klimp programme, e.g. support for local development of wind power. It is hard to tell whether the conflict between different ministries that we saw in the previous section has anything to

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[370] SEPA 2008.
[371] Ds 2005:57, p. 25.
[372] Cf. SEA & SEPA 2007a; SEPA 2008. Experience with cooperation projects is considered benevolent since it involves communication and strengthens group identity and, above all, elicits social norms, such as norms of promise keeping. See Bicchieri 2002; cf. Lubell & Scholz 2001.
[373] SEA & SEPA 2007a; SEA & SEPA 2007b; Samakovlis & Vredin Johansson 2007.
[374] SOU 2008:24. Note that the majority's proposition was criticised by the opposition, who would have preferred a strengthened and developed Klimp, see SOU 2008:24, p. 440.
[375] Government Bill 2008/09:162, p. 139. My translation.

do with the discontinuation of the Klimp projects. It probably has not in any direct way, since criticism came from within public authorities based on evaluations of the Klimp projects. However, it seems evident that this policy shift was possible due to a heavier emphasis of the norm of cost-efficiency, since the Klimp programme was criticised for not living up to standards of cost-efficiency. Both SEA and SEPA had cost-efficiency in mind when evaluating Klimp. However, the 'Keynesian' influenced Ministry of Environment (at least earlier, under the Social Democratic government) has obviously lost this battle, or has redefined its opinion.

Despite all this, the responsible authorities seemed somehow concerned with the inclusion of the local level in the climate policy. They suggested that it should be investigated how the state could provide further incentives for municipalities, and how these could be coordinated with local incentives to save energy and local planning for adaptation to the effects of climate change.[376] And according to the Head of the Climate Policy Unit at SEPA, it cannot be trusted that municipalities will take action without being pushed in the right direction by the state: "I still think that the national measures are very important because otherwise the municipalities would not have the incentives to do these things."[377]

It is also difficult to definitely conclude how important the change of government was for the discontinuation of the local climate investment programmes. But Klimp was undoubtedly a Social Democratic idea, and hence maybe a reason in itself for the subsequent centre-right government to phase them out. As will be clearer below, the centre-right government slightly more than the former Social Democratic emphasised the norm of cost-efficiency.

Nevertheless, the Klimp programme clearly marked government policy during the analysed period, and thus implies how the government thought about the inclusion of the local level. What is interesting is how demanding municipalities have interpreted this state policy of including 'all' society in managing climate change. Regarding the investment programmes, we know that only 161 (about 55 percent) and 67 (23 percent) of Sweden's 290 municipalities were granted LIP and Klimp funding, respectively. Furthermore, some municipalities have been granted several times, and being successful once has meant learning how to get granted another time.[378] Without doubt, municipal ambitions depend on something at the local level. As I have made clear earlier, it is not my aim to explain this variation. Rather, I continue the analytical approach from this chapter when I analyse the Västra Götaland region and some local cases in the next chapter. I will investigate how these polities have constructed the question of what climate change 'is', the polity's responsibility for

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[376] SEA & SEPA 2007a; SEA & SEPA 2007b. Beside many municipalities and Counties, the Climate Committee seemed to agree on this point too, SOU 2008:24, p. 244.
[377] Lars Westermark, interview 2008. My translation.
[378] SEPA 2008.

managing climate change, and what it should do to contribute to the mitigation of climate change.

'That's the way we do it'—domestic measures

From chapter 4 we can conclude that the international discourse on climate change is centred on the norm of flexibility. Measures to mitigate climate change should be flexible in order to be cost-efficient, which is the most pronounced norm in the climate change regime regarding *how* climate change is to be mitigated. The roots to this can be found in the emergence and growth of the discourse of ecological modernisation during the 1980's and 1990's, which, *inter alia*, put forward the notion that environmental degradation is a matter of market failures and thus inefficiency. According to ecological modernisation, and even more emphasised by liberal environmentalism, the remedy to this inefficiency is first and foremost to create incentives for market actors to reduce their pollution. Thus, the introduction of economic measures was perceived as the most important innovation to environmental policy in industrialised countries. In the late 1980's Sweden was among the first to introduce these novelties, most prominently the CO_2 tax.[379] However, the introduction of the flexible mechanisms in the Kyoto protocol is to further the idea of flexibility in international environmental agreements.

This section will analyse Sweden's strategy to reduce GHG emissions. First, I analyse domestic measures, and then I turn to international measures, which largely refer to the so called flexible mechanisms of the Kyoto Protocol. One aim of this analysis is to view climate policies in Sweden against the analysis of international climate discourse in chapter 4, and briefly summarised in the previous paragraph. Thus, questions regarding the domestic effects of international climate and environmental policy developments will be central.

Before analysing transport and energy policy, let us contemplate the following words by Lars Ekekrantz, Head of the Environmental Quality unit at the Ministry of Environment, when answering my question what the prioritised measures in Sweden are:

> Prioritised is to as far as possible get rid of all fossil carbon dioxide emissions. If we look at what we actually have in Sweden; to begin with we have a non-fossil energy system. [...] We have come a long way in the industry sector, i.e. the demand for heating in the industry sector is today largely based on bio-energy. [...] Transports are what is crucial. That's where we have to find alternatives to petrol and diesel. In the housing sector we actually think we have come a long way to being carbon free. And that depends largely on the expansion of district heating. Electricity production is of course, since we have hydro and nuclear power, carbon free. [...] District heating with bio-

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[379] See Government Bill 1987/88:85; Government Bill 1989/90:111; SOU 1990:59; Government Bill 1991/92:150.

energy combined with power and heating plants, which many municipalities are investing in, means that we in 2020 probably will be more or less carbon free in the housing sector. [...] Then we have the agricultural sector... [...] And it is very hard to rearrange the agricultural sector to be emission free. I don't think that's possible. But fossil free, that's our ambition.[380]

These are the words of a man confident with his country's deeds, past and future. As Ekekrantz understands it, Sweden has done most of what the country can do within its borders, with some exceptions. What can be done in the industry sector has to be managed within the EU Emissions Trading Scheme (ETS), so that Swedish industry does not run the risk of being outcompeted. Apart from this, the transport sector is depicted as the hardest nut to crack, especially if seen in shares of Swedish GHG emissions. The above quote quite well illustrates the Swedish self-image of already having done very much. This does, however, not mean that there aren't things left to do, a task Sweden will most definitely opt for.

Continued transports, but reduced emissions

When Sweden started dealing with climate change two main strategies were identified to choose between: first, energy savings, or the introduction of more energy efficient techniques, and second, the use of alternative energy sources, regardless of which sector we have in mind. Energy savings could come in the form of behavioural changes, like driving car to a lesser extent, but what policy makers seem to have in mind is by and large technical solutions. But all the same, technical solutions do not come about without behavioural changes; someone has to introduce new technologies. The most important way to do this, which is also in line with the norms articulated in the climate change regime, is to provide actors appropriate (economic) incentives.[381]

The transport sector, the only sector with steady GHG emissions increases, has throughout the years been considered the hardest nut to crack in Swedish climate policy. Hence, when transports became incorporated in climate policy in 1998, the goal concerning this sector has ever since been to stabilise GHG emissions at the 1990 level no later than 2010.[382] Thus, the goal for this sector was not to reduce emissions like it was regarding aggregated emissions. The biggest potential was perceived to lie in alternative, non-fossil, fuels. In order to promote these, a CO_2 tax together with an environmental classification system was put in the seat of honour. Bio-fuels were to be freed from the CO_2 tax, so that they could compete with gasoline and diesel on the market. The under-

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[380] Lars Ekekrantz, interview 2008. My translation.
[381] Government Bill 1991/92:150; Government Bill 1992/93:179; Government Bill 1996/97:84; Government Bill 1997/98:56; Government Bill 1997/98:145; Government Bill 2001/02:55; Government Bill 2005/06:172.
[382] Government Bill 1997/98:56.

lying principle behind the CO_2 tax, which is considered the "basic transport policy measure", is "to put a socio-economically appropriate price" on fuels.[383] Citizens and corporate actors could then decide for themselves how to conduct their transports. They would thus be provided with incentives to change their behaviour (drive less, or more efficiently with climate friendlier fuels), while they would not—importantly—be forced to do so by law.

People are hence viewed as consumers on a market. If they are to have free choices they may also need information about the effects of their choices. Swedish information campaigns on climate and transports have been designed in order to make consumers more climate conscious. This was over time more emphasised as an important measure for the development of the transport sector.[384] Despite the belief in information, the major strategy to restructure the transport sector is to push forward alternative fuels with economic incentives to market actors. The belief in information could be interpreted as a manifestation of a market liberal discourse, since people as *consumers* with free choices are emphasised. However, I would be cautious with such a conclusion, since the government was not impartial regarding people's choices. Rather, the government (regardless whether it was Social Democratic or centre-right) wished that people should make the 'right' choices, but with as little enforcement as possible. My interpretation is that this is typical of the discourse of ecological modernisation, which on the one hand advocates active government, but on the other hand also promotes private actors' involvement in the policy process, i.e. not only industry, but also citizens, consumers etc.

The Government Bill on transport policy from 1998 contends that the transport sector does not have any value in itself; its value lies in the positive side-effects it can bring to society. It is of value for economic growth and employment, as well as it can bring comfort to people in their everyday lives. Hence, the aim of the Swedish transport policy is divided into several sub-goals: to provide an available transport system, transports of high quality, safe traffic, a good environment, and a positive regional development.[385] These goals may of course be in conflict. Interestingly, in the long run the government saw "no genuine conflict between these different goals".[386] The solution to this theoretical dilemma is that the positive effects of a transport system of high quality generate economic growth and a higher employment rate. In turn, this will generate "the necessary resources to manage environmental problems and sustain high ambitions in the policy of income redistribution".[387]

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[383] Ibid., p. 39. My translation. Cf. SOU 1996:184.
[384] Government Bill 1997/98:56; SOU 2000:23; Government Bill 2001/02:55.
[385] Government Bill 1997/98:56.
[386] Ibid., p. 17. My translation.
[387] Ibid. My translation.

Thus, one can say that the restructuration of the transport sector is all about a long-term reconstruction of the society, which involves several obstacles and insecurities:

> We are a sparsely populated and oblong country with high standard of living where people have gotten used to the car, above all, and to lorry transportations. And many different political decisions are needed in order to fix this. But if we are to switch fuel; the private vehicle stock can be changed in about 19 years, and we have around 4000 gas stations where at least half or a quarter need to supply the new fuel for the whole thing to work. So we are talking about a lot of infrastructure, which means a rather long-termed restructure of society. And yet we know that we don't have *the* perfect fuel today. That's one thing. The other is that we need to make vehicles radically more energy efficient. We may have to reduce energy consumption with about one third or a quarter. And remember that we have two vehicle producers in this country [Volvo and Saab] who have made themselves quite dependent on big vehicles with low energy efficiency. Of course, people will at first see a conflict with job opportunities.[388]

Ygeman continues with saying that it is difficult to find acceptance for higher fuel prices and compares this with how relatively easy it has been to restructure the housing sector. Here it was easy for the individual to see that in the long run a switch of energy source implied lower costs and often a better indoor environment. Thus, it seems that at this point the restructuration of the transport sector does not imply a Win-Win situation.

Lars Westermark at SEPA also points out that potentially effective measures are often met with resistance, not only by individuals, but also by industry:

> On the one hand you could say that there are really cheap measures; halve the size of engines. But how do you achieve such a measure? We know how big the resistance is when the EU tries to sharpen emission standards. Now it is decided to allow 130 grams per kilometre as an average. In Sweden we are at 190 grams carbon dioxide per kilometre. And thus, it gets very problematic to legislate on lower levels. And it is also highly problematic to increase fuel taxes, and to do it EU-wide, or over yet larger areas—because, I mean transports is also an international phenomenon. You need to cover a larger area than merely Sweden.[389]

Here we see the acknowledgement that to radically cut emissions from the transport sector there is a need to harmonise instruments internationally. This was also implied by the statement by Lars Ekekrantz in the section above, and it will be seen below regarding the energy sector (which includes the industry). In that sense, after having implemented domestic policy measures for some

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[388] Anders Ygeman (S), interview 2008. My translation.
[389] Lars Westermark, interview 2008. My translation.

years, Sweden more and more 'thinks globally' regarding policy measures. To hold out for National Action is simply not perceived to be effective enough.

Despite the 'international openings' in the material above, the confidence in technical solutions providing alternative fuels and that these should be promoted with the right incentives is striking in Swedish transport policy. It is not people and their behaviour that primarily need to change; it is the technology that they can choose. This is very much in line with the spirit of the Kyoto Protocol, perhaps with a 'technological fix' edge, i.e., the overall impression is that of an agent confident regarding its capacity to rationally plan and provide these technologies and incentives. I find this strategy to clearly draw on the discourse of ecological modernisation. Alternative discourses, which might have questioned this strategy, or that technical solutions to the problem might be 'eaten up' by higher consumption, are hardly considered. Instead, planned business as usual is the ruling principle. Like in other areas of Swedish climate policy, it is perceived as an opportunity to develop new techniques and services that are in the frontline internationally. Hence, this can be positive both for the global climate and the Swedish economy. However, as was just shown, the difficulties associated with implementing domestic policy measures imply a disturbing 'blur' to this confident self-image.

The dilemma of restructuring the energy sector

Climate change policy obviously has implications for the wide energy sector. Rightly it can be said to cut through the heart of industrialised societies, since practically all organised human action is dependent on energy. For Sweden this has implied a dilemma, given its dependency on nuclear power, which was decided to be phased out no later than 2010, after public referendum in 1980. The clash between nuclear power and GHG emissions reductions is very much pronounced in Swedish climate policy. Since GHG emissions have decreased 1970–1990, due to the introduction of nuclear power, emissions reductions will be costly—especially if nuclear power is to be phased out simultaneously.

The dilemma of balancing climate concerns, nuclear power, and Swedish welfare is obvious in Government Bills since the early 1990's:

> In the short and long run, the aim of Swedish energy policy is to secure the access to electricity and other energy in competitive conditions with the surrounding world. The energy policy shall create the conditions for an effective use of energy and a cost-efficient Swedish energy provision with low negative impact on health, the environment and the climate, and to facilitate the adjustment towards an ecologically sustainable society.[390]

[390] Government Bill 1996/97:84, p. 1. My translation. Cf. Government Bill 1990/91:88; Government Bill 2001/02:143.

In this quote we can see several key aspects of Swedish energy policy. There is the anxiety about the conditions for Swedish industry, which could be harmed by unilateral Swedish measures. There is, again, the norm of cost-efficiency, which among other things opens up for implementing measures internationally ("Sweden should implement cost-efficient measures both internationally and nationally"[391]). Finally, there is articulated the Swedish self-image of an environmental forerunner that should be in the frontline of developing techniques compatible with the idea of the ecologically sustainable society.

The concern for the industry operating in an international market is manifested in a lower CO_2 tax for the energy intensive industry compared to other emitting sources, including e.g. private persons driving cars and using energy to heat their homes (if run by fossil fuels). Years before joining the EU, Sweden recognised the need for international coordination of a CO_2 tax, in order to eliminate disadvantages for domestic industry.[392] A decade later, after a wide use of economic measures such as CO_2 and energy taxes, the government saw the limits with this approach and after looking at other EU countries introduced the idea of long-term agreements between the state and industry.

> A program for long-term agreements for energy efficiency can make possible a balance between environmental considerations and companies' international competitiveness.[393]

Thus, in order to fulfil the goals in the climate strategy the government identified the opportunity to create policies together with companies in sectors exposed to international competition, as a complement to other measures that had some limitations. As we remember from earlier in this chapter, public–private cooperation is hardly a novelty in Swedish (environmental) policy, and it is thus not a surprise that the government picked up this idea.

As we have seen, Sweden likes to promote the self-image of an environmental forerunner. In climate change politics this has been manifested in a more far-reaching goal than needed according to agreements, and that the aim was to fulfil this despite that it might be hard given the relatively high costs to reduce emissions in Sweden. The vulnerability of Swedish industry if unilateral measures are implemented were, however, very well acknowledged:

> Swedish efforts to combat climate change have to be adapted to demands for a maintained international competitiveness, employment and welfare. Only

[391] Government Bill 1996/97:84, p. 13. My translation.
[392] Government Bill 1990/91:88, App. 1, p. 12.
[393] Government Bill 2001/02:143, p. 133. My translation.

through a sustainable economic growth can resources be created for necessary environmental and climate efforts.[394]

Here, economic growth is linked—as a necessary condition—to the ability to manage environmental and climate problems. My interpretation is that this can function as legitimising in two ways: it can on the one hand legitimise climate consideration for those more prone to emphasise economic growth ("it will not compromise economic growth and thus the prerequisites for a sustained welfare"); on the other hand it can legitimise the pursuit of economic growth ("we need it") for those who are more interested in climate change mitigation.

Yet another manifestation of this self-image is that practically every policy document of relevance for climate change mentions what Sweden has already done in the energy sector since the beginning of the 1970's. Moreover, it was argued that this should be 'considered' when allocating responsibilities internationally, together with per capita emissions. However, what this should imply is not directly spelled out. Hence, Sweden accepts the Kyoto Protocol's distribution of burdens, and later that of the EU.[395] The following excerpt from the 1997 Government Bill on energy policy illustrates that Sweden is well aware of what it has accomplished compared to other industrialised countries, and these countries should not expect Sweden to continue taking on much heavier burdens than them:

> Successful international cooperation presupposes a fair distribution of commitments and costs between countries and between individual actors. [...] This means that all countries' varying starting points need to be considered. This is a fundamental demand regarding the situation of developing countries. It is also of importance for countries like Sweden, where the electricity system is not based on fossil fuels. Moreover, Sweden has during the last decades reduced its emissions drastically. [...] Most other industrialised countries have during the same time increased their emissions. Swedish emissions of carbon dioxide per person and relative to its GDP are among the lowest in Europe. The costs for further reductions in Sweden are therefore high compared to most other countries. The costs will be particularly high if emissions reductions are undertaken at the same time as nuclear power is phased out in a short time span. Therefore, Sweden will have difficulties to shoulder equable emissions reductions percentagewise for all countries after the year 2000. The Swedish climate strategy therefore also ought to be con-

[394] Government Bill 1992/93:179, p. 197. My translation. Cf. Government Bill 1996/97:84; Government Bill 1997/98:145; Government Bill 2001/02:55; SOU 2000:23; Government Bill 2005/06:172
[395] But Sweden not only accepts the distribution of burdens, it also lays a heavier burden on itself.

centrated on the Swedish involvement in measures taken in other coun-
tries.[396]

Here, the eagerness to point out what has already been done is connected to
the phase-out of nuclear power. In the next section I will return to the clash
between the goals regarding climate change and nuclear power.

The quote above also quite heavily constructs climate policy as a Sacrifice.
Partly this has to do with it being written in 1997, and the construction of cli-
mate change as an Opportunity has become much stronger since then. But an-
other possible reason might be that the Bill was prepared at the Ministry of
Enterprise, Energy and Communications, which seemed to have a different at-
titude towards climate policy and Sweden taking on heavy burdens than the
Ministry of Environment, as became clear in the section on national organisa-
tion above. Nevertheless, the underlying threats in the excerpt above have not
really been realised. But it certainly illustrates an interesting conflict that is
sometimes only latent, sometimes becomes salient.

The other side of Sweden's self-image as a forerunner is the aim to take the
lead in creating a sustainable society, based on non-fossil energy resources. In
the long run, Sweden has everything to gain from being in the frontline of de-
veloping new techniques and alternative energy sources, since it will imply
products and services demanded on the international market.[397] If this should
not be sufficient to legitimise Sweden's climate strategy, it might be worth
pointing out that it is positive for developing countries as well:

> Sweden stands for about 0.2 percent of the global emissions. That does not
> mean that what Sweden does is of no importance. Among other things Swed-
> ish climate policy can contribute to the development of techniques and policy
> instruments that combine decreased emissions with increased welfare, high
> employment, good competitiveness for Swedish companies and a positive de-
> velopment for the poorest countries.[398]

This clearly draws on the discourse of ecological modernisation. Once again,
the government perceives "no genuine conflict" between decreased emissions
and economic growth. Rather, economic growth will benefit all—domestically
as well as people in poorer countries.

Interestingly enough, this 'pro-activeness' did not come without ambigui-
ties. One may say that Swedish climate policy has been conditioned on action
by other countries:

> The point of departure for Sweden in the following work with limiting global
> changes are the energy agreement from 1991 and the undertakings in the cli-

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[396] Government Bill 1996/97:84, p. 72f. My translation.

[397] See e.g. Ibid; SOU 2000:23; Government Bill 2001/02:55; Ds 2005:57. See also SOU
2003:80 on the idea of commercialising the results of energy-related research, develop-
ment and demonstration.

[398] Summary of Government Bill 2001/02:55, p. 5. My translation.

mate convention. Of great importance are also new research results about climate changes and at what pace and at what costs other countries take concrete measures.[399]

> The Swedish climate strategy's further design is to be worked out with comparisons of measures actually taken in other countries, in order to avoid that Sweden puts a substantially greater burden on Swedish industry than what competitor countries put on their industry.[400]

Further, the goal has been to work out international cost-efficient measures in order not to affect Swedish costs unilaterally.[401] Hence, at the same time as Sweden should take the lead in combating climate change, it should not do too much if significant others do not do their legitimate share. Although the underlying assumption is that Sweden should be 'one step ahead', there is a touch of a realist discourse, emphasising relative (dis)advantages regardless of the belief in the so called win-win situation. Sweden indeed acknowledges the social dilemma character of climate policy.

The domestic measures to be used in the restructuration of the energy system included first and foremost measures that create incentives for changed behaviour, like taxes and subsidies to renewable energy resources, in combination with the use of certificates.[402] Money should be spent on research on alternative energy development. Further, like for the transport sector, information and education was considered an important ingredient in the strategy. The general public as well as smaller companies were to be informed about how to save energy. As pointed out above, in 2002 the government introduced the idea of long-term agreements between the state and the industry in exporting sectors, as a complement to established measures.[403] Thus, the overall strategies were both to develop alternative energy resources and to save energy or use energy more efficiently. Practically all actors, public and corporate actors as well as citizens, are hence expected to save energy, and are given incentives to do so (e.g. higher energy taxes), while the Swedish polity privileges its export-depending industry. Some actors are hoped to develop new energy for the future carbon-free society, where Sweden can stand out as a good example. Thus, Sweden's social structure makes policy actors to construct energy policy as a collective mission, where everyone should contribute. That the export-depending industry is partly excused from this (by having lower energy taxes)

[399] Government Bill 1992/93:179, p 32. My translation.
[400] Government Bill 1996/97:84, p. 71. My translation.
[401] Cf. SOU 2000:23.
[402] Certificates replaced the "earlier state subsidies to electricity production based on renewable energy resources" (Government Bill 2003/04:31, p. 14; my translation) by Act (2003:113). Cf. Government Bill 2005/06:154.
[403] Government Bill 1990/91:88; SOU 1992:90; Government Bill 1996/97:84; Government Bill 2001/02:143; Government Bill 2002/03:85; SOU 2003:80 ; SOU 2004:109; Government Bill 2005/06:32.

is significant for Sweden, a small export-dependent economy. Climate considerations are thus conditioned on the existence of a prosperous industry that can 'feed' the country.

Saving energy and developing renewable energy resources can be linked to a science narrative, but in different ways. To save energy may be viewed as to economise with limited resources, which is in line with much of survivalist thinking as outlined in chapter 3. Here, however, developing alternative resources through research is mixed with a narrative that puts progress in the driver's seat. Thus, the world is not limited more than by physical laws and scientific progress. I see no other reasonable discursive label to this than ecological modernisation. Concerning the ways to fulfil these goals there is a wide belief in the state's capacity to inform its citizens on the right way of living, and in the possibilities of incentive-based instruments. The former is not surprising given Swedish political tradition, drawing on a discourse of the rational state (which, needless to say, fits the discourse of ecological modernisation like a hand in a glove). The latter clearly emphasises the free choices of market actors, who are believed to be sensitive to stimuli.

Colliding environmental goals: nuclear power as a clean energy source

Reducing GHG emissions implies that fossil based energy needs to be replaced by something else, if energy use is not radically rationalised, or if welfare is not to be compromised. Regarding alternatives to fossil based energy, what's left is nuclear power and renewable energy resources of different kinds, depending on a society's specific conditions. The UNFCCC and the Kyoto Protocol do not in any strict sense preclude nuclear power from being used. But nuclear power is not allowed to be used in JI and CDM projects. Thus, although nuclear power is not strictly condemned, the underlying norm seems to be that nuclear power is not considered a clean energy resource, to be used instead of GHG's.

Swedish policy has since the beginning of the 1980's been to slowly and cautiously phase out nuclear power. But this has not been without opposition. According to a public referendum in 1980 nuclear power was decided to be phased out in 2010.[404] Hence, Swedish policy decisions have proclaimed the phasing out of nuclear power, which stands for a relatively large share of the Swedish energy balance.[405] The Social Democratic government shut down two nuclear power plants, in 1999 and in 2005 respectively. The plan to phase out nuclear power until 2010 was abandoned long ago, however. The current centre-right government in its inaugural speech declared that nuclear power plants will neither be phased out nor restarted during the government's length of office 2006–2010.[406] In its 2009 climate and energy policy Bill the govern-

[404] Public referendums are advisory, not decisive, in Sweden.
[405] Government Bill 1996/97:176; Act (1997:1320).
[406] Riksdagens protokoll 2006/07:6.

ment abandoned the prohibition to expand nuclear power. The state itself did not aim at expanding nuclear power, but left it open for private interests to do so if they would find it economically justified.[407]

Over the years, the climate change issue has in Sweden increasingly been used to promote nuclear power by some actors; without nuclear power, the argument goes, it is impossible to reduce GHG emissions. Rhetorically, the Social Democratic government was "convinced that we are able to phase out nuclear power in the long run", and the Minister for the Environment Lena Sommestad argued that

> it goes without saying that we can not solve one environmental problem, the climate problem, through increasing and aggravating another, i.e. how we are to take care of nuclear waste from our power plants and how we are to handle this very dangerous technique.[408]

In this articulation nuclear power is not considered more legitimate than the use of fossil fuels, at least not in the long run. But there is no consensus on this issue; voices are raised in Sweden for not giving up nuclear power:

> If we seriously thought that nuclear power could be replaced by alternative sources that are environmentally friendly, we would of course replace nuclear power. But what we see very clearly is that it is not replaced by environmentally friendly energy sources, but it is to a very large extent replaced by gas but also by Danish and German coal power.[409]

MP Marie Wahlgren from the Liberal Party (FP) here links climate change policy in Sweden to circumstances in the surrounding world. Phasing out nuclear power too early would have implications for climate change since available alternatives are environmentally unsound. Implicit in Wahlgren's argumentation is that the presently available alternatives are not only bad from a climate perspective, but also causing other pollution. But she also saw another danger in phasing out nuclear power, i.e., that of destroying the "untouched rivers", a very sensitive issue in Sweden:

> If the minister opens up for the extension of the untouched rivers, we can of course use hydro power to replace nuclear power. But as the minister knows it is an issue very much at heart for liberals not to exploit the last untouched rivers. It is about protecting our nature. [...] That's why we want to be able to use nuclear power for a longer period. Neither I view it as the thousand year energy source, something for all future, but it is a considerably better energy source than carbon, gas and oil.[410]

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[407] Government Bill 2008/09:163.
[408] Interpellation 2004/05:585, anf. 26, Lena Sommestad (S). My translation.
[409] Ibid., anf. 27, Marie Wahlgren (FP). My translation.
[410] Ibid., anf. 29, Marie Wahlgren (FP). My translation.

The "untouched rivers" is a very sensitive element in the Swedish discourse on Nature, which is practically impossible to rhetorically abuse. The minister for the environment thus very quickly joined the appraisal of the untouched rivers: "Let me first establish that the untouched rivers is an issue very much at heart for the government and for Social Democracy. Obviously I do not plead for the expansion of hydro power in order to manage our energy supply."[411] The minister did not (have to) develop her argument as to why hydro power shouldn't be expanded (although accused for having such an agenda). It was 'obvious' it shouldn't.

In the quote of MP Wahlgren (FP) above, it is also interesting to note how she argues in favour of nuclear power through the comparison with other 'dirty' energy sources, like 'coal, gas and oil'. Thus, implicit in this articulation is that she promotes the idea that the only reasonable alternative if phasing out nuclear power too quickly is to stick with fossil based fuels, leading to increased GHG emissions. Among the political parties the Liberal Party (FP) has been the most stubborn advocate of the expansion of nuclear power. The 2008 report by the parliamentary based Climate Commission had a registered dissenting opinion by the member from the Liberal Party, Carl B Hamilton, who argued that

> the greatest contribution for decreased emissions of greenhouse gases that Sweden can give to the climate, the atmosphere and the world is to immediately build more nuclear power plants. In that way we can produce more carbon dioxide free electricity and thus spare humanity from some of the greenhouse gases' consequences. The only reasonable conclusion is that Sweden immediately has to start planning for additional nuclear power.[412]

Hamilton's view was by and large shared by his fellow party member, the Minister for Higher Education and Research, Lars Leijonborg. The Minister held a speech at a conference on nuclear power research, where he ascertained that the government's decision not to build more nuclear power plants didn't imply that nuclear power research should be prohibited from receiving state funding. Moreover, he spoke well of the potentials of nuclear power: "Nuclear power will be a necessary part of humanity's energy supply for decades ahead—among other things in order to reduce the greenhouse effect."[413]

Despite Hamilton's and Leijonborg's plead for the 'necessity' to build more power plants, or at least not to further phase it out, this was far from the established truth in the Swedish polity. The Chair of the Parliamentary Committee on Environment and Agriculture, Anders Ygeman (S), argued that

> the climate issue implies that we phase out nuclear power a little slower than we otherwise should have done. But nuclear power is not a sustainable en-

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[411] Ibid., anf. 30, Lena Sommestad (S). My translation.
[412] SOU 2008:24, pp. 442. My translation.
[413] Leijonborg 2007.

ergy source. If we have the current price on uranium and go from 3 percent, as it currently is in the world's energy mix, to 10 percent, there would be no uranium left in—what is it—5–7 years. There's an end-point to that too. Sometimes in the Swedish debate you get the impression that if we only stick to nuclear power it will all get fixed. But I don't think so. [...] If we should build new nuclear power plants they would be ready to install in about 10, 15 or perhaps 20 years. Then you have to ask yourself: is that the future? [...] If we are to create new energy sources, should we really go for nuclear power? I don't think so. [...] And you have to remember that we have phased out one nuclear power plant, we have reduced our emissions of carbon dioxide with 10 percent, and we have had an all-time high GDP growth. So, those who argue that we will fall into this black hole if we take climate responsibility and phase out nuclear power, they have a really weak case in reality.[414]

The established truth—represented by Ygeman—about nuclear power was thus that it is not a 'clean' energy source (but opponents indeed think it's clean, from a climate perspective), and it is not the 'future'; both because it is potentially dangerous and because uranium will not last forever. Moreover, Ygeman reproduces the success story of Swedish climate policy; emissions have been reduced, and economic growth has been high, although two power plants have been shut down. Within public authorities, civil servants at key positions do not see a big problem with a phase out (although they are quick to emphasise that what politicians have decided democratically are what counts). Says the Head of the Environmental Quality unit at the Ministry of Environment:

> When and if nuclear power needs to be phased out, for safety or economic reasons, it can of course be a problem if it happens very abruptly. But if it happens in a planned fashion I don't think it will have to be that problematic.[415]

Lars Westermark at SEPA is more anxious about a possible phase out, but does not seem to think it likely with a quick one, and in the shorter perspective (for the 2020 objective) it would be of little importance. But if it, on the contrary, would be politically decided to extend nuclear power in Sweden (something Westermark doesn't seem to think totally unlikely), it would be due to Thinking Globally considerations, and to promote Swedish industry:

> If one decided to *phase out*, well, that would have big consequences, because then it has to be replaced somehow. But if nuclear power would be extended, it would not have that big effect on Sweden. It would then be done with the idea to out-compete Danish or Polish coal power plants or something like that.[416]

[414] Anders Ygeman (S), interview 2008. My translation.
[415] Lars Ekekrantz, interview 2008. My translation.
[416] Lars Westermark, interview 2008. My translation.

The latter means that Sweden could export additional electricity from nuclear power it doesn't need to cover domestic requirements. This would be beneficial from a climate point of view, if it meant that it replaced fossil energy sources somewhere else. This is how nuclear power advocates argue, and they do it leaning on the Thinking Globally story-line.

Although we have seen tendencies for a revaluation of nuclear power, the government's decision to withdraw the prohibition on expansion of nuclear power came as a surprise when it was presented shortly before the climate and energy policy Bills were launched in March 2009.[417] The decision was the fruit of a political compromise within the government. Both the Centre Party and the Christian Democratic Party had been known as opponents to nuclear power (especially the Centre Party), and there were some internal opposition in these parties against the government decision.[418] However, the problem of nuclear power was explicitly put against the problem of climate change, and the latter was no doubt considered the most serious. Renewable energy sources were considered most desirable in the long run, but hardly worth to rely on; their capacity to replace both fossil fuels and nuclear power was called in question, to say the least. Add to this that the government saw the opportunity to export possible surplus energy, which could replace 'dirty' energy sources in other countries. Thus, nuclear power has gone from being 'a necessary evil' to something which is reluctantly embraced as a 'clean technology' by the currently in charge centre-right government. This would probably not have been possible without the political saliency of climate change.

As we have seen in this section, environmental values are obviously important in the Swedish polity. Climate policy together with the special circumstances of the use of nuclear power makes some of the valued issues collide. This collision has been used by those who see the positive aspects of nuclear power. The extensive use of nuclear power has also had some implications for the Swedish climate strategy, regarding how much action that should be taken abroad through the use of the Kyoto Protocol's flexible mechanisms. Were it not for Sweden's use of nuclear power for the country's energy supply, it would have been hard to reach Sweden's Kyoto targets, without counting emissions reductions through the project mechanisms.[419] Then other policy measures would have been called for. As implied by the analysis in this section, many actors think that the price is too high if Sweden is to have an ambitious climate policy at the same time as phasing out nuclear power. The cost of reaching both these goals is linked to the emphasis on cost-efficiency, and that measures both nationally and internationally should be cost-efficient. This, in turn,

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[417] Government Bill 2008/09:163. This did not imply that the Swedish state should invest in nuclear power, but left it open for private actors to do so if they found it profitable.
[418] The opposition parties (S, V and MP) heavily opposed this decision.
[419] On the dilemma of nuclear power and climate change policy in Sweden, see Nordhaus 1997; Marshall 2007.

is linked to the possibility to invest in measures taken in other countries, through the Kyoto Protocol's flexible mechanisms, especially JI and to a lesser extent (but more and more over time) CDM.

Flexibility: investing in emissions reductions abroad

The flexible mechanisms of the Kyoto Protocol are interesting because they can be regarded as new types of measures in international (environmental) governance. They should not be mixed up with economic measures such as taxes, although it can be argued they have the same ideological roots. However, economic measures such as taxes can hardly be argued to be 'novelties' in any meaningful sense when it comes to domestic politics, even if they are relatively new in environmental politics.[420]

Moreover, as we saw in chapter 4, the flexible mechanisms have been criticized from a moral perspective drawing on a discourse of civic environmentalism. Hence, the mechanisms have been argued to consolidate the structurally unequal relations between industrialised and developing countries, among other things because rich countries can 'buy themselves free' from changing their domestic energy structures, and what is more, while picking the 'lowest hanging fruit' (all according to the norm of cost-efficiency). Therein lies the 'flexibility'; because states can thus choose to take measures in other countries instead of within its own borders. The mechanisms have also been criticized for being nothing but 'loopholes', i.e. not contributing to real emissions reductions, only to hypothetical ones. Given that Swedish environmental foreign policy has traditionally had traces of the discourse of green radicalism/civic environmentalism one could expect that this discourse would be somewhat influential when Sweden takes a stand on the flexible mechanisms. As the analysis will show, surprisingly little of this has actually happened, despite Sweden's refusal to account for reductions from JI or CDM projects.

The supplementary principle, i.e. that a "significant" share of the committed reductions should be made in domestic society is important within the UNFCCC, and so it is in Swedish rhetoric. However, it seems unclear, as in the UNFCCC, how large share of the reductions that should be made through domestic measures. I argue that this is related to the uneasy Swedish handling of the flexible mechanisms. On the one hand, when formulating a first comprehensive climate strategy in 2002, the goal was to reduce GHG emissions without accounting for the flexible mechanisms—i.e. investing in reductions in other countries—or carbon sinks.[421] On the other hand, Sweden hardly criticized the

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[420] On the differences between taxes and tradable emissions permits, see Pezzey 2003; Sterner 2003.
[421] Government Bill 2001/02:55. That is, according to this goal, all reductions should be made in domestic society. However, the government opened up for possibilities to, in the future, reformulate this goal to include a goal including the flexible mechanisms.

flexible mechanisms; rather one appraised them as a cost-efficient way to reduce emissions and that they should be used because they are part of what has been agreed to in the Kyoto Protocol. The Social Democratic government later emphasised this even more:

> A national target construction does not imply, according to the government's judgement, an obstacle for a continuing active Swedish participation in emissions trading and in the development of the project based mechanisms. On the contrary, these constitute important parts of Sweden's climate strategy and Sweden will continuously give priority to active participation in the work with the project based mechanisms.[422]

In March 2008, when the parliamentary based Climate Commission presented its report on future Swedish climate policy, this conflict was manifested. The Commission's proposed target for the year 2020 was 38 percent emissions reductions compared to 1990, and that this should partly be reached with the use of flexible mechanisms. Apart from arguing for a 40 percent reduction target the representatives from the three opposition parties (S, V, MP) registered their dissenting opinion against the majority's proposal regarding the use of the flexible mechanisms:

> This implies that the national target for efforts in Sweden are significantly lower than 30 percent in the majority's proposal, i.e. more than 10 percent below our suggestion. That is a level that even falls short of the direct effects of the suggestion in the Commission's plan of action. The target thus undermines the work of the Commission. That is a level too low in relation to what the economy, economic policy, and the climate demands.[423]

When the subsequent Government Bill was launched a year later we saw the definitive policy shift; Sweden's 40 percent reductions target was proudly presented as the world's most ambitious climate objective hitherto, but one third of these emissions reductions was to be made through the use of project mechanisms similar to the ones in the Kyoto Protocol.[424]

The use or non-use of the flexible mechanisms has been emblematic for the climate issue, since it touches upon the crucial dividing line between what Sweden should commit to domestically (reproducing the National Action story-line) and whether the country should invest in (and above all account for) the most cost-efficient measures, which would take place in other countries, where you would get much more emissions reductions for the same amount of money. The latter would cling to the Thinking Globally story-line, which is considered legitimate in the climate field since it builds on the science

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[422] Government Bill 2005/06:172, p. 81. My translation.
[423] SOU 2008:24, p. 437. My translation.
[424] Government Bill 2008/09:162. The Bill anticipated a global treaty on climate change to be settled in Copenhagen in December 2009, which should include project mechanisms similar to the flexible mechanisms of the Kyoto Protocol.

discourse of green governmentality, and is economically 'rational' in line with the discourse of liberal environmentalism. This dividing line is by far the most salient in Swedish climate discourse.

> What Sweden should do nationally and what one should do internationally is a typical such question [where there are different point of views]. That may be the biggest dividing line. [...] It has been pronounced for the latest 20 years. It has been true also for other environmental problems than the climate. It has often been like that, e.g. when we have discussed acidification and emissions of sulphur and nitrogen dioxides, it has been the same. It is cheaper to carry out measures abroad than in Sweden. All the time this has been under the surface in this discussion.[425]

This dividing line, so significative of Swedish climate discourse, has of course been especially salient regarding the flexible mechanisms. Below I will discuss these, starting with the tradable emissions permits, followed by the project mechanisms.

Tradable emissions permits

Sweden was rather quiet on the issue of tradable emissions permits until the late 1990's. The impression one gets when studying the policy documents is that Sweden has awaited the international negotiations and what happens within the EU.[426] When Sweden finally dealt with tradable permits, it was in a rather technical manner; how the system should be designed in order to be as cost-efficient as possible.[427]

Basically, the argumentation for the use of tradable emissions permits followed the same lines as those for Joint Implementation (i.e. both JI & CDM, see next section). That is to say,

> [t]he effect of climate affecting emissions of so called greenhouse gases are independent of where emissions take place. Hence, emissions reductions are equally valuable as contributions against climate changes, independently of where they are made.[428]

Quite obviously, this quote effectively reproduces the Thinking Globally storyline. Further, the government implicitly argued that since costs for reducing emissions vary with different circumstances and the norm of cost-efficiency is the most pronounced in the Swedish climate change mitigation strategy, the

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[425] Lars Westermark, interview 2008. My translation.
[426] Cf. Zannakis 2001. See also Molin & Wurzel 2000; Marshall 2007.
[427] See Government Bill 2003/04:31; Government Bill 2003/04:132; Government Bill 2004/05:18; SOU 2004:62; SOU 2005:10; Government Bill 2005/06:184.
[428] Government Bill 2003/04:31, p. 9. My translation.

flexible mechanisms provide opportunities to reduce emissions where the costs are lowest.[429]

Besides the appraisal of the norm of cost-efficiency, which follows from the Thinking Globally story-line, the government once again used the binding targets in the Kyoto Protocol in order to legitimise the use of the flexible mechanisms. Hence, they are to be used because they exist, they are part of the Kyoto Protocol that has been agreed to. This is interesting since the binding targets in the Kyoto Protocol do not force countries to use the flexible mechanisms. According to international consensus, the flexible mechanisms, where tradable emissions permits are a central part, are a *help* for industrialised countries to reach their targets. But countries are not obliged to use them.

The EU emissions trading scheme (EU ETS) is thus welcomed as "an instrument of climate policy, aimed at reducing emissions of GHG's in the Union in a cost-effective and economically efficient way."[430] As we have seen above, the EU is considered more and more important by Swedish policy makers for the development of policy measures. Perhaps the most important measure is the EU ETS, which was launched on trial in 2005, and it is generally considered to play an important role in the community's future climate policy.[431] As we saw in chapter 4, the existence of emissions trading is the basis for the other two flexible mechanisms, the project mechanisms. One thing is the possibility to buy and sell emission rights, within the limits of politically decided quotas. Another is to invest in emissions reductions in other countries in order to get credits, which in turn are tradable. Let's take a closer look at this.

To account for emissions reductions abroad: the project mechanisms

Joint implementation (JI) and the Clean Development Mechanism (CDM) are sometimes packed together in the term JI (JI refers to projects in 'less developed' industrialised countries without quantitative commitments, whereas CDM refers to projects in developing countries). The principles behind them are also similar, and I thus treat them jointly.

As already indicated, Sweden's strategy at least partly clings to the Thinking Globally story-line: 'From a climate perspective it doesn't matter where on the Globe GHG's are emitted or where emissions are reduced'. This draws clearly on the discourse of Green Governmentality, where science is a legitimising element. The interesting part is that this story-line is linked to *solutions* drawn from the discourse of liberal environmentalism. Thus, reductions should be made where they are most cost-efficient, which opens up for buying and selling emissions rights, and investing in projects in countries where marginal costs are lower than in Sweden. Hence, to construct climate change along the

[429] Ibid.
[430] SOU 2004:62, p. 29.
[431] Lars Westermark, interview 2008.

Thinking Globally story-line effectively makes possible solutions such as the flexible mechanisms.

Concerning JI (and later CDM) Sweden shortly after the framework convention was signed in Rio in 1992 made sense of it because it was internationally agreed and because it contributed to the overall norm of cost-efficiency:

> The rules of Joint Implementation have been included in the Climate Convention first and foremost to satisfy the demands for cost-efficiency in the measures taken. This also implies that the parties to the Convention do not see any contradiction between national efforts and e.g. regionally or bilaterally coordinated efforts to reduce global environmental problems.[432]

The conclusion from this is that Sweden should "make use of the possibility to cooperate with other countries", and one further legitimises this because such action in Eastern Europe could also contribute to decrease acidifying pollution from these countries.[433] The reference to the Agreement, i.e. "that *the parties to the Convention* do not see any contradiction..." is also typical for Sweden's mode to legitimise policy, as we will see further below. If the parties to the Convention agree on a certain issue, why would Sweden hold another view?

The embracement of JI was initially quite ambiguous. The Commission for international environmental cooperation preferred general economic measures like CO_2 taxes and emissions permits, but recognised that JI can be important as a first step. The Commission identified a number of problems with JI: (1) it is hard to control actual reductions, which could lead to high management and transaction costs; (2) reductions are not real but estimated which could lead to overestimations from all involved parts. However, the Commission concluded that Sweden ought to be a driving force for JI rules that are based on sound criteria.[434] There is no indication that official standings deviate from this conclusion. Hence, Sweden seemed to perceive the situation like this: Rather than risking that JI could be degraded, Sweden ought to take its responsibility and do all it can to 'save' the JI from being 'nothing but loopholes'. No doubt there was a belief that the 'environmental conscience' (although this would not be used as a self-label) in world politics can and should introduce efficient measures that can be applied in a wide circle of countries.

Policy documents through the whole studied period all follow this pattern. Policy actors emphasised that the project mechanisms are inherent in the binding Kyoto Protocol and should *therefore* be followed. Moreover, policy documents manifest the norm of cost-efficiency, and the perception is that all flexible mechanisms exist in order to facilitate the implementation of the Kyoto Protocol. Under the name of Activities implemented jointly (AIJ) Swe-

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[432] Government Bill 1992/93:179, p. 31. My translation.
[433] Ibid., p. 31f.
[434] SOU 1994:140.

den has been running projects in some East European countries since 1993, in order to be prepared for JI projects when they are allowed to count.[435]

As mentioned above, Sweden's rather peculiar strategy given the embracement of JI became to reach its objective without making use of the flexible mechanisms. This strategy was affirmed by the Parliament, which is noted by MP Gustav Fridolin from the Green Party (MP). In an interpellation he questioned the effectiveness of making use of the flexible mechanisms, including JI and CDM. Given the Parliament decision Fridolin wanted to de-legitimise the government's informal position paper to the EU Committee regarding a Linking Directive[436], where "Sweden is positive to the recognition of JI and CDM credits in the EU emissions trading scheme. The project-based mechanisms are an important element in reaching the climate mitigation targets in a cost-efficient manner", Fridolin quoted the government. However, "[i]f it is cost-efficiency that is the only goal", Fridolin asked rhetorically, "why did the Swedish *riksdag* exclude the mechanisms as a way to fulfil the Swedish goal when we later want to implement them at the EU level?"[437] He also called the flexible mechanisms a "loophole" in the climate mitigation.

Sweden's embracement of the flexible mechanisms should come as no surprise. Probably not to Fridolin either. But there is something in his objection that is worth noting, and which I will return to in a minute. However, his effort to question the established truth was effectively downplayed. Minister for the Environment Lena Sommestad disavowed that the flexible mechanisms were 'loopholes'; in fact they lead to concrete emissions reductions, they contribute to capacity and technique development in target countries, and they are, finally, totally in line with what was agreed in the Kyoto Protocol.[438] The latter returns in almost every statement on the project mechanisms. What has been decided has to be followed, and if Sweden does not accept the project mechanisms it could upset other countries. The Kyoto Protocol is over and over again made use of to legitimise the government's position. As Sommestad rhetorically asked Fridolin's stand-in in the chamber, Ingegerd Saarinen: "If we are to implement the Kyoto Protocol, don't we then have to implement what we jointly have agreed to in the international negotiations?"[439]

Thus, there seem to be different interpretations of what the project mechanisms of the Kyoto Protocol imply for Sweden, although the official position is positive. The critique articulated concerns the environmental effectiveness of the projects, whether they can be regarded as 'loopholes' or not. Interesting to note is that no critique emphasising the unfairness of JI and CDM can be identified (i.e. that target countries are left with the relatively more expensive reduc-

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[435] See SOU 1999:111; Government Bill 2001/02:55; SOU 2002:114.

[436] COM (2003) 403.

[437] Interpellation 2003/04:160. My translation of the quotes of Fridolin (MP).

[438] Riksdagens protokoll 2003/04:54, anf. 82, Lena Sommestad (S).

[439] Ibid., anf. 84, Lena Sommestad (S). My translation.

tions when they in the future will have targets of their own, and that there is a risk for a development towards 'neo-colonialism' due to asymmetrical power relations between industrialised countries and target countries; cf. chapter 4).

However, that may not be the whole truth. Although there are no clear objections based on the above described critique, I reckon there is a key in the Swedish objective in itself. Remember that the Social Democratic government, with support from the Left Party, in its 2001 Government Bill aimed at a minus 4 percent reduction target without accounting for the flexible mechanisms or carbon sinks (the Bill was passed by the Parliament in 2002). As I discussed in the section on Sweden's responsibility above, to an important degree this objective was due to Sweden's urge to be an international role model, which aimed to show the world that a rich country could take climate responsibility, and—importantly—was ready to change its own structures. That way Sweden could be a credible party in international negotiations, and in the longer run affect other countries—both industrialised and developing countries—to also take measures against climate change. This heavy emphasis on National Action thus made it 'impossible' to make use of (or more correctly, account for) the project mechanisms, regardless of the government's principal appraisal of the flexible mechanisms as a cost-efficient measure to reduce GHG emissions.

It is against this background that we should view Fridolin's objection above. He and his Green Party were probably anxious that Sweden should not deviate from being a role model. This interpretation was confirmed by the words of Anders Ygeman (s), Chair of the Parliamentary Committee on Environment and Agriculture: "We are prepared to buy and do some stuff with the flexible mechanisms, but only if we do our share first."[440] He continued by saying that he indeed sees some risks with the project mechanisms, i.e. that Sweden or Swedish companies take "the lowest hanging fruits" in poor countries, which in turn will be left with more expensive measures when they will have quantitative commitments in the future. He also sees the problem of additionality, i.e. that it is very difficult to measure whether the projects actually lead to emissions reductions that would otherwise not have taken place. Nevertheless, he is by and large positive to the project mechanisms:

> But on the other hand, they are up to now probably the best incentives there are for private companies in the West to invest in poor countries. [...] They [Swedish companies] would hardly make environmental investments in a poor country otherwise. So that's positive.[441]

Former Minister for the Environment, Lena Sommestad (s), admits that she was initially sceptical of the project mechanisms, but

[440] Anders Ygeman (S), interview 2008. My translation.
[441] Anders Ygeman (S), interview 2008. My translation.

when the CDM finally started to work, the developing countries got more interested in the Kyoto Protocol, they thought that this was interesting. The sharp-sighted, like South Africa, said that 'well, you will take the low hanging fruits and then when it's our turn we get the difficult parts'. So there were those who saw the problems, but it had a positive effect.[442]

On the other hand she did not see the CDM as the only way to involve the developing countries in climate policy. They could just as well get involved "through special aid programs or technique exchange programs or education performances or whatever." Her urge to look for alternatives was due to anxiety with the CDM "because it implies that the costs for emissions get reduced in our part of the world."[443]

Ygeman was also self-critical and admits that his party (S) has not managed to lead a serious discussion on the mechanisms, because the debate has centred on the question regarding Swedish measures domestically or Swedish measures in other countries. And since Social Democracy has argued along the National Action story-line, but at the same time not rejected the mechanisms, they have not primarily been occupied with the quality of them. But most obviously in Ygeman's understanding,

> we haven't had the need for them. The main reason that you want flexible mechanisms is that they reduce carbon dioxide [emissions] at a fifth or a tenth of the cost. And since we have aimed at reducing our emissions domestically, and have managed that, and we have exceeded the international obligations, we haven't had the need for them.[444]

So within Social Democracy the project mechanisms have not been wholeheartedly embraced, because there is the question of 'taking the lowest hanging fruits', i.e. a question of moral responsibility, and the question of National Action, i.e. that Sweden ought to reach its objective by emissions reductions within domestic society. But the project mechanisms were not rejected *per se*.

Further, Sweden argued that when burdens are to be allocated internationally, emissions per capita should be the guiding line. However, nothing of this was referred to regarding JI projects. Here, cost-efficiency was the guiding norm. This was later re-articulated in the parliamentary based 'FlexMex2' Commission's conclusions as well as by the Social Democratic government in its last climate policy Bill during the studied period.[445] Interestingly, the CDM is constructed as a 'natural' component of the goal of a global fair and sustainable development:

[442] Lena Sommestad (S), interview 2008. My translation.
[443] Lena Sommestad (S), interview 2008. My translation.
[444] Anders Ygeman (S), interview 2008. My translation.
[445] See SOU 2004:62; SOU 2005:10; Government Bill 2005/06:184.

If the climate issue is integrated in the international cooperation for combating poverty and the pursuit of sustainable development, prerequisites for an increased common understanding between industrialised and developing countries in climate policy can be created. Climate consideration ought to be an important part of aid policy as well as of other financial mechanisms for investments in developing countries. The Kyoto Protocol's so called clean developing mechanism, CDM, is one example of such a financial mechanism.[446]

This broader view of the CDM is in line with Sommestad's (who was the responsible Minister for the just quoted Government Bill) statements in my interview with her, as can be seen above. Elisabeth Lidbaum at the Ministry of Enterprise, Energy and Communications indicated that some change of strategy regarding the overall policy on developing countries is about to take place:

Earlier aid and funds have been discussed quite a lot. But such large investments are needed that other resources are also called for. And what we discuss a lot is that you have to get the ordinary market forces, companies and the industry at large to want to invest in these countries. And how can we make that happen? It's more of that focus today. And then you somehow have to make sure that these countries get an investment climate that companies like and want to invest in. And at the same time support investments so that they are 'climate smart'.[447]

Lidbaum underlined that these are just discussions; concrete suggestions how this should be done was yet lacking. But together, this suggests that aid assistance is to be replaced by something else in the near future, and perhaps climate policy has been important in this new way of thinking about developing countries.

The shift of Government in 2006 has slightly marked Swedish climate policy, which is manifested in the Climate Commission report from 2008. In the report's suggestion the Swedish objective for 2020 was to be reached including

the use of mechanisms similar to the current project-based mechanisms provided for the Kyoto Protocol. Sweden should actively seek to expand the scope for using flexible mechanisms of this kind in achieving the 30 per cent reduction, via measures within the EU and measures financed by EU countries outside the EU. For its part, Sweden should make use of the tools provided for within the EU and in international agreements.[448]

The Commission, which reflected the new majority conditions in parliament, was here more positive to the project mechanisms than the former Social Democratic government and the Left Party and the Green Party had been. These

446 Government Bill 2005/06:172, p. 10. My translation.
447 Elisabeth Lidbaum, interview 2008. My translation.
448 SOU 2008:24, p. 45f. The figure 30 percent refers to EU's community-wide objective for 2020 which was placed on probation conditional release in winter 2007.

ideas also survived into the upcoming Government Bill.[449] This policy change has to do with a heavier emphasis on the norm of cost-efficiency, i.e. the Committee and the government saw that an increased use of project mechanisms will make Swedish climate policy considerably more cost-efficient since emissions reductions can be reached at a lower cost.

Former Minister for the Environment Lena Sommestad had mixed emotions regarding this emphasis on cost-efficiency, leading to industrialised countries investing in more emissions reductions in poor countries instead of cutting them domestically:

> Naturally, it is cheaper to make emissions reductions in Africa. This climate policy that has now been pleaded for, the cost-efficient, it can to a certain extent be justified, I think. You *can* think like that. But it means that you do all the simple things first, everything for which we already have technique available. You can do this for ten years without a single new innovation. You do all the simple things first and push all your problems into the future. We can't work like that, with such a problem ahead of us.[450]

This last section has shown that the flexible mechanisms have been debated along the central dividing line in Swedish climate policy; that regarding domestic measures (backed up by the National Action story-line) and investments in emissions reductions in less developed countries (backed up by the Thinking Globally story-line). Cost-efficiency has throughout the years been institutionalised in Swedish climate policy at large, and has strengthened its position over time. Nevertheless, the National Action story-line, although all the time contested, has so far been institutionalised in Swedish climate policy. This story-line is based on a norm of justice, i.e. a rich country like Sweden should show that it is willing to 'do its homework' before demanding climate policy measures from developing countries. But as we have seen in the previous sections, this strategy is also based on the notion that Sweden and Swedish industry has everything to gain from being in the frontline in climate policy, since new Swedish technology can be world leading and thus exported. In the process leading up to a follow-up agreement to the Kyoto Protocol, the Thinking Globally story-line has got a stronger position, which opens up for Sweden using the project mechanisms to reach its future climate policy objectives. My analysis indicates that nothing in the material implies the abandonment of the self-image of Sweden as a developer and exporter of new climate friendly technique.

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[449] Regeringskansliet 2009.
[450] Lena Sommestad (S), interview 2008. My translation.

As international climate policy, Sweden's climate policy has been analysed regarding what climate change 'is', how the question of responsibility has been constructed, and what Sweden finds necessary and possible to do to mitigate climate change. A summary of the analysis is found in table 5.1 below. Each of these aspects of Swedish climate policy has further been analysed in terms of articulated policies, norms, story-lines and discourses. Just as was the case in the previous chapter on international climate policy, what aspect of climate change policy we focus at has consequences for which discourses, story-lines and norms that are salient. This will be clear in the concluding analysis following the table.

Table 5.1. Analysis of Sweden's climate policy. Articulated discourses, story-lines, norms, and policies.

Questions and analytical dimensions	Discourses	Story-lines	Norms	Policies
What 'is' climate change?	Green governmentality	Greenhouse theory Sacrifice vs. **Opportunity**	Global management Sweden should await other countries' actions vs. **Sweden should take the lead**	Not applicable
Responsibilities	Civic environmentalism Ecological modernisation	Ecological justice **Opportunity** vs. Sacrifice Win- Win situation **National Action** vs. Thinking Globally	Justice Economic growth Modernisation of society Sweden should await other countries' actions vs. **Sweden should take the lead**	1990–2008/2012: **Minus 4 percent domestic reduction target, without accounting for the flexible mechanisms** vs. Follow the plus 4 percent target according the EU burden sharing agreement
What needs to be done?	Ecological modernisation Administrative rationalism	Thinking Globally vs. **National Action** A mission for the whole society Opportunity Win–Win situation	Cost-efficiency Flexibility Planning Rationality	Facilitate the introduction of renewable energy sources More efficient use of energy (technical development) Providing appropriate incentives (e.g. taxes, subsidies) Ambition to involve the whole society Investment programmes (LIP, Klimp)

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

In the previous chapter we saw that the discourses of liberal environmentalism and green governmentality together with civic environmentalism are institutionalised in international climate policy. Now, let's compare that to the analysis of Swedish climate policy. I begin by discussing the analysis of the 'is'– 'ought'–'do' of climate policy in Sweden.

First, the analysis showed that the Swedish polity whole-heartedly embraced the greenhouse theory, and correspondingly called for global scientific monitoring and global action against human induced climate change. This is safe to conclude let alone that some actors in the early 2000's questioned the robustness of the greenhouse theory. Thus the discourse of green governmentality was effectively reproduced. The questioning of the greenhouse theory has also to do with the construction of climate policy as a sacrifice, although you did not have to be sceptical regarding the human impact on the global climate to construct climate policy as a sacrifice. Rather, the Sacrifice story-line has been an important part of Swedish climate discourse, just as I believe it still is in a global perspective. What is interesting, though, is that another story-line, which constructed climate policy as an opportunity, has been articulated from the early days of climate policy, and this Opportunity story-line has no doubt gained influence over time. I argue that it even characterised Swedish climate discourse in the early 2000's. I will come back to this below.

Second, Sweden's interpretation of its own responsibility is interesting given what we knew from the start: Sweden undertook a tougher burden than obliged to, and is most likely to over-implement it with a vengeance. Let's first establish that Sweden no doubt constructs climate change as a global problem, in line with the Thinking Globally story-line. Sweden thus realises that, being a small country, it cannot solve the problem by itself. Climate change can only be managed if all countries take responsibility and help contribute to the stabilisation of GHG's in the atmosphere. The point with Sweden's strategy, in the eyes of policy actors, was by and large to be a role-model. That is, Sweden wanted to show especially industrialised countries that it is possible to cut GHG emissions without having to compromise economic growth.

> Sweden can already today show that it is possible to break the connection between economic growth and greenhouse gas emissions, and has furthermore among the lowest emissions in the group of industrialised countries, counted as per capita or as per GDP unit. Within the EU, Swedish emissions are the lowest of all.[451]

This strategy was on the other hand seen as legitimising in the eyes of less developed and poorer countries; they could see that a rich country actually was serious about taking action against climate change. By demonstrating that the

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[451] Government Bill 2005/06:172, p. 79. My translation.

reduction of GHG emissions did not have to imply lower economic growth and that an industrialised and rich country was ready to take the lead, Sweden thus wanted to engage other countries—both industrialised and developing—in the global efforts to mitigate climate change. In other words, Sweden's strategy was in this respect more long-term than merely having the Kyoto Protocol's commitment period in mind.

Sweden's willingness to be a role-model was also connected to the construction of climate change as an *opportunity*. If committing to the reduction of GHG emissions was basically not about sacrifices, but instead implied opportunities for the Swedish economy, then being among the first countries to restructure its climate relevant structures should instead be viewed as a potential advantage. This analysis of the situation ought to mean that Sweden certainly leaned on the Win-Win story-line, i.e., the key in contemporary influential environmental discourses of ecological modernisation and liberal environmentalism. This can be seen both regarding the internal process of convincing significant policy actors that Sweden should 'go ahead', and when Sweden tried to convince other (industrialised) countries that this was the right thing to do.

When turning to developing countries I argue that Sweden used other ways to legitimise its behaviour. Although acknowledging that, in the long run, developing countries also need to be engaged in the mitigation of climate change, Sweden constructed the problem as one concerning the issue of justice, thus reproducing the Ecological Justice story-line. According to this it is most sound to view GHG emissions in per capita terms, and that the only just solution in the long run is if per capita emissions converge at a level that is globally sustainable. Moreover, underlying this analysis is the acknowledgement that industrialised countries have at least partly been able to develop at the expense of the global South, something which is inherently unjust. Hence, Sweden also leaned on elements from the discourse of civic environmentalism. This was manifested in Sweden's reiteration of the National Action story-line, which meant that Sweden was to reach its Kyoto commitments domestically without accounting for the flexible mechanisms or carbon sinks. This has been de-emphasised by the current centre-right government when discussing future climate policy. However, we should not forget the words of Social Democratic MP Ingemar Josefsson in the 2002 parliamentary debate on Sweden's climate objectives: "There is no point in the longer perspective to have higher ambitions than other countries."[452] Not only the centre-right parties have been sceptical regarding the advantages of Sweden reaching for too ambitious domestic targets, but it has been latent also within Social Democracy.

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[452] See the section on Sweden's responsibility and Riksdagens protokoll 2001/02:77, anf. 138, Ingemar Josefsson (S). My translation.

My conclusion is that Sweden's construction of its climate responsibility consists of a *combination* of the Ecological Justice and the Opportunity story-lines. This combination is what characterises and makes Sweden's theoretically unexpected climate policy objectives possible. Sweden admits its moral responsibility as a rich country that has contributed asymmetrically to climate change, and this implies that Sweden should 'go ahead'. However, the construction of national responsibility also leans on the Opportunity story-line, which means that Sweden could actually benefit from being a forerunner in climate policy. Developing and exporting new techniques and energy sources can be economically advantageous to Sweden. Important here is that one is aware of Sweden's beneficial circumstances, in that Sweden is rich on natural resources. We thus see the intertwining of ideational and material factors here. Material factors and interests alone could not explain Sweden's behaviour, but rather the combination of ideational and material factors. Natural resources such as large forests with potential for bio-energy, many lakes and rivers with potential for hydro power, and large unexploited areas and long coast with potential for wind power are not in themselves determining for Swedish behaviour in climate politics. What is more, it is only through the analysis of the discursive interpretation of the material factors that Sweden's behaviour can be explained; as simple 'facts' they would make little sense, because they do not determine the policy outcome. Natural resources, knowledge, technological skills etc., have to be interpreted discursively to be 'opportunities' in the context of global climate change.

Third, we have seen that Sweden thinks it should contribute to mitigating climate change by reducing the country's domestic GHG emissions by 4 percent from 1990 until 2008–2012. Any involvement in the flexible mechanisms, which has indeed taken place, should not be accounted for in order to reach the national objective. My overall conclusion, which will be clearer below, is that climate policy in the Swedish polity is constructed as a technical issue that with proper measures can be solved in a cost-efficient manner. Important in the proper and rational way to manage climate change is to coordinate measures internationally, not least within the EU.

Typical features in the strategy have been to aim at providing societal actors with appropriate incentives in the form of e.g. carbon taxes or subsidising renewal energy sources. By and large, the strategy has included a focus on renewable energy sources, be it wind power or bio-fuels etc. On the other hand, to economise with energy has also been held up as a virtue. Policy actors have admitted that conditions are comparatively good for developing renewable energy sources in Sweden, apart from the fact that the country is relatively rich. Further, emphasis has been put on involving the whole Swedish society, i.e. public authorities, organisations, the industry, as well as citizens. The LIP and Klimp programmes, providing monetary support for infrastructure investments at the municipal level, conditioned on involvement by the private sector, was a special feature in Swedish climate policy.

Underlying such instruments, which indeed encourages cooperative efforts, is the assumption that everybody has something to gain from taking action; it constitutes a Win-Win situation. It was also based on a belief that society (or the state) is able to rationally plan 'away' the problem. Climate policy has thus to a large extent been made into a 'rational' issue of creating 'the good society'. The concern for these issues certainly builds on valuing the environment but when it comes to *how* to manage climate change there has been a peculiar lack of discussions of the values underpinning policies, e.g. regarding distribution effects[453] or the principles behind the flexible mechanisms (see below).

However, it should be noted that the LIP and Klimp programmes have been terminated mainly because they did not live up to the standards of the norm of cost-efficiency. This is a norm that has been strong over the years, and it seems reasonable to say that it has gained in prominence.

This became even more pronounced regarding the part of climate policy that concerns the Kyoto Protocol's flexible mechanisms. We saw that the norms of justice and cost-efficiency were at the centre of the debate in international climate discourse. In a somewhat peculiar way this has been reflected in Swedish climate discourse. In the Swedish polity 'justice' together with 'cost-efficiency' function as 'nodal points', whose meanings are contested (justice more than cost-efficiency). The government has argued that justice means that the flexible mechanisms should be used because they contribute to a truly global just and sustainable development. In fact, the flexible mechanisms imply solidarity with poor countries, not the opposite, as some critics would argue. "Environmental friendly and energy efficient Swedish technology can by these means get further diffused and strengthen developing countries in the international climate cooperation."[454] From such logic the critique of the Protocol's flexible mechanisms is irrelevant; if anything, adopting the flexible mechanisms constitutes the illustrious Win-Win situation.

I argue that we have an interesting paradox in Swedish climate policy here. It has repeatedly been emphasised that policy measures ought to significantly contribute to the reduction of GHG emissions. This can (analytically) be linked to the Thinking Globally story-line (i.e., "from a climate perspective it does not matter where on the Globe GHG's are emitted or where emissions are reduced") and to the norms of flexibility and cost-efficiency. Measures taken should thus be as cost-efficient as possible. In turn, this opens up for measures taken outside Sweden (flexibility). In that way one gets the most value out of every spent amount of money.

[453] One of very few exceptions to the lack of discussions of distribution effects of environmental policy measures is an appendix to SOU 2003:2 (appendix 11). There, four from the government free-standing academics point out that especially economic policy measures have the effect that low income households and people living in rural areas are relatively more affected than other groups in Swedish society.
[454] Regeringskansliet 2007. My translation.

As we saw in chapter 4, there are other ways to perceive the question of measures taken in other countries. Given Sweden's tendency—in many policy fields—to cling to an international solidarity narrative it would not have been surprising if Sweden were sceptical to the flexible mechanisms. This would also have been in line with much of the existing critique of them, which was also based on justice arguments—but here the flexible mechanisms were argued to cement unjust relationships between rich and poor countries. Sweden could have joined this lamentation while adhering to its identity as a 'world conscience', i.e. the identity that makes possible for Sweden to cling to the Ecological Justice story-line when constructing its responsibility. However, articulations that would question the use of flexible mechanisms were effectively framed out in Sweden.

But at the same time the National Action story-line is no doubt institutionalised in the Swedish polity. At least Social Democratic governments have throughout the years argued that Sweden has to be a role-model in the international work for mitigating climate change, and hence, reducing more GHG emissions *domestically* than accorded by international treaties. Moreover, even though the flexible mechanisms were not dismissed *per se*, the Swedish target was to be reached without accounting for emissions reductions in other countries financed by Sweden. Concerning 'post-Kyoto' climate policy, this policy has been abandoned; to reach the 2020 objective (minus 40 percent) Sweden is to account for one third of the reductions through investments in other countries.

One of the aims of this study is to analyse how international agreements like the Kyoto Protocol are interpreted in the domestic policy process. What does the Kyoto Protocol actually demand from its signatories? In legal terms, it demands that some countries should reduce their GHG emissions with x percent. It does not say *how* this should be done; suggestions are laid out, as well as rules for what can be counted, how it is to be reported etc., but not which policy measures each country should pick. Then it is interesting to note how important they may be for state behaviour. The aim of international environmental agreements is often to mitigate or eliminate a perceived problem. Policy prescriptions are seldom laid out explicitly. Nevertheless, the agreements may have normative and/or strategic effects for a country. Despite that the Kyoto Protocol does not point out any specific policies (domestically or abroad), policy makers at the state level quite often refer to 'what was agreed on in the Kyoto Protocol' when trying to legitimize specific policies domestically. For example, despite the flexible mechanisms' controversial character and that they are not mandatory, they are referred to as a 'help' for reaching targets, and as part of the solution spelled the Kyoto Protocol. The latter seems to function as legitimizing in itself. Although not forced to, Sweden obediently accepts the flexible mechanisms as efficient policy tools. The flexible mechanisms are quite new measures in international environmental policy and imply the intertwining of states' policy measures (for good or for bad, depending on

from what discursive position you look at them). We have probably only seen the beginning of this.

Thus, parts of the solutions outlined in the Kyoto Protocol could theoretically have been discursively debated (more than they have been so far) in the Swedish polity. The traditional occupation with international solidarity could have meant something else than expressing the need to solve the urging global climate problem in the way that the developing countries can be helped by technical development in the West. If not made clear enough earlier; Sweden certainly underlines the concern for developing countries. But what is interesting to note is that the flexible mechanisms in the Swedish discourse on climate change easily get the status of being in line with the notion of a 'truly global just and sustainable development'. And this happened despite international criticism coming by and large from the 'South', which a couple of decades ago probably would have granted Sweden's support.[455]

Why, then, is this story told and not another? As I have already hinted it might not be that unexpected given the relevant social structure in the Swedish polity. Sweden early on introduced economic measures such as environmental taxes domestically. The motivation for these measures was that they were considered cost-efficient. Although the flexible mechanisms are promoted as cost-efficient policy measures, they can be discussed from other discursive perspectives. This is practically not done in the Swedish polity. However, it may be that the early introduction of economic measures in environmental policy explains why the flexible mechanisms are in the end embraced.[456] Add to this the Swedish willingness to be 'the best pupil in class' which is manifested in references to 'what has been agreed to' internationally. This seems to be legitimising in itself.

The discourse of liberal environmentalism, which was institutionalised internationally, does not seem to be that salient domestically. My guess is that it to a large extent equals ecological modernisation minus the (modern welfare) state and all that it stands for. Thus, when the part of international climate policy that was flavoured by liberal environmentalism 'goes domestically', it takes the guise of ecological modernisation. Given at least parts of what constitutes ecological modernisation, it might not be that strange that this fits Sweden and its social structure quite well. Core elements in this discourse are negotiations and cooperation between the state and private interests, and thus the integration of environmental consideration into sector activities. This is very much in line with Swedish environmental policy tradition. In this tradi-

[455] Cf. Bjereld 2007; Brommesson 2007.
[456] At a seminar in April 2009 Sweden's Chief Negotiator in climate politics Anders Turesson from the Ministry of the Environment witnessed that Sweden's launching of a CO_2 tax in 1991 lead to investments in biomass, an effect which was quite unforeseen (Chalmers, 16 April 2009.).

tion, as well as in the discourse of ecological modernisation, there is a belief in the rational, albeit not necessarily all-effectuating state.

Since this concerns an environmental problem, and Sweden has a relatively strong and broad environmental public opinion, which is part of the constitution of the social structure, it is easy to refer to the environmental effectiveness when addressing the nature loving Swedes. Further, there is the important aspect of climate change as a window of opportunity. Export of 'clean' Swedish technology adds to the self-image of the 'world role model' showing the way to the sustainable society. 'True' or not is less important here; rather what is of importance is how it affects expectations and whether the choices made can be legitimised.

6. Emulating the state while considering local circumstances

We can conclude from the previous chapter that central to the Swedish climate change discourse is that GHG emissions need to be cut globally (and firstly by industrialised countries) and that the basic approach to this is to introduce renewable energy and phasing out fossil fuels. This is by and large a strategy focusing on technical solutions. To some extent behavioural aspects are also emphasised, i.e., energy saving is considered desirable. However, no-one seems to really believe that behavioural changes will do the whole job alone. Thus, limiting GHG emissions from the transport, energy, industry sectors and so on, should be done primarily through the conversion to non-fossil energies (which then need to be stimulated) and/or utilising waste energy, e.g. in the form of district heating. To some extent are behavioural aspects implied for this (it won't just happen), but the major impression of Swedish climate change policy is that it is based on the notion of rational socio-technical planning.

The question is if sub-national political-administrative entities are on the boat. Does everyone speak the same language? Are regional and local institutions prepared to 'volunteer' where state policies demand it or leave the field open for local initiatives? In a review of research on Swedish municipal handlings of environmental issues, and sustainable development in particular, Forsberg concludes that Swedish municipalities have largely varying ambitions in environmental policy, and sustainability is a concept that has many different interpretations at the local level. The most ambitious municipalities have policy documents that are quite critical to the prevailing social order and sketch a future where people need to consume *less*, but this quite radical view does not survive into concrete measures. Instead, such ideas collide with other important interests, above all the importance of economic growth for policy actors, which e.g. can be materialised in investments in car dependent infrastructure and the establishment of shopping malls outside of city centres. This implies an ideological tension that is seldom debated or acknowledged, Forsberg argues.[457] One can also argue that in these cases there is a discursive clash between elements of green radicalism and, to the extent that the promotion of economic growth can be said to be part of an environmental discourse, ecological modernisation. Thus, when it comes to concrete policy measures it

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[457] Forsberg 2007.

seems that the growth discourse trumps the green radical when it really counts. The latter is also far less structured in the Swedish political society.

Another study suggests that pro-social organisational norms find several institutional obstacles, such as available resources, the kind of professional affiliation, and conflicting objectives within the organisation (probably illustrating discursive tension) which prevent cooperative behaviour. At the same time local decision-makers interviewed in the study seem to admit that climate change implies a common dilemma, and thus that the own organisation has a moral responsibility to handle this dilemma.[458]

We can also contemplate the role of The Swedish Association of Local Authorities and Regions (SALAR).[459] SALAR is an important Swedish consultative body and opinion-maker when it comes to issues relating to municipalities and regional councils (which are elected by popular vote). Being an interest organisation it has commented the government's climate policy and taken own initiatives in so called position papers. SALAR has repeatedly emphasised that Swedish municipalities and regional councils are ready to take climate responsibility and that they indeed have an important role to play in climate policy. Not least is this local level rhetorically viewed as an important platform for bottom-up political processes in that it makes possible both dialogue with citizens and citizen engagement. However, SALAR has been critical of what it views as a lack of financial and administrative support by the government vis-à-vis municipalities, and wants to see an increased involvement of municipalities in the political process to get their points of view across. Apart from this SALAR by and large reproduces many elements from the national climate discourse, such as the acknowledgment of the importance of public authorities' cooperation with business life and research institutions, and the general emphasis on economic growth, which should not be compromised by environmental or climate considerations. If climate policy measures should be implemented they have to be in line with the Win-Win story-line. Following logically from this was the articulated fear that if Sweden would implement unilateral measures—i.e., be too much of a forerunner—this would seriously harm Swedish competitiveness. Thus, climate change policy is here not unreservedly a 'window of opportunity'.[460]

From such findings it seems clear that the sub-national level in Sweden is concerned with environmental and climate issues. At the same time, this concern is somehow conditioned on the fitness with a growth discourse. I would thus expect a similar pattern in this chapter's analysis. I thus argue that the above findings imply that there are various and conflicting ways to understand

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[458] von Borgstede, Zannakis & Lundqvist 2007.

[459] The Swedish Association of Local Authorities and Regions = Sveriges Kommuner och Landsting (SKL).

[460] E.g. SALAR 2005; SALAR 2006; SALAR 2007a; SALAR 2007b; SALAR 2007c; SALAR 2008a; SALAR 2008b.

the world which are at a more fundamental level of analysis than 'simply' be-ing about conflict of interests. As should be clear by now, there is nothing 'natural' about what is viewed as an interest. Rather, I assume that powerful (and not so powerful) discourses, containing ideas, norms and practices etc., constituting social structures, help to guide policy actors in their everyday ac-tions. Hence, interests are constructed through the reproduction and reforma-tion of these discourses rather than being logical consequences of objective facts that, once known to the analyst, can be extrapolated from these facts.[461] This guidance does not mean that each individual is guided by his or her dis-course, i.e., *one* discourse, but rather that individuals are part of the reproduc-tion and reformation of various discourses all the time, both consciously and unconsciously. With such an analytical perspective we get a better understand-ing of colliding interests and how they are given meaning, as well as what these conflicts represent socially and politically. This is what I aim to further investigate, and in this chapter I focus on the sub-national level.

As described in chapter 2 the study analyses public institutions in the Västra Götaland Region and the municipalities Gothenburg, Stenungsund and Borås. I start with the regional level, consisting of both the state's regional arm, the County Board, and the publicly elected Regional Council. Regarding the social structure of these polities it is hard to disentangle from the national social structure. However, I discuss as much as possible the history and 'spe-cial circumstances' of the sub-national polities analysed in this chapter.

SUB-NATIONAL LEVEL I: THE VÄSTRA GÖTALAND REGION

The Västra Götaland Region (VGR) was launched on 1 January 1998 through a unification of three counties in the southwest of Sweden. The region was launched on trial, but is now established and will together with *Region Skåne* probably be a role-model for the expected reorganisation of Swedish regional administration.[462] The VGR has 49 municipalities and about 1.5 million inhab-itants and is thus the second largest region in Sweden (in terms of inhabitants; 18 percent of Sweden's inhabitants in about 6 percent of its area). Being lo-cated on the west coast it is to a relatively large extent exposed to some of the risks following global warming, heavy rainfall and hurricanes, according to the consensual scientific discourse on climate change and not least the Swedish Commission on Climate and Vulnerability.[463]

This section is divided into two analyses; first I analyse the County Board's [*Länsstyrelsen*] climate change policies, which has its mandate from 'above',

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[461] Of course, interests *may* be extrapolated that way and be reasonable with the cards on the table, but *not necessarily* so.
[462] SOU 2007:10.
[463] SOU 2007:60.

the state. Then I analyse the Regional Council's [*Regionstyrelsen*] policies, which has its mandate from 'below', the citizens of the VGR (see chapter 2).

The State in the region: the Västra Götaland County Board

State policies have implications for municipalities. However, in between the government and municipalities, we find the state's prolonged arm in the regions, the County Boards. The County Board is a state administration and has a mission to interpret the government's climate policy goals and adapt them to regional and local circumstances.

Interpretation of climate change and the County Board's responsibility

When the government launched its first comprehensive climate strategy in 2002, the question for the County Boards became to translate this into regional policies. The Västra Götaland County Board (VGCB) pretty much followed the government's line of reasoning—which is also the established 'truth'—when it comes to its interpretation of what the problem of climate change consists of. Before suggesting any policy measures the Board made sure to explain the science of global climate change (which legitimises the endeavours to manage the problem), and its probable consequences. Thus, it is acknowledged that climate change is *human induced*, and accordingly it is only humans who can potentially do anything about it. The guiding norm here is evidently that the concentration of greenhouse gases ought to be *stabilised* at a level that prevents dangerous anthropogenic interference with the climate.

Quite interestingly, the issue of responsibility was not touched upon here; neither that Sweden nor Västra Götaland ought to contribute to solving the problem—other than implicitly, as we saw above. Instead, it seems that it was perceived as *self-evident* that Sweden and Västra Götaland should do what they can to manage climate change.[464] This pattern was reconfirmed in the revaluation of the County climate targets five years later. It was then also emphasised that "everyone" ("private companies, municipalities, public authorities, organisations, and even individuals") has a responsibility for reaching the Swedish environmental objectives, including the climate objective.[465]

However, how the national objectives from 2002 should be regionally translated was not self-evident for Västra Götaland. Inge Löfgren, who was Environmental Superintendent at the time, argued that there was inadequate information from the government and SEPA concerning what should happen with the national objectives regionally. Initially, there were various views regarding the idea of scaling down the national objective within the County Board ad-

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[464] Länsstyrelsen Västra Götalands län 2003: 18-20.
[465] Länsstyrelsen Västra Götalands län 2008a: 4. Cf. Länsstyrelsen Västra Götalands län 2008b.

ministration.[466] The final solution, however, was to simply use the national objective to reduce GHG emissions by 4 percent.[467] Still, some of the concerned parties considered this implausible since the region has the country's largest refinery industry, which emits a lot of GHG's and contributes to the County's difficulties in reaching its targets (see further in the next section). If regions have different preconditions, they should not have the same quantitative goals, critics remarked. For example, the *Swedish Environmental Research Institute* [IVL Svenska Miljöinstitutet] argued that the guiding principle of Swedish environmental policy should be cost-efficiency, rather than automatically scaling down the national targets. The municipality of Stenungsund (which will be analysed later in this chapter) together with the city of Trollhättan and *Agenda Enviro* (an environmental consultant) suggested that the County's target should exclude special sources like the petrochemical industry in Stenungsund. The latter kind of sources should instead be included in the national target, and thus not completely be accounted to Västra Götaland. Stenungsund also remarked that if Västra Götaland is not able to reduce its emissions, other parts of the country have to reduce their emissions even more, if the national target is not to be compromised.[468] Underlying these arguments seems to be a view of the petrochemical industry as a national concern, and not a specific Västra Götaland interest. The VGCB's view, however, was that it would be unfair if other regions had to compensate this by taking a larger burden than the national minus 4 percent objective , and added that there would be a risk that other regions with heavy industry followed Västra Götaland's argumentation, thus definitely jeopardising the chances of reaching the national target.[469] Thus, in the obvious tension between the National Action and the Thinking Globally story-lines, the VGCB nevertheless leaned on the former.

Interestingly, both sides emphasised the norm of justice, but reached different conclusions. On the one hand, the ones who are directly dependent on the heavy industry's room of manoeuvre, argued that this activity was in the public's interest, and that one should not be 'punished' for being severely dependent on GHG intensive activities. On the other hand, the VGCB defended the idea that all parties within the nation should contribute to the national goal, implicitly arguing that high levels of emissions were not more justified to be continued than were lower levels (that was emitted in other counties, less dependent on heavy industry). Underlying this argument is the idea that all activities ought to contribute to the (inter-)national goal; already high levels of emissions cannot be regarded as more difficult to reduce than lower levels, and

[466] Inge Löfgren, interview 2002.
[467] Länsstyrelsen Västra Götalands län 2003: 21.
[468] Länsstyrelsen Västra Götalands län 2002.
[469] Länsstyrelsen Västra Götalands län 2003: 22.

such activities can thus not be excused from taking measures.[470] Important to note is also the County Board's concern for a massive defection strategy by other counties that are heavily GHG dependent, if the Västra Götaland County were to choose this path. In the revaluation of the objectives in 2008 the minus 4 percent objective remained without further problematization—apart from the establishment of the fact that the Västra Götaland County, quite contrary to Sweden as a nation, until 2005 had increased its GHG emissions since 1990, and would thus have difficulties reaching the objective.[471] However, this was acknowledged despite the fact that there are no comprehensive figures on the quantity of GHG's emitted within the County. What counts are emissions in Sweden as a nation, and emissions in the County are mere estimations.[472]

The debate on the VGCB's climate target illustrates the possible (local) dispute regarding what scale should be the appropriate when assessing measures, which in turn is a manifestation of what discourses that are drawn on. The empirical pattern is structured along the following lines: on the one hand we have the articulation that the problem needs to be managed by all (local) actors (in line with the National Action story-line); on the other hand it can be argued to be a global issue that needs to be handled cost-efficiently, thus opening up for reductions taking place *somewhere else* while emissions can continue *here* (echoing the Thinking Globally story-line). We also find the principled emphasis on the norm of cost-efficiency, in this case articulated by the IVL.[473] The latter no doubt follows a Thinking Globally story-line, to be contrasted with VGCB's National Action approach. Note, however, that besides the IVL reasoning, the arguments in favour of diverse obligations among Swedish counties does not necessarily draw on the norm of cost-efficiency, since it is at least arguable whether excusing the heavy industry from taking harsh measures is the most cost-efficient solution. Rather, arguing in favour of divergent obligations can just as well be related to the protection of the region's economic interests, as it seems to be here, though there are attempts to construct it as a national interest, and therefore legitimate. No matter if clinging to the National Action or the Thinking Globally story-line actors drew on the norm of justice. From both perspectives it was claimed that their proposed solution (a minus 4 percent objective or another, less ambitious objective) was inherently

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[470] In fact, if one were to follow one important ingredient of the internationally institutionalised climate change discourse, it would be regarded as more cost-efficient—i.e. better—to cut down emissions where they are cheapest, i.e., from an already relatively high level. From this perspective it is more difficult (expensive) to reduce already low emissions. However, as we saw in chapter 4, international climate change discourse is rather ambiguous in this regard. The norm of cost-efficiency does not fully trump the norm of a just distribution of responsibility between countries.

[471] Länsstyrelsen Västra Götalands län 2008a.

[472] Rolf Hammarling, interview 2008.

[473] Note that IVL was only one of the heard concerned parties, they do not formally have a say in the policy process.

just and thus legitimate. Accordingly, the National Action and the Thinking Globally story-lines influence the interpretation of the norm of justice.

What needs to be done?

The transport sector, summing up to more than one third of the region's GHG emissions, is depicted as the hardest nut to crack, just as it is nationally. Moreover, tackling the transport sector is understood to contribute to several of Sweden's environmental objectives.[474] The other major sources, industry and heating, are considered easier to manage, basically because so much energy is wasted and can thus be saved primarily through technical solutions.[475] However, while the transport problem is a general pattern, Västra Götaland stands out in that the petrochemical industry has increased its emissions markedly. This means that the County—contrary to Sweden as a whole—has increased its GHG emissions since 1990 rather than decreased them.[476] What is more, the demand on fuels is expected to increase in the near future, which in turn implies increased GHG emissions in the County. As late as in spring 2008 the County Board had no idea or strategy to manage this problem. It *was* acknowledged as a problem, but a problem that could not be avoided, is the impression I get from how the County Board describes this.[477]

When it comes to specific measures, the County Board only presents recommendations of what municipalities, public authorities, private enterprises, the publicly elected Regional Council, and other actors of importance can do to reduce GHG emissions. Unlike the state policy, regional and local policies seem to be less about stimulating alternative energy types than about saving energy through technical and behavioural improvements (both after appropriate stimuli). Regardless of what sector we have in mind, the general approach is rational social planning of transports and the use of energy, and through the involvement of 'all' actors in society. Thus, through smart planning more efficient solutions can be found in housing, industry, transports and the energy sector at large. Planning of where and how people live, and the services that are available is also believed to create opportunities for reduced car use. To some extent renewable energy sources should be promoted, but the major way to go through with this is indirectly, since there are very limited resources for investing in research at this political-administrative level.[478]

[474] Länsstyrelsen Västra Götalands län 2003: 20f.
[475] Ibid; Länsstyrelsen Västra Götalands län 2008b; Rolf Hammarling, interview 2008.
[476] However, note that this is just an estimation; there are no measures of the County's GHG emissions (cf. the previous section).
[477] Länsstyrelsen Västra Götalands län 2008b: 4.
[478] Länsstyrelsen Västra Götalands län 2003: 22-25; Länsstyrelsen Västra Götalands län 2008b: 3-10.

The consequences of 'rational social planning' as the most important solution to climate change is that less emphasis is put on market mechanisms than is done internationally and nationally. That may not be that peculiar given that the flexible mechanisms do not directly affect the local day-to-day activities. The County Board neither has available system-wide instruments such as creating laws and introducing environmental taxes. One of the most important tasks for both the County Board administration and the municipalities is supervision, i.e. to control that actors follow laws and regulations. One may even say that the County Boards, as the state's prolonged arms in the country, exist in order to control that state policies are properly implemented, and to stand for regional social planning. Characterising the County Board's work with this is deliberation; in almost every single decision the County Board has to reach a comprehensive view, through deliberation and weighing interests against each other. This includes deciding what interest(s) should be considered most important.[479] With this in mind, together with Sweden's traditional self-image as a rational environmental manager, the policies and strategies chosen are not that peculiar. Albeit one realises that the climate targets will be very difficult to reach, the solutions are all the same impregnated by the implicit belief that the good, rational society will deal with this. If all put an effort to it, we may not be too far from succeeding.

The County Board's relatively long tradition of working within this field does not mean there are no frictions. Instead, one superintendent at the Environmental Protection unit explained that within the County Board there are different units and staff within the same unit that do not always have the same goals regarding climate change issues:

> I have a feeling that sometimes, when a large actor presents a wish to use 15.000 cubic metres of oil, one accepts it too easily. [...] We do not pull in the same direction, even though the legislation is clear. For example, in the Environmental Code, already in chapter 1 and 2, it is prescribed that you should economise with energy. [...] And this is followed up by a special paragraph; regarding energy, in the first place you should utilise renewable energy sources. [...] And we try to use this [paragraph] as much as possible. But that message does not come through everywhere, so to speak.[480]

Various paths in the interpretation of praxis, like manifested here, may not come as a surprise to students of organisations. Nevertheless, it is interesting because it concerns a public institution which makes a big issue of making its decisions based on a comprehensive view, and would like to think of the organisation's staff as generally working in a like-minded fashion.[481] I interpret this as a tension between the 'legalism' of the County Board and its mission to

[479] Cf. Rolf Hammarling, interview 2008.
[480] Inge Löfgren, interview 2002. My translation.
[481] Cf. Rolf Hammarling, interview 2008.

weigh important societal interests against each others, a tension which may not all the time be satisfactory solved.

However, the solution may lie in playing down the legalism bent of the Board. As in other environmental issue areas, the management of climate change recognises the importance of involving private actors in this mission. Emphasis is thus more put on involving the industry in the common work towards limiting GHG emission than it is on controlling it. Communication and dialogue hence become key words in this policy. The regional public institutions (i.e., both the County Board, and as we shall soon see, the Regional Council) more and more see as their mission to invite to dialogues, providing the platforms for communication etc.[482] Together one will find solutions that are accepted by all affected parties. Underlying this reasoning is the perception that all major actors have the same goal, to contribute to the common good, i.e., limiting the human influence on the climate. In addition to inviting the industry to dialogues and cooperation projects, however, the County Board has directed information to companies on how they can contribute to Sweden's environmental goals, not least 'limited influence on the climate'.[483] This booklet both emphasises the urgent character of (especially) global climate change, and what each company can do to reduce its impact on the environment. Notably, the message is that saving the environment equals economic earnings.

Despite this tendency to invite the industry to dialogue I would be cautious to conclude that the County Board clings to the discourse of ecological modernisation. The focus on rational planning and supervision by law is too salient to make such a conclusion. Rather, the County Board is probably the public authority studied that most obviously reproduce the discourse of administrative rationalism. The 'impulsive' urge to include the whole of society in the mitigation of climate change could be seen as 'spices' typical of corporatist and Social Democracy stained public Sweden. At the end of the day, the County Board's job is to devote itself to supervision and rational planning. Although no such words were used in the analysed material, I argue that the County Board clings to the story-line of The Administrative Mind.

Regional self-governance: the Västra Götaland Regional Council

Unlike the County Board, who has its mandate from 'above' (the national government) the Västra Götaland Regional Council (VGRC) has its mandate from 'below' through regionally elected politicians who formally decide the Council's actions. Traditionally, the County Councils have not dealt with environmental policy. With the launching of the two Regional Councils on trial since 1998 (the other one is *Region Skåne* in the south), this regional institution has

[482] This seems to be a general development for supervisory authorities, see Johansson 2006.
[483] E.g. Länsstyrelsen Västra Götalands län 2004.

taken over some of the responsibility for environmental issues from the County Board.

Interpretation of climate change and the regional Council's responsibility

The VGRC does not formally have a climate policy objective, because it has no mandate to decide on this issue. Implicitly, the consensual scientific view on climate change is cherished, and also that VGRC ought to do what it can to contribute to managing climate change. The national climate objective is thus also taken for granted. This should be viewed as a 'silent consensus'; if the VGRC would have objected to the consensual scientific view of climate change and the greenhouse thesis I think we would have seen that in the material. Alternatively, the VGRC would not be concerned with climate change at all.

The Head of the Environmental Secretariat, Peter Holmberg, confirmed that "there is no doubt" that climate change is considered an important problem among politicians and other major actors in the region when I interviewed him. He also said that politicians in the region were not that interested in formulating political goals on this issue, but preferred to go ahead with implementing concrete measures.[484]

Regarding the questions of what climate change 'is' and what responsibility VGRC has, VGRC thus comes close to the County Board's view, to the extent that the VGRC has thought about these issues. The rest of the analysis will thus focus on how VGRC interprets what needs to be done in the region.

What needs to be done?

Interestingly, environmental policy in the VGRC lies under the all-encompassing goal of 'growth and development', which it took over from the County Board when the Regional Council was launched in 1998.[485] In turn, this goal should be based on sustainable growth. My interpretation of the Regional Council's policy regarding climate change issues is that economic growth is the goal with the highest priority. However, VGRC is convinced that economic growth goes hand in hand with environmentally sound solutions. The Win-Win story-line is thus manifested in the policy measures that are preferred by the Regional Council and its environmental unit.[486]

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484 Peter Holmberg, interview 2002. As indicated above, the Regional Council is not mandated to formulate objectives for the County/Region. This is an issue for the County Board, as we saw in the previous section. However, the VGRC's Environmental Board was critical of the County Board's proposal for environmental objectives because these were regarded as too vague regarding who should do what and how. See Miljönämnden Västra Götalandsregionen 2007-09-04, § 40.
485 At that time called 'regional development'.
486 www.vgr.se, accessed 25 September 2008.

Strikingly in the VGRC's self-image is the acknowledgement that the region emits GHG's above the national average, but that "there is no other Region—or County—in Sweden that so purposefully invests in special environmental achievements within its mission of regional development."[487] Given that the VGRC lacks many of the State's, the County Board's and the municipalities' formal competencies, it seems that it has looked for an appropriate role to play in regional environmental policy. An example of this is found in the attempt to initiate and support projects, coordinate actors from various sectors, and use its potential power of being an employer of about 50.000 people when purchasing voluminous products that affect energy consumption.[488]

The most favoured method by the Regional Council in order to reduce emissions is indirect. It is to gather various actors such as municipalities, the industry, research institutions and organisations in cooperative settings, so that solutions can be reached via deliberative processes. "Together we can enhance the strength and the effect of the environmental efforts."[489] This is a common feature in much of the material analysed. For example, when the VGRC's Environmental Board granted money for investments in hydrogen gas it was motivated like this by the Board's chair: "There is a large potential for research, companies and the industry to contribute to both environmental and public welfare, as well as to growth in Västra Götaland."[490] Another example is when the Board decided to grant means for the establishment of a sea-based wind power project. The Board argued that the purpose of the project was that it

> should lead to increased competence and competitiveness for the Region's industry, existing as well as new establishments, in order to enable a fast development of sea-based wind energy. The project specifically aims to [...] increase cooperation between industry, the public sector and research/educational organisations.[491]

Thus, the necessity and possibilities for cooperation between various actors in society was continuously spelled out, as well as the Win-Win story-line. That various societal interests can and should jointly contribute to a more sustainable and climate friendly society is in itself a manifestation of the Win-Win story-line; if there are no conflicts of interest everybody should gain from cooperating to the common goal.

[487] www.vgr.se, "Våra prioriterade miljöområden" [Our prioritised environmental areas], accessed 25 September 2008. My translation.
[488] Such articulations are recurrent on the VGRC's web page as well as in action plans on transports and the environment (Västra Götalandsregionen 2004b; Västra Götalandsregionen 2008b) and energy and the environment (Västra Götalandsregionen 2004a; Västra Götalandsregionen 2008a).
[489] www.vgr.se, "Regional miljöutveckling" [Regional environmental development], accessed 16 January 2007. My translation.
[490] Västra Götalandsregionen 2008-01-29 (press release). My translation.
[491] Miljönämnden Västra Götalandsregionen 2008-03-11, § 25. My translation.

Lacking the opportunity to use other important policy measures, the Region has attempted to give financial support to various projects in order to contribute to technology development in Västra Götaland and Sweden.[492] Thus, it has intended to stimulate market actors to develop energy efficient techniques and production patterns through subsidies, since the Region cannot use taxes as a political instrument.

Apart from these more external policy measures, with the aim of stimulating other actors to take action, an important part of the Regional Council's climate strategy has concerned internal measures. Most important here is the establishment of an environmental policy for the Region where saving energy and implementing environmental management systems are core ingredients. As mentioned above, this can potentially have important consequences since the Region employs about 50.000 people and thus needs to procure various products (cars, machines, services, energy systems etc.). The establishment of an environmental policy demands that the procurement of such products and services should take these things into consideration.[493] Of course, the idea with such public demands is not only to affect its internal climatic influence, but also to send signals to market actors that they should supply more environmental friendly products.

From the analysis it is evident that the VGRC continuously reproduces the discourse of ecological modernisation. This is especially marked by the articulation of the Win-Win story-line. In this discourse economic growth is a strong norm, as well as consensus, implying that there are few conflicts of interest. Economic growth is the goal with highest priority, but in the VGRC narrative this is totally in line with being a friend of the environment. Hence, the VGRC no doubt constructs climate change policy as a window of opportunity.

Transports and the freedom of choice

Like many other actors the Region acknowledged the transport sector to be the most difficult and important sector to restructure from a climate change perspective. Measures laid out by the Regional Council focused on supporting ini-

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[492] E.g. Miljönämnden Västra Götalandsregionen 2004-08-24; Miljönämnden Västra Götalandsregionen 2008-10-12; Miljönämnden Västra Götalandsregionen 2004-11-30; Miljönämnden Västra Götalandsregionen 2005-04-26; Miljönämnden Västra Götalandsregionen 2005-12-05; Miljönämnden Västra Götalandsregionen 2006-02-02; Miljönämnden Västra Götalandsregionen 2006-04-18; Miljönämnden Västra Götalandsregionen 2006-06-08; Miljönämnden Västra Götalandsregionen 2006-10-03; Miljönämnden Västra Götalandsregionen 2006-12-19; Miljönämnden Västra Götalandsregionen 2007-02-02; Miljönämnden Västra Götalandsregionen 2007-05-02; Miljönämnden Västra Götalandsregionen 2007-09-04; Miljönämnden Västra Götalandsregionen 2007-10-16; Miljönämnden Västra Götalandsregionen 2008-01-29; Miljönämnden Västra Götalandsregionen 2008-06-03.
[493] Västra Götalandsregionen 2004c.

tiatives that contribute to more energy-efficient and less energy-intensive transport systems and the development of alternative fuels.[494] However, VGRC did not count on behavioural changes, but instead hoped for technical solutions. In the words of the VGRC's Head of the Environmental Secretariat, Peter Holmberg:

> As the transport system looks today, it is pretty decisive for the situation, regarding CO_2. I think that is the stumbling-block. I don't think that transports can be constrained, but other systems are needed [...] What we do today is that we cut a little bit on the edges here, to try to limit the negative effects as good as we can, without constraining people's possibilities to travel. And it is total political unanimity on the transport issue. And that's what people *want*, one cannot forget that. So, from a sustainability perspective, or the social perspective, it is important that one *can* travel.[495]

What Holmberg says implies that VGRC does not want to constrain people from travelling privately, in their own cars. The reduction of GHG's should be done through more effective technology, i.e., vehicles should be run with less climate influencing fuels. What people do not want, he continues, is to be 'forced' to travel collectively by bus, train etc. On this, politicians in the region agree. Moreover, people do not only want to, but they also have the *right* to travel in this way. That is what social sustainability boils down to in this line of argument. Once again, like those who characterise environmental policy as a win-win situation emphasise, there are no trade-offs between 'development' and 'sustainability'. Implicitly, however, there are. The statement above recognises that constraining people from travelling might be effective in order to reduce GHG emissions. But that would certainly not be a legitimate way to reduce emissions. It would clash with other fundamental norms.

My interpretation is that some things are not articulated here, but are nevertheless central for our understanding of how policy actors such as the VGRC's Head of the Environmental secretariat make sense of climate change and the regional responses to it. To begin with, we can ask: what is at stake here? Possible answers would be powerful norms of mobility or the freedom of choice, the Western life style, or perhaps the Swedish car industry (both *Volvo* and *Saab* have their base and/or historical roots in this region). I am doubtful whether the latter answer would be of significance to understand the above quote. But what about the other suggested answers? My guess is that they cannot be viewed in isolation. Central, however, ought to be the norm of freedom of choice, which is indicated by the data. People have the right to freedom of choice, and this includes the right to choose travelling by car, or the right to mobility (which seems to be incompatible with being 'forced' to travel collectively). That there is a powerful norm of the right to freedom of choice cannot

[494] Västra Götalandsregionen 2004b; Västra Götalandsregionen 2008b.
[495] Peter Holmberg, interview 2002. My translation.

be doubted from Holmberg's quote above ("try to limit the negative effects as good as we can, without constraining people's possibilities to travel. [...] And that's what people *want*, one cannot forget that.). Moreover, in combination with the norm of mobility (i.e. 'it is a good thing to travel') it becomes almost impossible to question this view.

My reading of the material contends that the transport strategy is very well in line with the way this institution understands environmental problems and the policy to manage them generally. While some observers argue there is a potential conflict between demands for economic growth and environmental management, the Regional Council rather sees a win-win situation where there are no losers. Further, it implies the framing out of conflicts between interests. Thus, there are limits that cannot be trespassed; the existing social order should not—and does not have to—be threatened in the name of climate change mitigation.

If the VGRC generally leans on the discourse of ecological modernisation as regards policy measures to mitigate climate change, here I argue that Holmberg's understanding has a touch of liberal environmentalism. When it comes to the transport sector policy measures in line with 'rational planning' or 'pollution prevention pays' are not that salient. We see an emphasis on norms of freedom of choice and mobility, thus leaving little room for constraining political measures, in the eyes of the Head of the Environmental Secretariat.

Conclusion of the analysis of regional public institutions

We have seen that the regional institutions analysed have different subject-positions due to different competences and sources of authority. This leads to quite different discursive articulations. I argue that we have one rule-follower (the VGCB) who is a bit anxious when facing the 'new' environmental policy in development, and one new-comer on the arena searching for a new identity and a 'role to play' (the VGRC).

Both regional institutions take the consensual image of climate change as depicted by IPCC and others seriously. They recognise that climate change is mainly due to emissions of GHG's that accumulate in the atmosphere, and accordingly, this has to be prevented. The similarity with the other analysed institutions implies that we have the discourse of green governmentality before us. But the manner in which these institutions take the greenhouse theory for granted without further elaboration makes me rather cautious. The emphasis on scientific mapping of the earth and the role of science etc., are lacking in the regional institutions' construction of what climate change 'is'. I thus prefer to conclude that they draw on what we may call the consensual international discourse on climate change, rather than the discourse of green governmentality. With 'the consensual international discourse on climate change' I mean the parts of the discourse of green governmentality that is explicitly dealing with the human impact on the global climate, but the former is not as broad in

character as the latter. However, the consensual international discourse on climate change is in line with the discourse of green governmentality.[496]

The County Board has a long history of supervising environmentally harmful activities and analysing the environmental situation. As we saw above one of the Board's missions is to balance between various societal interests and if possible come to a consensual agreement, which acknowledges all interests at stake. At the same time the Board has a legalism side, which means it should supervise industrial activities in the County and make sure they are in line with laws and regulations. Thus, rationality and neutrality are guiding norms for the County Board, I argue. Further, the County Board's understanding of its environment and its own mission is articulated through the discourse of administrative rationalism, although a few elements of the discourse of ecological modernisation are salient, e.g. the urge to include the whole society in the mitigation of climate change—but this is a typical Swedish feature anyway. This does not mean there are no frictions. As indicated by the words of former superintendent Inge Löfgren, supervision by the law and accommodating industrial interests may not always be a Win-Win situation.

The Regional Council (VGRC) does not have this history or capacity, but has quite recently started to work with environmental issues. It interprets this mission through the lens of the overarching goal of 'regional development'. Thus, it is not that surprising that the VGRC embraces the norm of economic growth and reproduces the Win-Win story line. As regards the view of conflicts the VGRC differs from the VGCB. Being a new-comer it is not surprising that conflicts between different political aims are salient. We have seen such conflicts in the VGCB. However, this conflict, recognised by the VGCB superintendent, does not seem to be regarded as a conflict in the VGRC's way to frame the problem. The VGRC does have other more prioritised aims than caring for the global climate, but it sees few conflicts in this. According to my analysis the VGRC clearly reproduces the discourse of ecological modernisation.

The first general conclusion from the analysis of the regional institutions is thus that they express rather different discourses. The other important conclusion for the following analysis is how the regional target in climate change policy is interpreted. This is what, at least formally, mostly frames the climate change issue for the municipalities. Here we can conclude that despite some objections from concerned parties the County Board target is simply a scaling down of the national target. A National Action story-line thus became institutionalised in the County Board policy, although there were some objections based on the Thinking Globally story-line. These objections draw on norms of justice (but related to self-interested arguments; 'we are dependent on emit-

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[496] The following analyses of municipalities will come to the same conclusion as here: what climate change 'is', is expressed through a consensual international discourse on climate change.

ting a lot of GHG's, and it would be unjust if we were not allowed to continue with this') and cost-efficiency ('it is unwise to cut emissions at a flat rate when, from a climate perspective, it does not matter where GHG's are emitted and we should cut them where we get most reductions out of every amount spent'), respectively. Hence, justice here seems to be interpreted in terms of capacity and cost-efficiency, not that all political entities should take equal shares of responsibilities (related to its share of global emissions).

The norm of cost-efficiency is strong in the international and national discourse on climate change, as we have seen in the previous chapters. My interpretation is that it is less emphasised at the regional level, although some actors certainly draw on it. However, this is not enough to influence the climate policy targets in Västra Götaland, which rather draw on the National Action story-line. That is, every single societal unit should take its (equal) share of the responsibility instead of calculating what actions that from a cost-efficiency point of view ought to be reduced primarily. One guess is that the norm of cost-efficiency can be more dominant on a structural level, when many actors at 'lower' levels have less influence over structural policy measures. However, since Sweden has relatively strong municipalities the latter is the case in the Swedish polity. It is probably easier to decide and weigh measures from a central position than it is at the regional—or local—level. In short, in such a subnational setting, there is a lack of opportunity for coordination.

Both the Regional Council's and the County Board's climate policies draw on two major story-lines: first, that involving a large variety of actors is *the* way of solving the climate change problem, and the implicit assumption of a win-win situation. Especially the Regional Council emphasises the win-win situation. The County Board's discursive abode is more complex than that.

*   *   *   *   *

On the next page (table 6.1) I summarise my analysis of the Västra Götaland public institutions. I have analysed articulated policies, norms, story-lines and discourses with regard to the questions of what climate change 'is', how the issue of responsibility is constructed, and what policy actors find necessary and possible to do in order to mitigate climate change.

Table 6.1. Analysis of the Västra Götaland public institutions' climate policy. Articulated discourses, story-lines, norms, and policies.

Questions and analytical dimensions	Discourses	Story-lines	Norms	Policies
COUNTY BOARD				
What 'is' climate change?	Consensual international discourse on climate change	Human induced climate change through emissions of GHG's Thinking Globally	Stabilisation of GHG concentrations...	Not applicable
Responsibilities		**National Action** vs. Thinking Globally	**Justice** (for both story-lines) vs. Cost-efficiency	**Minus 4 percent reductions** vs. Less than minus 4 percent reductions
What needs to be done?	**Administrative rationalism** vs. Ecological modernisation	The Administrative Mind Mission for the Whole Society Win-Win situation	Rationality	Energy saving Supervision Information Planning Communication and dialogue
REGIONAL COUNCIL				
What 'is' climate change?	Consensual international discourse of climate change	Thinking Globally	No information	Not applicable
Responsibilities		Implicity: National Action	No information	No information
What needs to be done?	**Ecological modernisation** vs. Liberal environmentalism	Win-Win situation Opportunity Mission for the Whole Society	Economic growth Consensus (no conflict) Freedom of choice/ freedom of mobility	Provide cooperative settings Regional development' Support initiatives that render more efficient use of energy and fuels Public purchasing Communication and dialogue

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

Now it's time to dig even more sub-national. This section includes an analysis of climate policies in three municipalities in the Västra Götaland region: Gothenburg, Stenungsund and Borås. In chapter 2 I described that they differ in size and administrative capacity, as well as in their economic structure. Their environmental records vary, and the municipalities are also somewhat different regarding political majorities in a historical perspective. I also argued that these characteristics are part of what constitute identity constructions and are therefore contributing to the perceptions of specific interests. Hence, to some extent I expect to find varying constructions of meaning regarding the questions posed in chapter 1: what 'is' climate change?; how is the organisation's own responsibility interpreted?; what action towards climate change is viewed as necessary and possible? In other words, what do the municipalities' differences imply for the interpretation of climate change as a political problem? However, we may just as well find similar patterns in the cases analysed. It would be foolish not to acknowledge all the things these municipalities have in common, such as being part of the Swedish polity and society, and all the things that come with that. Thus, although each case study is interesting in itself, my main task is to analyse similarities and differences in the data.

Gothenburg

Gothenburg is the second largest city in Sweden with about 490.000 inhabitants.[497] It has a history as an industrial city; being located on the west coast it has been the shipyard centre of Sweden and was throughout the twentieth century surrounded by heavy industry.[498] In the first half of the twentieth century shipping was a trademark of Gothenburg, being the most important port of Scandinavia. Thus, Gothenburg played an important role for Sweden's import and export of especially industrial products. The city was also an important communication node. Gothenburg's economically important manufacturing industry thus consisted of shipyards (*Götaverken, Lindholmen, Eriksberg*), but over time companies such as SKF (*Svenska Kullagerfabriken*) and *Volvo* came to be much more important for the local economy. Indeed, critics have remarked that Gothenburg is too dependent on a few (or sometimes a single) exporting manufacturing industries, thus making the city vulnerable to fluctuations on the world market. The 'motor city' character of Gothenburg is not merely about being the home of *Volvo*. In infrastructural terms the city is built

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[497] The number of Gothenburg's inhabitants vary depending on definition of city (some include suburban cities). I stick to the administrative city and thus the figure is somewhat lower than would I have included suburban cities in my definition.
[498] The historical description of Gothenburg is based on Andersson, Fritz & Olsson 1996 and CyberCity 2009.

for the car, not least because the need of easy access to the port and other major workplaces. The outskirts of Gothenburg's port are also residence for several refineries. Gothenburg's dependency on the industry has somewhat decreased during the last decades, not least due to the development of Western countries into 'information societies'. Moreover, we can see a development into cooperation between industry (primarily the manufacturing and medical industries) and *Chalmers University of Technology* and the *University of Gothenburg* (first and foremost the *School of Business, Economics and Law*, and the *Sahlgrenska Academy*), which is considered crucial for the competitiveness of these industries.

A typical feature of Gothenburg is what is called the 'Gothenburg spirit', which in short means that political parties from left to right have many times come to mutual agreements for the sake of the city's interests. This has often implied the interests of the city's major corporations. Thus, another important aspect of the 'Gothenburg spirit' is the cooperation between politics and industry, i.e., a corporatist feature at the local level. The Social Democrats have been in power (sometimes with support from the Communists/the Left Party and/or the Greens) most of the time since the early 1920's in Gothenburg. From the late 1950's until the early 1980's the power shifted between the blocs, with a little overweight for the centre-right parties. For the last three decades Gothenburg has had a left political majority almost all of the time.[499]

This industrial legacy still bears its marks, manifested in the fact that the industry stands for about 35 percent of Gothenburg's GHG emissions.[500] However, being a major city Gothenburg also contributes to GHG emissions from the transport sector, which is depicted as a problem hard to handle for the city. This is not surprising given the motor city character of Gothenburg. In the so called climate index of the *Swedish Society for Nature Conservation* (SSNC), where the organisation ranks Swedish municipalities' climate policy activities, Gothenburg came out sixth in 2005 and fifth in 2007.[501] That does not change the fact that Gothenburg's CO_2 emissions in 2007 had increased by 8 percent from the 1990 levels[502], although the figure as recently as in 2002 was a decrease of emission by 5 percent.[503] Below, we will try to understand why Gothenburg considers itself a relatively progressive municipality despite increased emissions.

[499] See CyberCity 2009.
[500] Göteborgs stad Miljö 2008. But the industry's share of Gothenburg's CO_2 emissions was 44 percent as late as in 2005, see Göteborgs stad Miljö 2006: 1:4.
[501] SSNC 2007. Stenungsund came out 58th and 16th, and Borås 17th and 21st, respectively.
[502] Göteborgs stad Miljö 2008: 19. However, it was noted that the trend since 1990 is that of "relatively constant emissions", Göteborgs stad Miljö 2008: 18.
[503] Göteborgs stad Miljö 2003a.

What 'is' climate change?

Climate change has been depicted as a global threat in the city's policy documents. Moreover, Sweden's responsibility, among other nations, to deal with this problem has been emphasised. It is striking how the description of climate change was in line with the international discourse on climate change; policy documents clearly spelled out the science of climate change, based on IPCC conclusions.

> One of these problems, the greenhouse effect, has in recent years been pointed out as the possibly most serious global environmental threat. It is feared that emissions of carbon dioxide from fossil fuels will lead to an increase of the Earth's mean temperature with, *inter alia*, climate change as a consequence. The risk for climate change is estimated as so serious that international agreements have been made to decrease emissions. The aim is that the amount of greenhouse gases in the atmosphere shall be stabilised at a level which implies that the human impact on the climate system will not be dangerous.[504]

Here, slightly unorthodoxly, the greenhouse effect was depicted as a problem, whereas later it was explained that the greenhouse effect is essential for life on Earth but that the concentration of GHG's in the atmosphere, leading to an enhanced greenhouse effect, can lead to global warming and thus several social problems.[505] The latter description is of course more in line with scientific explanations of the greenhouse thesis. The general picture is nevertheless that IPCC conclusions have had a prominent position in Gothenburg's understanding of climate change.[506]

As pointed out in the previous chapter, this is probably legitimising when actions against climate change are to be taken, since it refers to consensual expert knowledge. Hence, it has been acknowledged that the GHG's effects on the global climate really are global, and that it does not matter where on the globe the gases are emitted or where emissions are reduced. As we have seen throughout the study, this refers to one of the central story-lines in climate change discourse, the Thinking Globally story-line.

The consequences of global warming were also addressed, especially the risks. That is, it was especially the potentially *negative* consequences that were paid attention to. This is not only in the general, global way, but also regarding Sweden as well as more locally in the Gothenburg area. The city's vulnerability was observed, as it is located on the west coast of Sweden, which can receive a

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[504] Göteborgs stad Miljö 2002b: 4. My translation.
[505] E.g. Göteborgs stad Miljö 2007: 17f.
[506] E.g. Göteborgs stad Miljö 2000; Göteborgs stad Miljö 2001a; Göteborgs stad Miljö 2001b; Göteborgs stad Miljö 2002a; Göteborgs stad Miljö 2002b; Göteborgs stad Miljö 2003a; Göteborgs stad Miljö 2003b; Göteborgs stad Miljö 2004; Göteborgs stad Miljö 2005; Göteborgs stad Miljö 2006; Göteborgs stad Miljö 2007; Göteborgs stad Miljö 2008.

lot of rainfall, potentially causing floods. Quite interestingly, the potentially *positive* effects of climate change have been framed out in the political discourse on climate change in Gothenburg.

> If the temperature continues to increase the conditions for agriculture will be worsened in some parts of the world. The increased temperature may also cause floods in lowland coastal areas around the world, as a consequence of melting ices. In addition, a warmer climate will have the result that water molecules' volume will increase, which in turn results in a further rise of sea levels. According to IPCC's estimations the sea level will rise with 0.09-0.88 metres during the period 1900-2100.[507]

The general scientific conclusion is that the risks of global warming trump the potentially positive effects. But nevertheless, the scientific scenarios do not only speak of the negative impact of global warming, but also some aspects that can be interpreted as beneficial for some societies. For Sweden the warmer climate does not only imply downsides such as more rainfall, risk for floods, landslides, and erosion, but also a climate that may be more suitable for cultivating land and increased growth of forests.[508] With this in mind, it is interesting to note that nowhere in the analysed policy documents (or in the interviews) these potentially positive effects were mentioned.

Since the international discourse on climate change was referred to abundantly when it comes to the scientific basis (the consensual knowledge of IPCC) and what climate change 'is', surprisingly little of the Kyoto Protocol, its targets and its policy implications have been addressed directly. Here and there it was noted that the problem is so serious that it demanded international agreements to limit the emissions of GHG's. The more general (and quite vague) UNFCCC aim to stabilise emissions at a level that prevents dangerous anthropogenic influence on the climate system, was reproduced by the environmental administration. However, in my interpretation this was done via the national targets which were more specifically alluded to.[509]

The dominant norm as regards what climate change 'is', is the norm of stabilisation of GHG's in the atmosphere, while Gothenburg reproduces the consensual scientific discourse on climate change. According to this, the Thinking Globally story-line is fundamental. When turning to the question of responsibilities next the Thinking Globally story-line gets competition, just as we have seen at other political levels.

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[507] Göteborgs stad Miljö 2006, 1:3. My translation.
[508] See chapter 5 and SOU 2007:60.
[509] Cf. Göteborgs stad Miljö 2001b: 4-5; Göteborgs stad Miljö 2002b: 4; Göteborgs stad Miljö 2003b: 4 et al.

Local responsibility for managing climate change

Like the regional institutions, the city of Gothenburg has not made a big deal of whether the city should contribute to the international mission of mitigating climate change. Rather, lack of discussion of this indicates that it has been taken as self-evident that Gothenburg should take its responsibility. A telling description of how policy actors in Gothenburg seem to think came from Leif Johansson, Leader of the Infrastructure, Recycling and Environment Group at the Infrastructure Unit:

> A point of departure is that these are global phenomena and that Gothenburg contributes to the problems. The local arena is important, but in the global perspective it is hardly a hair shaft in the bear's fur. But of course we will contribute in all possible ways.[510]

Thus, it was acknowledged that Gothenburg's own emissions were in and of themselves not a major issue for the global problem. From a social dilemma perspective Gothenburg would need to be sure that other municipalities take their part of the burden (the city is not forced by the state—rather expected—to take climate initiatives) in order to decide to contribute itself. However, the rhetorical commitment is unreserved: "of course we will contribute in all possible ways." It is hard to interpret this as anything else than moral considerations. Although Gothenburg spoke almost exclusively of the negative effects of climate change, it was nevertheless acknowledged that other parts of the world are the most vulnerable to the effects of climate change. If Gothenburg self-evidently should contribute to the mitigation of climate change without conditioning it on others' action (we see no such indication, i.e., before the revaluation of local climate policy, see below) this has to do with the acknowledgement of moral responsibilities. Quite interestingly, underlying this self-evident responsibility I cannot find anything else than a norm of justice, although not explicitly articulated. For a long time climate change was neither constructed as a sacrifice nor as an opportunity in policy documents. It was simply not reflected upon in these terms at this local level. What is interesting is that the city's own responsibility to deal with this was acknowledged without elaborating the Opportunity path that Sweden as a nation did. I have reason to get back to this later. However, in the 2008 revaluation of Gothenburg's climate policy the Opportunity story-line was articulated:

> To decrease carbon dioxide emissions in order to reach the target proposition is by and large about switching over to better available technique and technical development with the aim of increasing energy efficiency and increasing the use of renewable energy sources. Development of new technique demands

[510] Leif Johansson, interview 2004. My translation.

a lot of resources but can also provide important competitive and development advantages for the city and its activities.[511]

Despite this late statement, and instead of a thorough discussion of why Gothenburg should launch climate policy measures, what we repeatedly find in the city's policy documents are references to the national targets. Especially to the environmental quality goals which more speaks of preventing dangerous anthropogenic climate impacts than about percentage-wise emissions reduction. When the County Board in 2003 scaled down the national target regionally, the city complied with that without further debate. It was not until April 2006 that the City Board decided that the environmental quality goals shall be 'translated' to Gothenburg's circumstances.[512] When this was politically dealt with in spring 2008 it concerned the 2020 target and a more general goal with climate policy: "In 2050 Gothenburg has a sustainable and fair level of CO_2 emissions."[513] Further, the Climate Commission's proposal for national target for 2020 was discussed by the preparatory local authority, which noted that

> reductions by 38–40 percent have been discussed [by the Commission]. Worth noting is that the national level includes all GHG's and also includes effects by the flexible mechanisms, i.e. measures leading to emissions reductions outside the country's borders. This is a type of measure that has not been included in the proposal for local target for Gothenburg.[514]

Thus, it was concluded that the Gothenburg target could only deal with the non-trading sector, and only with CO_2, because there were no reliable figures for the other GHG's locally. Further, since the trading sector (primarily the industry) of Gothenburg was supposed to be part of EU ETS, and that the EU targets were yet rather vague (20 percent or 30 percent reductions depending on other industrialised countries' commitments in future negotiations), these circumstances had to be looked after for possible revaluation of Gothenburg's targets. The proposed local target for 2020, with the previous reservations in mind, was 30 percent CO_2 emissions reductions (later granted by the municipal board[515]).[516] Hence, when discussing responsibility not only in general terms, but regarding specific targets, Gothenburg saw reasons to condition its actions, at least when it comes to 'post-Kyoto' targets.

However, in the initial process of translating the national minus 4 percent target into local targets, not all actors within the city administrations thought that automatically scaling down the national target was wise. Says the Leader of the Infrastructure, Recycling and Environment Group, Leif Johansson:

[511] Göteborgs stad Kommunfullmäktige 2008: 2. My translation.
[512] Göteborgs stad, Kommunstyrelsen 2006; Göteborgs stad Miljö 2006.
[513] Göteborgs stad, Stadskansliet 2008: 7. My translation.
[514] Ibid.: 6-7. My translation.
[515] Göteborgs stad Kommunfullmäktige 2008.
[516] Göteborgs stad, Stadskansliet 2008: 6-8.

Of course, we take the national target for granted but it would be counter-productive if we locally operated with the same target, because the target to a large extent is about how much one emits. If we reduce emissions by [4 percent] it has nothing to do with the Gothenburg inhabitants' influence on the global climate, but how much we consume. I think about CO_2 equivalents; if Gothenburg doesn't produce its own energy but buys electric power from Denmark we contribute to the greenhouse effect with our consumption and not with our production. [...] If we break down the national target it becomes ridiculous. It is not sure at all that it is a good thing that I save 4 percent and you save 4 percent.[517]

This touches upon an interesting question in climate change policy. Where should action take place? At the national and regional levels we saw a National Action story-line prevailing. No differences can be seen in Gothenburg regarding institutionalised policies, but the above statement bears witness that significant actors articulate the Thinking Globally story-line.

That does not contradict the institutionalisation of the National Action story-line. Proof of the latter's position lies not so much in what is said than in what is not said. A telling exception to this absence, however, comes in this example: "Measures within many areas will be demanded, in our country and internationally, in order to reduce greenhouse gas emissions. All contributions are necessary."[518] This is a clear articulation of the National Action story-line, where national as well as local measures are legitimised. We cannot call this story-line hegemonic in the city of Gothenburg's policies, since alternative story-lines were indeed articulated. There has certainly been a struggle between these two major ways of conceiving the issue. Nevertheless, in the end it is as if advocates of the Thinking Globally story-line did not go the whole hog; they uttered it almost surreptitiously. For example, contemplate this way of explaining the trend of increasing GHG emissions in the years after 1995: "The increasing trend since 1995 depends principally on increasing emissions from refineries, which have increased their production of more environmentally friendly fuels."[519] It is as if the city's Environmental Administration wanted to excuse the emissions by saying that it was for a good cause. But that would almost be impossible without drawing on the Thinking Globally story-line. As we remember by now, according to the Thinking Globally story-line the most important aspect is not where emissions are reduced, only that they are reduced globally and that they are cut in a cost-efficient manner.

Further indication of the closeness to this alternative understanding of the problem comes when the Environmental Administration makes us aware of the fact that

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[517] Leif Johansson, interview 2004. My translation.
[518] Foreword by Director of the Environmental Administration Christina Börjesson in Göteborgs stad Miljö 2006. My translation.
[519] Göteborgs stad Miljö 2004: 21. My translation. Cf. Göteborgs stad Miljö 2005: 19.

the statistics regarding Gothenburg are production based. This means, e.g., that the refineries' emissions, which are slightly more than 40 percent of Gothenburg's total carbon dioxide emissions, are entirely attributed the city of Gothenburg even though the major part of the products are consumed outside the city's borders.[520]

In making a distinction between spaces of production and spaces of consumption[521] the Environmental Administration implicitly makes us aware that one could—and possibly should—count differently. This different way of looking at emissions, which has *not* been directly uttered, would imply a different discursive understanding than what is given by the National Action story-line. However, one has seemed to be careful not to cross this line. Maybe because if doing so, one would have to admit that on an aggregate level Gothenburg's and Sweden's space of consumption far exceeds its space of production (i.e. Gothenburg and Sweden consume more goods produced outside their respective jurisdiction than they produce domestically, but it is the latter that are normally accounted for). This description is correct until 2008, when the following statement was added, much more in line with Johansson's articulation above:

> Our indirect CO_2 emissions, because of consumption of products produced outside the municipality's borders, are not accounted for. It is difficult to tell exactly how large this share is, but national estimations show that emissions of fossil carbon dioxide could be up to the double if import and consumption were included.[522]

This articulation is potentially radical, politically speaking. Nevertheless, this is not the established way to account for emissions, and why would Gothenburg count any different than states do, were it possible? Regardless of the fact that administrative borders imply a problem when municipalities, regions and states are to account for GHG emissions, objections to the production based accounting system (and thus promoting the inclusion of consumption in calculating emissions) will most probably lead to admitting that industrialised countries exceed other countries' GHG emissions even more than what is normally accounted for. Although we can see traces of this in the material analysed, and advocates of such an understanding outside the material analysed, none of the public institutions analysed in this study have actively promoted an alternative understanding. It may be because most actors think that this must be solved in international negotiations.

As regards Gothenburg's construction of own responsibilities, we find a vacillation between the National Action and the Thinking Globally story-lines, although the former got institutionalised in policy. Gothenburg finally decided

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[520] Göteborgs stad Miljö 2006: 1:4. My translation. Cf. Göteborgs stad Miljö 2007: 20; Göteborgs stad Miljö 2008: 19.
[521] Cf. Lindseth 2006.
[522] Göteborgs stad Miljö 2008: 19. My translation.

to follow the state and VGCB objective of minus 4 percent emissions cuts. The relevance of such an objective was nevertheless definitely discussed. Latent but not articulated in this debate was the tension between norms of justice and cost-efficiency. The National Action story-line is connected to the norm of justice in that underlying this understanding is the notion of a *common* moral responsibility to cut emissions, which should thus be shared within the Swedish polity. The tendency to 'think globally', on the other hand, is related to the norm of cost-efficiency. Thus, if every local polity takes on a similar responsibility in terms of quantitative objectives this may prove to be counter-productive from a global climate perspective. In terms of environmental discourses, I find no reason to 'label' Gothenburg in this regard.

What needs to be done?

The city of Gothenburg seems to be ready to take measures in order to fulfil its share of the nation's climate obligations. But what kind of measures do city actors have in mind? Quite like the state's and the VGRC's policies, all sectors in society shall be included in this noble mission; the public administration of course has a key role, but one has to cooperate and communicate with private enterprises, the Universities, and with the public. Individual decisions and lifestyles are also depicted as of special importance for restructuring the Gothenburg (and implicitly the Swedish and the world) society. Thus, climate considerations should be integrated in all societal activities. Underlying much of Gothenburg's arguments in climate policy is the Win-Win story-line. But it is seldom articulated, and when it is, it is not in a very convinced manner. For example: "The economy is a strong driving force for the industry to work with energy efficiency."[523] I do not find it permeating the policy documents analysed. The norm of rationality, and thus planning, is rather at the core of this discourse. These observations can be made in practically all important policy documents analysed.[524] Of course, this characterisation of Gothenburg's climate policy does not tell us exactly what measures the city is up to. But it gives us an important understanding of how Gothenburg's politicians and civil servants 'think'. The Environmental Administration often mentions the seriousness of the 'greenhouse effect' and that to change this, "a powerful restructuration of contemporary energy and transport systems is needed."[525]

As indicated from this statement, a recurrent pattern in policy documents is the emphasis on the energy and traffic sectors, which is not surprising given

[523] Göteborgs stad Kommunfullmäktige 2008: 16. My translation.
[524] Göteborgs stad Miljö 2000; Göteborgs stad Miljö 2001a; Göteborgs stad Miljö 2001b; Göteborgs stad Miljö 2002a; Göteborgs stad Miljö 2002b; Göteborgs stad Miljö 2003a; Göteborgs stad Miljö 2003b; Göteborgs stad Miljö 2004; Göteborgs stad Miljö 2005; Göteborgs stad Miljö 2006; Göteborgs stad Miljö 2007; Göteborgs stad Miljö 2008; Ibid..
[525] Göteborgs stad Miljö 2002: 4.

the general discourse of climate change. Thus, this emphasis possibly just reflects a general emphasis on energy and traffic in climate change policy; it may be regarded as tacit knowledge. Apart from this, the industry stands for about 40 percent of the city's GHG emissions, a fact very well acknowledged. The lion's share of these emissions come from the refineries, and both these and other important emitters are part of the so called trading sector, i.e. they are since 2005 part of the EU Emissions Trading Scheme (ETS).[526] Thus, they are outside the city administration's sphere of responsibility.

Reduced emissions from transports and energy efficiency or switches to renewable (or less fossil intensive) energy sources were also at the core of the LIP and Klimp projects that Gothenburg was granted for. The city was granted LIP money in 1998 and 2000, and Klimp money in 2003, 2006, 2007 and 2008. The total amount of Gothenburg's LIP and Klimp grants were nearly 180 million SEK and total investments in the projects summed up to about 584 million SEK and concerned a wide spectrum of policy measures.[527]

Energy and transports were the two main areas in need of restructuring, according to policy documents. However, these areas were quite differently understood in terms of what the municipality could do. Gothenburg concluded, just as Sweden and the VGRC did, that the transport sector (both land and sea transports in the case of Gothenburg) is the hard case to deal with, to a large extent because there is a lack of available policy measures at the municipal level. It is hard for municipalities to govern people's transport choices and the kind of fuels used.[528] To a certain extent, new technology was believed to be necessary for solving the climate change problem, no matter which sector we look at. But new technology in itself does not solve the problem. The question is how new technology should be introduced.

When dealing with the transport sector, the public administrations were prone to emphasise norms of market incentives and individual freedom. This has consequences for the policy measures chosen. Implicit behind the major strategy to tackle the transport problem seems to be a strong norm of individual freedom where people are not 'forced' to behave in a certain way (cf. the analysis of the Regional Council above). To reach the goals for the transport sector the city regards it as important to "deepen the knowledge about various transport alternatives' environmental effects, in order to be able to give rele-

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[526] Göteborgs stad Kommunfullmäktige 2008: 13.

[527] See http://klimp.naturvardsverket.se/mir/. Accessed 18 April 2009.

[528] Göteborgs stad Miljö 2000; Göteborgs stad Miljö 2001a; Göteborgs stad Miljö 2001b; Göteborgs stad Miljö 2002a; Göteborgs stad Miljö 2002b; Göteborgs stad Miljö 2003a; Göteborgs stad Miljö 2003b; Göteborgs stad Miljö 2004; Göteborgs stad Miljö 2005; Göteborgs stad Miljö 2006; Göteborgs stad Miljö 2007; Göteborgs stad Miljö 2008; Leif Schöndell, interview 2004; Jonas Johansson, interview 2004; Ann-Marie Ramnerö, interview 2004; Kia Andreasson (MP), interview 2004; Leif Johansson, interview 2004.

vant information so that citizens' transport choices can be facilitated."[529] Hence, in this statement there seems to be a belief in that it is possible to inform away the problem; rational, well-informed citizens will (at best) change behaviour voluntarily when they realise that it is in their own and/or the public's interest. Further, the Environmental Administration often writes that one is to "encourage" the introduction of non-fossil fuels (as well as less energy-intensive behaviour etc.). Quite interestingly, even though Gothenburg in a Swedish context is a large city with relatively strong capabilities, this strategy could be regarded as quite blunt. This should be understood against policy actors' sense of resignation regarding transport issues:

> [Regarding the major traffic routes] the municipality does not decide on this because it is not part of our budget. If it would have been part of our budget we could have tried to govern this. What we pay for we can try to govern, but what is outside my friends in the parliament [*riksdagen*] have to deal with. [...] I cannot do much as a local government commissioner.[530]

The consequence is the impression of an actor anxious to send the right signals to the market, e.g. through the city's large scale purchases (in this case primarily of vehicles), or making it easier to behave environmentally 'appropriate' (e.g. through making public transportation more accessible and informing about its advantages). Gothenburg finds it suitable to stick with trying to affect activities that are within the non-trading sector, and concludes that transports should be prioritised. Not counting the trading sector, transports stand for about 80 percent of Gothenburg's GHG emissions in 2008. Central in the policy is to improve public transportations (bus, trams etc.), but also infrastructure for pedestrians and cyclists.[531]

This tendency is less apparent in the energy sector, which is more marked by the idea of social planning, conducive to the discourse of administrative rationalism. For example, the introduction of an energy plan seems to be at the core of the climate relevant energy policies.[532] Permeating the energy plan is the encouragement of frequent measures to save energy ("the saved kilowatt-hour and cubic meter oil are the most efficient from an environmental perspective") and to develop or use new less energy-consuming technology:

> In this global perspective with local consequences Gothenburg, as an environmental forerunner, ought to be in the frontline of phasing out fossil fuels to the benefit of renewable energy, for the optimisation of energy systems, and the minimisation of the use of energy.[533]

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[529] Göteborgs stad Miljö 2003: 30. My translation.
[530] Kia Andreasson (MP), interview 2004. My translation.
[531] Göteborgs stad Kommunfullmäktige 2008: 16.
[532] Göteborgs stad Miljö 2003; Göteborgs stad 2005.
[533] Göteborgs stad 2005: 10. My translation.

The city owns the energy company *Göteborg Energi AB*, who has a concession on the web of electricity in Gothenburg and is also holder of the city's web of district heating. Together with surrounding municipalities it also owns *Renova AB*, who produces electricity out of combustion of refuse, and sewage treatment company *Gryaab*, whose activities generate waste heat. By and large, Gothenburg, who considers itself "an environmental forerunner", is quite proud of its web of district heating, with energy generated from the above mentioned companies, but also from waste heat from the city's refineries. The web is less based on the use of bio-energy, but the major ingredient is the benefit of taking care of already 'used' energy. As we will see in the other local case studies, Stenungsund and Borås, they are even more proud of their web of district heating, but it is only the latter which makes a case of running it with bio-energy. Borås is not the base of heavy industry as is the case with Gothenburg and Stenungsund.

Interestingly, the city's own production of electricity has made Gothenburg to 'think globally', since it implies increased emissions locally. The energy sector thus resembles other sectors that show a negative development from a climate policy perspective.

> Prognoses for road transports, shipping and industry all show increasing emissions. For energy, including production of electricity, with a greater production of electricity via *Rya Kraftvärmeverk*, CO_2 emissions will increase considerably. If you instead choose to look at electricity produced by *Rya Kraftvärmeverk* from a marginal-electricity perspective, the scenario instead shows decreased emissions.[534]

The municipal council tries to legitimise increased emissions from the energy sector, since it means that global emissions can be reduced although they may increase locally in Gothenburg. But here as elsewhere this is not made into a big case; it seems that this merely has to be 'noted'. Nevertheless, it is significative of how Gothenburg problematizes the National Action story-line.

The difference between how the transport and energy sectors are comprehended is to a large extent expected, since transports are in a certain sense more individualised. Transportation equals mobility, and is thus more difficult to plan and control in policy actors' eyes. Energy consumption like heating and electricity for private or industrial use can be viewed as dependent on individual behaviour too. But the possibilities to introduce structural measures are perceived to be easier in the broadly defined energy sector than in the transport sector where each person is his/her mobile own, at least as long as alternative vehicle fuels are not considered a realistic alternative. In the energy sector it is easier to provide incentives for wasting less energy, since it is economically beneficial for actors (apart from actors who gain from status quo). This logic does not seem to work in the transport sector—although it would be

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[534] Göteborgs stad Kommunfullmäktige 2008: 14. My translation.

economically beneficial for the individual to drive a less fuel-intensive vehicle or travel collectively or not at all (all other things equal). Most likely, this makes it more puzzling to introduce policy measures, especially if the norm of individual freedom is strong in the political community.

The emphasis on rational planning is thus ambiguous; we can suspect insecurity with this discursive path. In spite of the confidence in planning Gothenburg is careful not to get on the wrong side of market actors and the market's working. Thus, I contend that the city's institutions in their policies are vacillating between two different but related discourses. First we have one that puts strong government, capable of rationally planning things for the common interest, in the driver's seat (administrative rationalism). Second, we have a more market oriented discourse, which aims at stimulating and providing incentives to market actors (citizens, private businesses, organisations, public institutions, universities, municipalities etc.), who are the ones that in the end should take measures to fulfil the climate targets (ecological modernisation). However, regardless of which sector we look at it is clear that Gothenburg has embraced the idea that 'everyone', in cooperative settings if possible, should contribute to reducing GHG emissions. Ecological modernisation is also a more market oriented discourse than administrative rationalism. Thus, I argue that a 'technological fix' version of the discourse of ecological modernisation is institutionalised in Gothenburg's climate policy, especially regarding the energy sector. Regarding the transport sector we find a more market version of ecological modernisation, although not tipping over to the discourse of liberal environmentalism. The local government still has an important role to play, according to public administrations.

One way to understand the urge to include 'the whole society' in the mitigation of climate change is to consider Gothenburg's version of the 'Swedish model', commonly known as the 'Gothenburg spirit' (described earlier in this chapter). Central to this are close ties between political institutions and the local industry, and, not least, a consensus-minded political culture. Says the Director of the City traffic Office: "No decisions without consensus; when you rise from the table you are principally in agreement. That's what I call the Gothenburg spirit."[535] Understood this way, when the city is faced with the political problem climate change, it is interpreted by local policy actors so as to nicely fit with Gothenburg's social structure. Hence, climate policy measures in Gothenburg are by and large produced through the discourse of ecological modernisation.

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[535] Jonas Johansson, interview 2004. My translation.

Conclusion Gothenburg

Gothenburg has reproduced the consensual international discourse of climate change when constructing what climate change 'is'. Accordingly, the Thinking Globally story-line, i.e. that it does not matter where on the planet greenhouse gases are emitted from a climate change perspective, is also reproduced. Central to this discourse is that climate change is human induced. Thus, in order to mitigate climate change the emission of greenhouse gases have to be reduced so that they can be stabilised in the atmosphere, and in turn not cause a too high increase in the earth's mean temperature.

For that reason Gothenburg finds itself morally responsible to contribute to the global mitigation of climate change. This was depicted as more or less self-evident for the city to do. However, the analysis showed that Gothenburg vacillated between the National Action and the Thinking Globally story-lines, although the former was eventually institutionalised. This means that Gothenburg found a scaling down of the national target the most appropriate thing to do. Although not spelled out directly, the underlying norm was that accepting a scaling down of the national target was the only just solution. The Thinking Globally story-line, which was also articulated, was on the other hand based on the implicit promotion of the norm of cost-efficiency, according to which formulating a local target in line with the national one is not really relevant. Rather, what is important is what most efficiently contributes to the global mitigation of climate change.

Since a large part of Gothenburg's industry, including the refineries, is part of the trading sector managed within the EU ETS, a significant extent of the city's GHG emissions are not dealt with locally. Left are by and large measures in the energy and transport sectors. The latter is the child of sorrow in Gothenburg, as elsewhere. Transports are tried to be managed by soft policy measures, such as infrastructure planning, information and so on. The energy sector is easier to handle since it can be viewed in Win-Win terms. Through energy plans the use of energy can be analysed and potential savings identified. Thus, saving energy, e.g. through taking care of waste energy, together with the stimulation of renewable or less GHG intensive energy sources are typical features of Gothenburg's energy policy. Moreover, the involvement of 'the whole society', i.e. the industry, organisations, the Universities and citizens, is emphasised. This contributes to Gothenburg's construction of climate policy as a consensual political objective, which the rational society (broadly viewed) can find solutions to. These solutions nevertheless need to be in line with norms of market incentives and individual freedom. I thus find Gothenburg's climate policy measures to draw on the discourse of ecological modernisation.

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Before moving on to the analysis of Stenungsund I summarise the Gothenburg analysis in table 6.2 below. I have analysed articulated policies, norms, story-lines and discourses with regard to the questions of what climate change 'is', how the issue of responsibility is constructed, and what policy actors find necessary and possible to do in order to mitigate climate change.

Table 6.2. Analysis of Gothenburg's climate policy. Articulated discourses, story-lines, norms, and policies.

Questions and analytical dimensions	Discourses	Story-lines	Norms	Policies
What 'is' climate change?	Consensual international discourse on climate change	Thinking Globally Human induced climate change through emissions of greenhouse gases	Stabilisation of GHG concentrations… Implicitly: Just distribution of responsibility	Not applicable
Responsibilities		**National Action** vs. Thinking Globally	*Unarticulated but latent:* Justice *Unarticulated but latent:* Cost-efficiency	*1990–2008/2012:* **Follow state and County Board targets (minus 4 percent)** *Contradictory articulation:* Not relevant to formulate such local targets *1990–2020:* Minus 30 percent CO_2 emissions
What needs to be done?	Administrative rationalism vs. **Ecological modernisation**	Mission for the whole society Win-win situation (merely implicitly)	Rationality Consensus (no conflict) Market incentives Individual freedom	Restructuring the energy & transport sectors, trough: Planning (energy plan) Energy saving Supporting alternative technology Information Communication and dialogue Stimulate cooperation projects

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

Stenungsund

"'No more Stenungsunds'"[536], was an outcry which pretty much summarised the late 1960's criticism against the localisation of heavy industry in the up until then sparsely populated rural seaside village called Stenungsund. In 1951 Stenungsund municipality was launched through a fusion of four smaller municipalities, and together the new municipality consisted of 4.654 inhabitants. Although being located on the Swedish west coast, about 45 km north of Gothenburg, it did not have its traditional economic base in fishing, like many other villages in the area. Rather, farming and trading were the main economic activities. However, industrialisation had not been favourable to Stenungsund, and as a consequence, the area had to face out-migration and discouraging expectations.

Nevertheless, during the 1950's industrialists began to see the potential for the establishment of heavy petrochemical industries in the Stenungsund area, not least to and because of its natural harbour. The post-war era had seen an increasing demand for plastic, which traditionally had been created by decay products from the wood-processing industry. To meet an increasing demand, raw material for plastic needed to be produced out of petroleum. After much secrecy *Esso*, with the Government's permission[537], decided to build a cracking plant in Stenungsund, which was ready to be used in 1963. This started an industrial 'explosion' in the area, which lead to a heavy in-migration of blue-collar workers. A decade later the municipality had about 15.000 inhabitants. Thus, in the late 1960's Stenungsund became a national symbol of the conflict between industrial progress, work opportunities and economic growth on the one hand, and heavy outcries about the environmental damages caused by this development, on the other; places like Stenungsund were considered to be the 'misanthropic' side of industrial society. Ever since, it has been characterised as a 'Swedish Ruhr' by critics, whereas advocates have argued that Sweden is dependent on its petrochemical industry and that it is better to be able to control its environmental standards than to shut down these industries and let them be relaunched somewhere else.[538]

Today, Stenungsund has about 23.000 inhabitants. Politically, the municipality is currently run by non-socialist parties together with the Greens, but in the previous two terms of office Stenungsund had coalition governments consisting of the socialist bloc and the Centre Party. Despite being a relatively small municipality it is still Sweden's major centre for heavy petrochemical industry. Add to this that Stenungsund is passage of the E6 highway Copenha-

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[536] Hallvarsson & Selander 1974: 10. My translation.
[537] Typical for this era was that the Government appointed where heavy industry in Sweden should be expanded, which was typically in small coastal villages. The Government had the interests of heavy industry in mind, less local oppositions of various kinds.
[538] Hallvarsson & Selander 1974; Berner-Saarikoski 1976.

gen–Gothenburg–Oslo. Then it comes as no surprise that the municipality stands for about 2 percent of Sweden's energy consumption (almost ten times its share of the population), and is the third most CO_2 emitter among Sweden's municipalities. The industry's strong position in Stenungsund is illustrated in the fact that it stands for about 94 percent of the municipality's energy use per capita and 95 percent of its CO_2 emissions per capita.[539] In the mid 1990's the publicly owned housing enterprise collapsed, and the municipality had to take over the company's loans. Hence, "Stenungsund is the most heavily mortgaged municipality in Sweden."[540] Ever since, the municipality has had a rough time economically. Due to monetary cuts the political-administrative organisation is quite parsimonious.

Climate policy in Stenungsund should be understood against this background. It clearly marks current articulations in the climate change issue, but it does not determine Stenungsund's path; the municipality may have had its 'climate awakening' quite late, but it is a local actor determined to do as much as it views possible given the circumstances.

It was not until 2007 that Stenungsund launched its first comprehensive climate strategy.[541] Not that the municipality wasn't aware of climate change or didn't discuss or implemented climate policy measures, but in terms of policy documents and targets, Stenungsund was quite vague in its 2002 Environmental Plan: CO_2 emissions should be "reduced", the share of renewable energy should be "increased", and waste heating should be "used", and so on.[542] Tellingly, apart from a LIP grant for the development of the web of district heating in 1999, the city "has not had resources"[543] to apply for Klimp grants until 2007, an application which was also successful.

What 'is' climate change?

The greenhouse theory has implicitly or explicitly, been accepted by the municipality, i.e., it has hardly been questioned with a single word. However, the current Chairman of the Municipal Council Board said, regarding Al Gore's

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[539] Stenungsunds kommun 2007. Energy use per capita in the industry sector was in 2004 fifteen times higher than the national average. And other sectors were not unnaturally small compared to the country as a whole; rather, concerning transports Stenungsund's energy use was nearly 30 percent above the figures for Sweden. On the other hand, regarding municipal services the city's energy use per capita was only two thirds of the national average (Stenungsunds kommun 2007: 9-11). CO_2 emissions per capita was in 2004 59,3 tonnes, which can be compared to the Västra Götaland County's 6,8 tonnes/capita and Sweden's 5,9 tonnes/capita (Stenungsunds kommun 2007: 31).
[540] Bengt Nilsson, interview 2004. My translation.
[541] Stenungsunds kommun 2007.
[542] Stenungsunds kommun 2002.
[543] Christina Kobel, interview 2007. My translation.

film *An inconvenient truth*, that "it is hardly the whole truth on climate".[544] Yet, nothing else in that interview or other interviews with municipal representatives implied that the greenhouse theory was not taken seriously. The established version of climate change, which means the world (especially the industrialised) has to significantly cut GHG emissions during the twenty-first century, is implicitly or explicitly accepted in relevant policy documents.[545]

In terms of consequences the former Head of the Environmental Bureau, Christina Kobel, ascertained that Stenungsund is founded on an old seabed, which would make it vulnerable if the sea level would rise significantly. Moreover, the fact that the industry is located near the sea makes Kobel see potential threats to the community. Although things such as Al Gore's film, the ruthless tsunami in Thailand/Indonesia (which affected many Swedes during Christmas 2004) and many severe floods in Sweden in recent years have affected people, and made them 'climate aware', Kobel does not see that this has made people or the municipality as such to be aware of what this can imply for Stenungsund. It is as if the issue is too abstract; the long-term perspective has not been institutionalised in the municipality. "One has not started to think that way here, regarding housing and so on."[546] Thus, although admitting that climate change is a severe global problem, local consequences are hardly considered. Instead, Stenungsund concurs in the international (and scientific) discourse on climate change, that other parts of the globe are faced with the most serious challenges. Said the former Chairman of the Municipal Council Board:

> The climate issue is not alarming in Sweden, but it is terrible for countries that disappear and drown. [...] The Maldives' problem is that they will disappear under water. We have to try to bring out which question that is important for the world and put it in a Swedish perspective. What is important here does not have to be important globally.[547]

What Bo Pettersson (s) actually means is not clear here. It may seem that he means that since Sweden does not face such alarming consequences from climate change we do not have to care about taking measures to reduce emissions. But that does not fit in with the rest of his reasoning, nor with other respondents' arguments. Rather, Pettersson here admitted that climate change is indeed a serious threat to many societies in the world, let alone not that big a

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[544] Ove Andersson (M), interview 2007. My translation. The background was that the municipality organised a screening of the film for municipal employees, local environmental organisations and representatives from commercial and industrial life, in spring 2007.
[545] Stenungsunds kommun 2002; Stenungsunds kommun 2007: 30; Stenungsunds kommun 2008.
[546] Christina Kobel, interview 2007. My translation.
[547] Bo Pettersson (S), interview 2004. My translation. The succeeding Chairman of the Municipal Council Board, Ove Andersson (M), used quite similar words (Over Andersson, interview 2007).

threat to Sweden. This is important to bear in mind when we turn to the analysis of Stenungsund's understanding of its responsibility to act on this issue.

To conclude this section, Stenungsund joins the reproduction of the consensual international scientific discourse of climate change, admitting the human impact on the climate system. This is done without clear references to science or by describing the problem very scientifically. Rather, the conclusions of the IPCC, and perhaps Al Gore, are obviously considered trustworthy in the Stenungsund polity. The need to stabilise the concentration of GHG's in the atmosphere and the necessity to reduce emissions is implicitly acknowledged. However, climate change is by and large constructed as a problem that will affect remote parts of the world, but not that alarming for the local community.

Local responsibility for managing climate change

The question is what Stenungsund should do with the knowledge of the greenhouse theory (even if in its most simplified form). The 'fact' of climate change seems to have similar consequences here as in our previously analysed cases; it is something which 'everybody' ought to do something about. This is assumed without considering the potentially negative consequences of climate change for the municipality. As we saw above in e.g. the quote of Bo Pettersson, the municipality was not particularly afraid that it would be afflicted with the most severe effects of climate change. Nevertheless, my interpretation is that Pettersson argued that Sweden and Stenungsund have a responsibility to do something about the global situation, but that it is important how the issue is framed in a Swedish context since the consequences here are not that serious from a global perspective.

Recurrent is the emphasis that climate change is a global issue which first and foremost needs to be managed through international cooperation and agreements. Said the Chairman of the Municipal Council Board since 2006, Ove Andersson (M):

> More or less everyone who works with these issues say that it is of uttermost importance that they are managed globally, since it is a global problem. Of course, it is great if we implement a lot of measures, but at the same time it is not possible for us in Sweden to 'fix' global climate change on our own. We would be bloody naïve if we thought that.[548]

Hence, Swedish and local responsibility in Stenungsund is somewhat conditioned on the existence of serious international efforts. However, the flip side of the coin is something we recognise by now:

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[548] Ove Andersson (M), interview 2007. My translation.

Well, we have extremely good preconditions for reaching these objectives [in Sweden]. And if we cannot deal with them, then it would be difficult for us to say that others ought to deal with them too.[549]

Thus, morally Stenungsund like any other Swedish municipality has a responsibility for reducing GHG's, although it would be quite foolish if Stenungsund or Swedish society unilaterally took such a responsibility. To effectively manage climate change there is a need for international coordination, the argument goes. This leads to pointing out the state as a very important actor, both in international negotiations, and for providing the right incentives domestically, e.g. through the Klimp investment programmes. Ove Andersson (M), who otherwise was prone to emphasise that people have a personal responsibility to act on these issues, also underlined that it was important that the state 'brought home' international agreements and acted domestically:

When these agreements are brought home it is very important that the state takes on the role of a 'pusher', that it pushes the municipalities. [...] If the state should pass on this issue, say that 'it's fine as it is', 'let's take it a little easy here', I think it would be quite negative because it would decrease the pressure on us [municipalities] to do things. So I think it is important that the state constantly maintains pressure downwards, and not drops the issue, so to speak. [...] I don't think it would ground to a halt [locally] but I think the pace would probably be significantly lower. So the state has a very important role here, either we like it or not, if things should come about.[550]

For a city of Stenungsund's size it seems that action by the state equals financial support to large investments, e.g. through the Klimp program. The former Head of Environmental Bureau Christina Kobel explained that:

The municipality hopes that, well the local politicians hope that the climate investment money will not be withdrawn by the state. But rather, that the municipality and others can be given support and help to really make large investments to improve the climate, even on a global scale. I think it is very important that they make sure to maintain to provide this climate money. [...] Especially for these large investments. If we should build a large digester e.g., it would imply very large investments; while at the same time we would get an important environmental benefit. And that would be positive for the municipality, but if we could get support for this we would get a positive measure much quicker. I mean, this would cost several millions[551]

Thus, from the municipal point of view, it would be, if not impossible, much more difficult to achieve such climate measures that require large investments, without financial support by the state. While not spelled out explicitly, there seems to be a clash between the local responsibility laid out by the state, and

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[549] Ove Andersson (M), interview 2007. My translation.
[550] Ove Andersson (M), interview 2007. My translation.
[551] Christina Kobel, interview 2007. My translation.

the municipality's available resources. Moreover, it gets even more problematic since municipalities have demands both from 'below', the citizens, and other legal demands from 'above', the state. That is, municipalities have other obligations which might collide with climate policy when it comes to the financial part:

> And then you have to choose, are we to choose biogas or should we build new preschools or do we need new geriatric cares? You know, it has very much been all about schools and geriatric care recently, and since the community is growing rapidly there are demands. And the municipality can be liable to pay damages if it does not build—e.g. if there is no kindergarten when your children need it in a couple of months. Then it is harsh to say to the public that no, you can't have a kindergarten place because we want to build a digester.[552]

Hence, to some extent local responsibility is conditioned not only on serious international cooperation, but also on appropriate state support, at least when it comes to measures that require large investments.

"The industry built Stenungsund":
Local tension between National Action and Thinking Globally

Stenungsund's heavy petrochemical industry can be seen as both its child of sorrow and its life buoy. In terms of GHG emissions the industry makes Stenungsund rather unique among Swedish municipalities, as we saw above. However, people in Stenungsund are also very aware that

> the localisation of the industry, that's what quite early built Stenungsund, well the whole community actually. It is difficult to move it so to speak, and it has made large improvements all the time, and still do, of course.[553]

Thus, in the eyes of most Stenungsund residents the community is economically—and in the longer run, socially—dependent on the industry. The industry's presence strikingly marks the Stenungsund social structure, i.e. how a normal and legitimate order is represented. Climate responsibility can be taken within the limits allowed by this social structure. Hence, the implementation of climate measures is only possible if it does not threaten the industry's position, but on the contrary takes it for granted and cooperates with it. The picture of the industry is furthermore one of a cooperative partner according to Stenungsund's political leadership:

> The industry works very hard, and every time it is about to reform something it has to face a review, and the demands on them get harsher every time. But if I understand it correctly they don't think of it negatively. Rather, today

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[552] Christina Kobel, interview 2007. My translation.
[553] Christina Kobel, interview 2007. My translation.

everyone is careful with their company name. To be associated with something which disturbs and which is environmentally malign—no company wants to be that today.[554]

Andersson continued by saying that it was his impression that companies work much more voluntarily with these issues today than they did 20–25 years ago. He also thought that the societal debate on environment and climate change, which has escalated in recent years in his view, to a large extent pushes this development forward. Thus, the municipal view of the industry is that of a co-operative partner rather than a troublesome actor hard to control. Indeed, when the Chairman of the Municipal Council Board reflects upon the industry's situation, he understands it as a Win-Win situation.

Above we saw that, at least implicitly, it is taken for granted that Stenungsund should take its share of the responsibility, thus implying an understanding along the National Action story-line. That is, each societal unit (in the industrialised world) should take its share of the responsibility for mitigating climate change. However, the tension between the National Action and the Thinking Globally story-lines is quite obvious in Stenungsund. This is hardly surprising given the industry's strong position in Stenungsund, a position which builds on large GHG emissions. To legitimise the industry's position and practices, the petrochemical industry is rather constructed as a *national* interest, not a local interest.

The tension is manifested in the argumentation around two energy projects in the early 2000's. The first project under debate was a natural gas pipeline running from Trelleborg on the south coast of Sweden along the west coast to Stenungsund at the north end, and was opened in May 2004. Energy company *Nova Naturgas* in 2001 decided to prolong the existing pipelines providing the southwest of Sweden up to Gothenburg with Danish natural gas. Thus the pipeline network would reach Stenungsund in the north. This was publicly welcomed by the Chairman of the Municipal Council Board in Stenungsund:

> We have harbours, railways and highways, and now we also get a natural gas pipeline to the municipality. It is of importance both for the industry located here and for new interested parties. We also see the possibility to start running the municipalities' cars on biogas, and to build a biogas station for vehicles.[555]

This statement nicely fits into a growth discourse, emphasising infrastructure ("harbours, railways and highways") and the industry. But it does not mean politicians and civil servants in Stenungsund are only concerned with growth issues. The natural gas pipeline project is also supported by the municipality with the use of the Thinking Globally story-line: "Globally it will get better, lo-

554 Ove Andersson (M), interview 2007. My translation.
555 Stenungsund's Chairman of the Municipal Council Board, Bo Pettersson, interviewed in Göteborgs-Posten (Andree, *Göteborgs-Posten* 2001). My translation.

cally there will be more CO_2 [emissions]. In total, therefore, emissions will decrease, since motor traffic is the major emission source in the cities."[556] Thus, despite the talk of local responsibility (referring to the National Action storyline), when it comes to the crucial question of natural gas pipelines, which will contribute to local emissions, but undoubtedly also be good for the local industries, it is no longer that relevant to say that each should take their share of the responsibility.

This is perhaps even more obvious when we look at the other project, state owned energy company *Vattenfall*'s plans to burn residual oil from the power plant of the country's biggest petrochemical industry *Scanraff* in Stenungsund, with the purpose to produce electricity. Once again Bo Pettersson's view was that from a local and even national perspective it may be negative, i.e. cause increased emissions, "but globally it may be a good thing." Further, when he explains the relatively large local emissions from industries, he once again 'thinks globally':

> Our establishments are better per produced unit seen from a climate perspective, compared to e.g. Italy. We have increased our CO_2 emissions since we have enlarged the industry and produce more, but CO_2 [emissions] per unit have decreased. If you measure internationally, we are in a good position.[557]

To be clear, the projects referred to here were not a decision for the municipality. But it could nevertheless have opinions, and it probably would have been difficult to launch these projects without the municipality's support. The *Vattenfall* project was finally cancelled, but that was not due to lack of support from the local politicians. Rather, the official reason was the increased price on oil and resistance from the local public.[558]

Since Stenungsund is a centre for heavy industry in Sweden it is consequentially the industry that is most often depicted to have responsibilities for reducing local GHG emissions. As we have seen, this is dealt with a bit ambiguously. A potential way out of this dilemma might be to shift away focus from the industry to the households, which is done by Stenungsund's Energy Adviser, who does not perceive the industry to be the main villain here. Instead, he emphasises the importance of ordinary households and the potentially large energy savings that households can achieve. "We consumers stand for a 1,5 percent increase in the electricity consumption in the last years. It is not the companies, but we consumers."[559] The focus on consumers to some extent probably comes with the Energy Adviser's occupation. Confronting many ordinary households he sees all the potentials in saving energy in people's homes. But he also gets the chance to be worried by many people's urge for conven-

[556] Bo Pettersson (S), interview 2004. My translation.
[557] Bo Pettersson (S), interview 2004. My translation.
[558] Isemo, *Göteborgs-Posten* 2004.
[559] Bengt Nilsson, interview 2004. My translation.

ience, when they e.g. want 'unnecessaries' such as floor heating "just because the neighbour has it".

Besides the Energy Adviser, I find no such official understandings of climate change in Stenungsund. The 'correct' way to understand the problem seems to be to depict the heavy industry as the major problem, but a problem that one cannot easily curb; the industry's importance for the local economy cannot be underestimated. The municipality's administration can of course also contribute to the local objective, which is vaguely adopted among the city's environmental objectives.[560]

Thus, Stenungsund's moral responsibility to contribute to mitigating climate change is on one level considered self-evident, regardless of the social dilemma character of climate change. On another we saw that responsibility was to some extent conditioned on activities in the surrounding world, not least on state support like the Klimp programme. Without such support the municipal engagement would necessarily have to be more modest, due to other important tasks for the municipality. Stenungsund has a special character because of the petrochemical industry. This circumstance makes Stenungsund pending between the National Action and the Thinking Globally story-lines. On the one hand it is admitted that Stenungsund will of course take its responsibility. On the other hand municipal actors 'think globally' when comparing emissions locally with emissions in other countries, with the conclusion that emissions per produced unit are considerably higher elsewhere. That way 'the existing order' can be legitimised. Therefore I argue that the Thinking Globally story-line is slightly more influential in Stenungsund than is the National Action story-line. Recently, however, the latter has gained in influence, following a discursive shift manifested in the 2007 climate policy. This shift will be clearer in the next section. However, the industry's position is not questioned, illustrating its power, and definitely limiting what is 'thinkable' in Stenungsund.

What needs to be done?

As I mentioned earlier Stenungsund's climate policy has been rather parsimonious, in terms of policy documents, until 2007. Municipal representatives were nevertheless all the more proud of a specific measure that the city has taken. The fact that Stenungsund is the residence of many industries has also implied possibilities to implement climate friendly measures. The municipality has "made a big contribution by taking care of waste heat from energy, and built up a web of district heating in large parts of the municipality. This means that from a heating point of view, the municipality has very low emissions", the earlier Head of the Environmental Bureau argued.[561] The Chairman of the

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[560] Miljöförvaltningen Stenungsunds kommun, undated.
[561] Lars Wilke, interview 2004. My translation.

Municipal Council Board, Bo Pettersson (s), made this a moral issue, and concluded that "it would be shameful if we did not work with the enlargement of the web of district heating when we have such unique possibilities."[562] The development of the web of district heating was made possible by a grant from the government's LIP money in 2000. The persuasion of the Stenungsund citizens did not only involve environmental arguments, but rather economic ones; in the longer run it was much cheaper to warm up your house through district heating than by an oil boiler, which was quite common among Stenungsund's many detached houses. The municipality had realised that the industry wasted a lot of energy, which could be used with great environmental benefits.

Taking care of this waste energy, which could warm up large parts of the community, can be seen as a way to legitimise the local industry; it provided something beneficial for the community, even in environmental terms. This is another expression of the Thinking Globally story-line; increased local emissions (by the industry) may be excused if we believe that they will indirectly contribute to decreased emissions globally. Add to this that the industry's emissions in this case imply that other emissions can be reduced (heating).

Some of the initial but not officially labelled climate work was delegated to the Energy Adviser. His work was concentrated on providing actors with information on how they can save energy and thus save some money. The arguments he used did not bear reference to climate change, but rather to people's wallets. The latter is far more passable if you want to affect people's behaviour, the Energy Adviser admitted.[563]

Apart from this Stenungsund's climate policy could best be described as pending in the early 2000's. Back in 2004 the then Head of the Environmental Bureau estimated that the municipality was involved in the climate change issue at an "average" level. But despite this, he concluded that "Well, it isn't anything the municipality actively works with, one can say."[564] The Energy Adviser added that the municipality "is not passive, but not particularly active either."[565] One possible reason for this, according to respondents' narratives, is the recurrent remark that resources do not come with the responsibility laid on municipalities by the government.

The Energy Adviser continued with a conclusion that despite a local political recognition of the problem there is e.g. no Energy Plan, which is demanded by law. To a large extent, this is due to insufficient resources.[566] The Head of the Technical Services Administration agreed on this general picture; the

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[562] Bo Pettersson (S), interview 2004. My translation.
[563] Bengt Nilsson, interview 2004.
[564] Lars Wilke, interview 2004. My translation.
[565] Bengt Nilsson, interview 2004. My translation.
[566] Bengt Nilsson, interview 2004. Stenungsund adopted a mutual Energy Plan and Climate Strategy in 2007 (Stenungsunds kommun 2007).

problem is considered serious, but there are various obstacles, most obviously lack of resources, hindering a whole-hearted work to limit GHG emissions.[567]

The former Head of the Environmental Bureau went even further, and concluded that "realistically, the municipality has very limited possibilities to govern this issue."[568] His view was that because the heavy industry is governed through supervision according to the Environmental Code, the municipality can do little; the problem is that legislation is not precise and inclusive enough. Further, the traffic situation is hard to influence, since you cannot forbid people from travelling by car, especially not as a local government. Improving public transportation can do only a little, Lars Wilke continued. In conclusion, for Wilke and others the policy instruments available for the local level were not considered very effective at this point in time. To effectively govern especially the transport and industry sectors you would need the more structural measures, but where are these to be found:

> A reason [for not engaging in cooperation projects for limiting emissions from the transport sector] is that we have not thought it worthwhile to get engaged since the municipality does not have any possibilities to govern transports. The question is if even the state has them.[569]

Thus, we have two pronunciations of why Stenungsund cannot do much about climate change. There are not enough resources accompanying the state-given responsibilities, and municipalities lack the possibilities to introduce effective policy measures that can make any difference. The Head of the Environmental Bureau nuanced the lament on lack of resources slightly: "The municipality has skimped so much that it practically has difficulties to play any role whatsoever here."[570] He referred to the profound financial cuts in the mid 1990's after the municipality suddenly became heavily indebted. Implicitly, what he said was that the problem is not solely stemming from lack of resources provided by the government. Perhaps the situation in Stenungsund was worse than in other municipalities due to the economic crisis?

Given the above articulations, summing up to the conclusion that 'it is difficult to do anything at all', it seems evident that Stenungsund was not ready to introduce loads of measures in order to reduce local GHG emissions at this point in time. However, this is not the end of the story. Neither is it the hegemonic self-interpretation of what the municipality has done in this field or what it can do. Later interviews as well as policies partly paint another picture.

If the 2002 objective was quite vague, the 2007 was more precise as well as had a more structural approach. Climate policy targets in EU, Sweden and

567 Bo Falkevi, interview 2004.
568 Lars Wilke, interview 2004. My translation.
569 Lars Wilke, interview 2004. My translation.
570 Lars Wilke, interview 2004. My translation.

Västra Götaland were explicitly referred to when Stenungsund launched its own objectives. The overall and long-term vision was expressed like this:

> We want Stenungsund to be among the country's leading municipalities when it comes to saving energy and we shall work for a conversion to more environmental friendly types of energy sources. Emissions [of] greenhouse gases from sources within the municipality shall by the year 2050 be reduced and be halved compared to emission levels in 1990.[571]

More short-term objectives were divided into various sectors. As regards the industry sector Stenungsund aimed at a CO_2 emissions reduction by at least 4 percent in 2015 as compared to the 2004 levels. Interestingly, the year 2004 had the highest emissions levels ever and the target minus 4 percent for 2015 thus implies that emissions levels will still be higher than any other year before 2004.[572] Again, the industry has a privileged position in Stenungsund, and since it stands for about 95 percent of Stenungsund's GHG emissions per capita, the municipality will continue to be a high-level emitter in Sweden.[573]

From the energy sector, the households and the municipal services, the target is to decrease CO_2 emissions by at least 25 percent in 2004–2015. Compared to the 1990's and the years around 2000 the target figures are significantly lower. The transport sector gets a middle range position in terms of ambitions; the target is to stabilise CO_2 emissions at 1990 levels in 2010. The trend thus far had been a stable but not explosive increase of emissions, especially during the late 1990's.[574]

Stenungsund's objective is thus to reduce CO_2 emissions and to strive for a sustainable development. Nearly 100 policy measures in eight areas were introduced where environmental benefits were calculated, institutions were pointed out as responsible for implementation, along with a time schedule.[575] The impression is that of a municipality much more ambitious than before, although GHG emission levels would still not be drastically reduced according to the objectives.

A few years earlier, several policy actors complained that the municipality could not do much because of lack of appropriate policy tools or lack of resources. Now the analysis was spelled out somewhat differently. Regarding the energy sector, widely understood, one was modestly confident that it could be made more effective, not least when building new housing estates. In an expanding municipality like Stenungsund there are great opportunities for this. The existing web of district heating was of help here, and there were plans to expand it even more. This could easily be legitimised since it could be consid-

[571] Stenungsunds kommun 2007: 56. My translation.
[572] Ibid.: 55.
[573] Cf. Crenson 1971; Jones 1975.
[574] Stenungsunds kommun 2007: 55
[575] Ibid.: 56-66.

ered a rational way to take care of energy from the industry that would otherwise just go to waste. To compromise with the picture of Stenungsund as the centre for the petrochemical industry in Sweden just was not a matter of discussion, as we have seen above.

Remember that the transport sector in Stenungsund was considered very hard to handle locally just a few years ago. The climate strategy as well as interviewees, especially the Chairman of the Municipal Council Board, Ove Andersson (M), bear witness of a discursive shift. Transports were still considered hard to manage by the municipality since they are transboundary and the local level has very little or no influence over the private costs of driving a car. However, now there was a belief that through planning and cooperation with other municipalities and state authorities, the municipality actually could influence the way people travel. Ove Andersson explained that according to the municipality's judgement managing the traffic situation is about social planning, a municipal task which seldom gets any extra state financing but which nevertheless is something you should not escape from. Since Stenungsund is expanding there has been a demand for new housing estates. The municipality's strategy has been to make sure to locate these as near as possible public transportation routes. In one case when a new estate was built and a large new population was to be expected in *Hallena*, south of the city centre, the municipality decided to launch a new bus line already from the beginning. That way people would have the opportunity to travel with public transportation before their habits were settled.

> It won't do to supply public transportation three or four years after people have moved in, because then they will have developed their transport habits. The bus is there, it has been there from day one, when people moved in. You are therefore faced with a choice immediately, and I think it is very important that you are there, at the spot, when people get there. Because, you know by yourself that if you have gotten into a routine you think work quite decent, then it takes pretty much to change that routine.[576]

The new bus line meant that Stenungsund now has three local bus lines. When the number of travellers was measured, Andersson continued, one could see that it almost doubled from February 2006 to February 2007, when the new bus line was in operation. According to policy actors in Stenungsund, the major reason for having a functioning local public transportation is first and foremost to shuttle people to the municipality's travel centre. The petrochemical industry notwithstanding, many people commute between Stenungsund and primarily the Gothenburg area and most travel privately. Thus, the municipality's ulterior motive with its transport policy was to increase the share of the population who utilised public transportation for commuting. Part of

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[576] Ove Andersson (M), interview 2007. My translation.

this strategy was to improve the communication between suburbs and the municipality's travel centre.

Another was to improve communication between Stenungsund and the surrounding coastal communities. Also this largely focused around planning and cooperation. The discursive shift notwithstanding, the Head of the Environmental Bureau declared that "it is hard for a small municipality to manage these large transport issues. You have to do that on a larger scale."[577] Here it was obvious that Stenungsund could not govern this on its own, but needed to discuss with neighbour municipalities, the *Swedish Rail Administration* and *Västtrafik*, who is responsible for public transports in the County of Västra Götaland.[578] When I met Andersson in summer of 2007, Stenungsund was in the middle of discussions with other municipalities in the inter-municipal organisation GR, the Gothenburg Region, consisting of 13 municipalities, and the *Swedish Rail Administration* concerning, *inter alia*, the establishments of meeting places for trains (which would significantly decrease delays) and an increased frequency of train services.[579] Early in 2009 the improvements were ready to be launched, and they were shortly thereafter considered quite successful.[580]

Despite these efforts and the concern on the part of the municipality policy actors did not paint a success story. Rather, both Andersson and Kobel lamented that people were hard to influence regarding their transport behaviour, even if it was much easier to launch or even discuss such measures at this point in time than it had been ten or fifteen years earlier. Interesting is that even if the municipality sometimes found it hard to make a significant progress in climate policy, and admitted the almost insignificant importance of what happens in Stenungsund (thus implicitly admitting that they faced a social dilemma), it was seen almost as a moral duty to do what is possible.

> Of course, in a global perspective it may be almost meaningless [what we do here] but if all places around the world do an equal share, I think it will be significant. You can't just sit down and say 'but oh Lord, if we do something it will not have any significance', because if everybody says that nothing will happen. But rather, each and everyone have to take his/her personal responsibility. And it is important to point out that you have a personal responsibility for [the management of] the climate issue. That is, to realise that it isn't someone else who will fix this, but rather; you actually have a personal responsibility for the choices you make.[581]

[577] Christina Kobel, interview 2007. My translation.
[578] *Västtrafik* is half-owned by the Västra Götaland region and half-owned by the 49 municipalities in the region.
[579] Ove Andersson (M), interview 2007.
[580] Andree, *Göteborgs-Posten* 2009: 4; Nyström, *Göteborgs-Posten* 2009: 14.
[581] Ove Andersson (M), interview 2007. My translation.

A clearer reference to the National Action story-line is hard to find. But as we see here it is not only Stenungsund as a collective unit that has this duty, but "everyone". However, citizens need to be informed about what they can do to contribute to the mitigation of climate change. The Environmental Bureau was well aware of that, as pointed out by the Bureau's Head.[582] Information and education was also one of the eight separate policy measure areas in the climate strategy, beside other informative measures in the strategy.[583]

It is clear that Stenungsund over time has incorporated elements of the discourse of ecological modernisation in its way to understand climate change policy. This is not least evident in the more positive attitude towards the possibility to govern the issue locally. Whereas in the early 2000's Stenungsund expressed a rather 'defensive' version of the discourse of administrative rationalism, this has in recent years shifted. The municipality's own responsibility and its possibilities to govern the issue has been upgraded, manifested in e.g. involvement in cooperation projects and own infrastructure initiatives. The importance not only of the municipality's action, but also that of the citizens' has been underlined. Thus, the National Action story-line has gained in prominence, although the Thinking Globally story-line still has a hold of Stenungsund due to the special circumstances of heavy industry. Another important aspect of Stenungsund's self-narrative was the pride in the expansion of district heating, which underlines the power of the norm of saving energy, but also functions to legitimise the industry's position in Stenungsund.

Conclusion Stenungsund

Although being a late starter in climate policy, Stenungsund early on joined the chorus of consensual international discourse of climate change. Thus, the human impact on the global mean temperature due to emissions of GHG's was accepted as a fact. Or put differently: consensual science as interpreted by IPCC was accepted as the legitimate description of the climate issue. Climate change was not viewed as that big a threat to the local community by policy actors, but rather something which could have severe consequences in other parts of the world.

Yet, Stenungsund policy actors constructed the municipality's responsibility to manage climate change as something more or less self-evident. However, the analysis showed a tension between the National Action and the Thinking Globally story-lines in Stenungsund too. But here the latter story-line had a greater grip over local policy. National and regional objectives were not scaled down as in Gothenburg. Rather, Stenungsund's responsibility boiled down to objectives more in line with its own 'special circumstances'. This should be

[582] Christina Kobel, interview 2007.
[583] Stenungsunds kommun 2007: 66.

understood against Stenungsund's identity as an industrial community where the industry's position cannot be compromised.[584] Hence it is practically impossible for Stenungsund to be an average Swedish municipality. While Stenungsund's moral responsibility can be interpreted in justice terms, the protection of its industry is just as well interpreted that way by local policy actors. This was made possible through the construction of the petrochemical industry in Stenungsund as a *national* interest, and the municipality should not be 'punished' because of this by having to undertake the same local objective as other municipalities (are expected to do). Moreover, the Thinking Globally story-line made possible the promotion of the norm of cost-efficiency: Even if various activities in Stenungsund imply increased GHG emissions *locally*, this can be legitimised because these activities replace 'dirtier' activities in other countries, thus making emissions decrease *globally*.

We find two major strategies to reduce emissions in Stenungsund. First, the municipality is quite proud of the expansion of the web of district heating over the last decade. This is by and large run by waste heat from the industry (and this contributes to the legitimisation of the heavy industry), which implies saving energy. Second, the municipality has lately started to work on transport issues, trying to improve public transports. Many residents commute privately and the municipal board finds potentials to change their habits by providing better communication opportunities. This is manifested in measures both intra- and inter-municipally, where especially the latter has turned out relatively successful. Stenungsund also draws on the Mission for the Whole Society story-line, making everybody in the community responsible to think over their behaviour. Thus, although Stenungsund's emissions per capita are about ten times the national average, and this can be attributed the heavy industry (95 percent of the emissions per capita), policy measures are by and large directed at affecting the 5 percent marginal share that is not managed within the EU ETS. Hence, we find a mix of a belief in rational social planning and the provision of appropriate incentives to market actors (including citizens). Together with the emphasis on public-private cooperation this sums up to the articulation of the discourse of ecological modernisation. Before this policy shift I argue that a rather 'defensive' version of the discourse of administrative rationalism was influential in Stenungsund's climate policy.

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The analysis of Stenungsund is summarised in table 6.3 on the following page. I have analysed articulated policies, norms, story-lines and discourses with regard to the questions of what climate change 'is', how the issue of responsibil-

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[584] Cf. Crenson 1971; Jones 1975.

ity is constructed, and what policy actors find necessary and possible to do in order to mitigate climate change.

Table 6.3. Analysis of Stenungsund's climate policy. Articulated discourses, story-lines, norms, and policies.

Questions and analytical dimensions	Discourses	Story-lines	Norms	Policies
What 'is' climate change?	Consensual international discourse on climate change	Human induced climate change through emissions of GHG's Thinking Globally → worst effects in other parts of the world	Stabilisation of GHG concentrations… Emissions reductions	Not applicable
Responsibilities		**Thinking Globally** vs. National action	*Unarticulated but latent:* Cost-efficiency *Unarticulated but latent:* Justice	*The industry:* Minus 4 percent 2004–2015 *Energy, households and municipal services:* Minus 25 percent 2004–2015 *Transports:* +/- 0 1990–2010
What needs to be done?	Administrative rationalism (defensive) Ecological modernisation	A mission for the whole society	Saving energy	Expansion of web of district heating Energy saving Improving public transportation Cooperation with other municipalities and state administrations regarding railway traffic Energy counselling

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

Borås

The city of Borås is located 66 kilometres east of Gothenburg. It is the second largest municipality in the Västra Götaland County with just over 100.000 inhabitants. Ever since the days that Borås was founded in the seventeenth century, it has been known as the 'kingdom of textiles' in Sweden.[585] The area surrounding, commonly called *Sjuhäradsbygden ('Seven Counties Area')*, has for a long time played a role both for manufacture and for trade. *Sjuhäradsbygden* was famous for its peddlers (*knallar*), who early on played an important role for the development of a local market of especially textile handicrafts, smithery and woodwork. The river *Viskan*, running through the city and *Sjuhäradsbygden*, has contributed to the generation of hydro power, important for the development of manufactures and, later on, industries. The textile industry 'revolution' in the late nineteenth century was made possible by the import of cotton from the Americas. During the interwar years the textile industry in Borås developed very fast, which lead to a rapid growth of the population, quite unique for the period.[586] In the beginning of the 1940's Borås had about 50.000 inhabitants, compared to about 10.000 fifty years earlier.

The identity of Borås is still highly marked by the city's textile industry legacy, despite its contemporary smaller importance for the local economy. The textile industry faced a crisis already in the 1950's, when Borås and other Swedish labour-intensive industry had to meet competition from Mediterranean Europe and to some extent East Asia. While most Swedish textile industries practically disappeared the following decades, this was not the case in Borås. However, it had to adjust to changing market conditions and thus became more focused on latter stages in the production processes, like dyeing. The 1970's was also a time when Borås' economy was somewhat restructured. Contributing to this was among other things the localisation of manufacturing industry, e.g. *Ericsson Microwave Systems*, in *Viared* outside the city centre. Moreover, the *Technical Research Institute of Sweden* (SP *Sveriges Tekniska Forskningsinstitut*[587]) was in the mid 1970's relocated from Stockholm to Borås, which generated jobs for Borås. Another important factor was the expansion of mail order companies in Borås, which also contributed to this restructuration of the local economy. The mail order companies had a close connection to the city's textile industry legacy; a lot of what was sold was clothing and other textile products. Nevertheless, the otherwise quite expansive city saw a demographic decrease in the period 1970–1985 by about 10.000 people.

[585] This historical background of Borås is based on Berglund et al. 2005.
[586] At least in Sweden.
[587] From 1993 until the end of 2006 the company, which is 100 percent owned by the State, was called *Sveriges Provnings- och Forskningsinstitut*, and before that the name was *Statens Provningsanstalt*.

A few decades later this competition was enhanced from above all the Baltic States. Hence, the textile industry in Borås is not at all what it used to be. How come Borås still has a strong textile identity, then? The restructuration of Borås has been incremental, but major changes followed from the aftermath of the early 1990's' financial crisis in Sweden. It became obvious that the local industry could not face the competition from especially the Baltic States. Since the textile industry was quite labour-intensive, several companies saw an opportunity in moving production to these neighbouring countries in the former Soviet Union. Since the late 1990's Borås is economically more diverse and not that dependent on the textile industry, a development that started in the first phase of restructuration but now became even more emphasised. Small enterprises are now more common, often with a base in trade, logistics or textiles. Add to this that the *University College of Borås* (*Högskolan i Borås*), founded in 1977, grew markedly in the years around 2000. An important part of the College is the Department of Textiles, which is internationally highly ranked. Thus, Borås is now an economically more diverse city, focused on trade, but it has somehow adjusted its textile industry legacy to contemporary challenges.

Regarding political majorities, Borås has been close to the national pattern. The Social Democrats gained political power in Borås in the early 1930's and maintained it until the elections in 1966. In 1970 there was a dead heat between the socialist and the non-socialist blocs, but from 1973 until 1982 the non-socialist parties were in rule. Then followed a period of fluctuating majorities, but since 1998 there has been a non-socialist majority consisting of the four traditional non-socialist parties (M, FP, C and KD) together with the Green Party and the local party Vägvalet.[588] Interestingly, it seems that the Borås political climate was for a long period (and maybe still is) characterised by a consensual spirit, and cooperation regarding the major political issues. For example, chairpersons of municipal councils were often not appointed by the majority but split up between the two political blocks. This 'Borås spirit', not unlike the 'Gothenburg spirit', was somewhat played down in the 1970's.[589]

What 'is' climate change?

Since Borås started producing policy documents on climate change the truthfulness of the greenhouse theory has not been doubted. The consensual science on climate change has at least briefly been referred to. When Borås in 2003 formulated local environmental objectives out of the national ones, it was explained that the concentration of GHG's in the atmosphere, largely ema-

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[588] Vägvalet was founded by some dropouts from the Christian Democratic Party (KD) in Borås, among others.
[589] Berglund et al. 2005: 248f. However, this consensual spirit has been/is quite common in Swedish municipalities, and is probably not unique for the communities analysed here (cf. Åberg 1998).

nating from the combustion of fossil fuels, contributed to global warming. This could affect biological life and geological processes, and weather conditions will most probably be more extreme. As a consequence, vegetation could be affected. Apart from quoting the national climate policy target formulations, what could be so severe with climate change was not discussed.[590]

This should not be taken as proof that municipal actors did not know the possible consequences of climate change, according to consensual science as interpreted by IPCC. Other sources tell differently, let alone that knowledge has been spread over time. The fact that Borås applied for and was granted LIP money in 1999 indicates that the municipality was aware of what climate change implied, and that it also implied local responsibility. The Head of the Environmental Monitoring Unit, Jonas Edin, who by and large had a critical distance to Borås' environmental performance, testified that the greenhouse theory was definitely structured in Borås:

> I think that [people representing the municipality] really have embraced the problem. Here people believe in the greenhouse theory, if I can put it that way. Extremely few question this phenomenon, that there is a scientific basis for it. And an overwhelming majority thinks that the municipality has to take its responsibility, has to do its share. As far as that goes, we have come pretty far.[591]

A climate strategy launched a couple of years after the 2003 document explained the greenhouse effect and developed the probable consequences from global warming. It emphasised that climate change is a global problem. However, positive as well as negative effects of climate change were discussed, with the conclusion that the negative effects would far outnumber the positive ones, at least globally. Although the risks for Sweden were admitted, positive effects like greater productivity in farming and forestry were also discussed. Nevertheless, the general conclusion was that the complex character of the problem calls for global cooperation in order to mitigate and manage the social and ecological consequences of climate change.[592] The emphasis on the consequences of climate change was slightly more emphasised in the discussion of the 2008 environmental objectives.[593]

Such consequences were sometimes discussed in a geographically general manner, e.g. in terms of rising sea levels, increased amounts of floods, droughts etc. Global climate change or consequences of climate change in other parts of the world were considered—sometimes implicitly (e.g. famines, armed conflicts), sometimes explicitly. This was confirmed by my interview-

[590] Borås stad 2003a: 7.
[591] Jonas Edin, interview 2007. My translation.
[592] Borås stad 2005: 2.
[593] Borås stad 2008a: 13.

ees, e.g. the Local Government Commissioner Morgan Hjalmarsson (FP) and the Head of the Environmental Services Committee Inge Pettersson (Vägv):

> Globally it is a huge problem. For Borås it may not be that big a problem, of course.[594]

> I think we should look at climate change more globally. Locally it is—and this is from my point of view—locally it is more storms, more rain, more unstable weather that we will notice here in Borås. And of course, we can worry about that, but we are at a pretty high altitude. I think that every politician, or most politicians are aware of that today. But the local effects on Borås is probably not acutely dangerous, apart from heavy storms and that. On the other hand it is alarming globally, if you look at all the things such as melting ice, warming, landslides, rainstorms, weather phenomena and so on.[595]

These statements, which no doubt represent the common understanding of the issue in Borås, were contradicted by the Vice Chairman of the Municipal Council Board, Social Democrat Ulf Olsson, who explicitly referred to the Swedish Government Official Report on the threats and opportunities following climate change:

> Well, if you look at the national report on climate and vulnerability, it is emphasised that Borås is one of the most vulnerable municipalities in the country when it comes to climate change, according to the long-term investigation in the report that SMHI[596] commissioned. We will get a heavy increase of rainfall in this area, and drastically higher water-levels, well this concerns the whole of Western Sweden. [...] So we are one of the parts in Sweden that will be most afflicted, Western Sweden, and particularly Borås and *Sjuhärads-bygden*. Unfortunately I don't think that many are aware of this, that this is the scenario we have ahead of us.[597]

Olsson was well aware that the most severe consequences from climate change probably will take place in other parts of the world, and that people in general are well aware of the general picture of *global* climate change. But because most people are not aware of the local vulnerability, the issue is not concrete enough:

> I think most people, after the recent [media] debate, have realised that climate change is a problem. They see the broader picture, which is also very important, with melting ices and so on. But I don't think people know that well how this will affect their own municipality. I simply don't think they re-

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[594] Morgan Hjalmarsson (FP), interview 2007. My translation.
[595] Inge Pettersson (Vägv), interview 2007. My translation.
[596] SMHI = Sweden's Meteorological and Hydrological Institute (Sveriges meteorologiska och hydrologiska institut).
[597] Ulf Olsson (S), interview 2007. My translation.

alise that. Because if they would embrace this knowledge, they would also see this more clearly, that it implies this and that for Borås.[598]

It seems clear that Borås as a municipality and Borås citizens as individuals understand climate change as a global problem, according to Olsson. I interpret Olsson's objections as saying that if you view climate change as an abstract problem far away and have an unclear picture of how it will affect the local area it also affects your perception of responsibility and willingness to act.

Borås thus draws on the consensual international discourse of climate change in an 'impulsive' way, much like the other institutions analysed in this chapter. That is, scientific conclusions or explanations are not very elaborated. Rather, the general conclusions of this discourse are taken for granted, perhaps because their advocates are perceived to be trustworthy. It is also clear that the city government 'thinks globally' regarding what climate change 'is'. It is by and large a global problem, but due to its global character it means that all societal units around the globe can contribute to the mitigation of climate change. That the reduction of GHG emissions and the stabilisation of GHG levels in the atmosphere are normative guidelines is evident.

Local responsibility for managing climate change

As indicated in the former section it is practically seen as self-evident that Borås has a responsibility to contribute to managing climate change. My impression is that the issue is almost not even a matter for discussion. But let us investigate this in more detail.

When dealing with climate change in the 2003 environmental objectives for Borås, the responsibility aspect was expressed rather vaguely, via a discussion of what the problem demands from human societies: "To decrease emissions we need to replace fossil fuels with renewable ones, i.e. exchange oil with biofuels, and be open for energy technical solutions." The next moment the city government agreed on the Swedish position that Sweden should 'move ahead', and thus have greater ambitions than what is demanded by EU decisions.

> The Kyoto Protocol from 1997 and settlements within the EU allow Sweden to increase its greenhouse gas emissions by 4 percent until 2012. This is a low level of ambition and Sweden has instead committed to decrease emissions by 4 percent compared to 1990.[599]

The city government simply adopted the national government's minus 4 percent objective for 1990–2010. Discussing energy policy in relation to climate change, the 2003 document emphasised that "achieving a sustainable development within the energy field is a task for everyone; individuals, politicians,

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[598] Ulf Olsson (S), interview 2007. My translation.
[599] Borås stad 2003a: 7.

municipalities, companies and organisations", even though the Municipal Council Board was depicted to have the overall responsibility.[600] This broad inclusion has been recurrent, and Borås repeatedly addressed its citizens with the message that contributing to the mitigation of climate change is something everyone should be concerned with, as well as information on what individuals can do. The city even introduced an environmental objective of its own when translating the 16 National Environmental Quality Objectives into Borås' circumstances, namely an objective focused on knowledge. Hence, it was considered important that citizens had a proper knowledge in environmental and sustainable development issues if the other environmental objectives were to be met.[601] However, the Head of the Environmental Services Committee admitted that this target was difficult to measure.[602] The broad distribution of responsibilities was not accompanied by precise responsibilities for implementing concrete measures, at least not in the 2003 Environmental targets, something which the Head of the Environmental Monitoring Unit lamented.[603]

Nevertheless, the city government's sense of responsibility is manifested in the ambition to "always strive for living up to or top the demands of law."[604] In the opinion round-up for the settlement of the most recent climate objective formulations a common critique was that targets were not ambitious enough: "Generally, the remarks we got concerned that one thought we could be more ambitious", Jonas Edin commented. When settling the local climate target, percentagewise, the benchmark was the national targets. The local figures could thus possibly be different.

> Well, it has to point in the same direction. Often it gets more ambitious. That is the typical solution. [...] It has never been likely to cut the [national] target. To the extent you can transfer a national figure to a local, politically you always rather want to exceed it. If it says minus 4 percent nationally, then you probably want to put it minus 5 here or something like that.[605]

The national urge to be a good example obviously has its resemblance at this local level. At the rhetorical level, climate change did not seem to imply a collective action dilemma, quite the contrary. The Vice Chairman of the Municipal Council Board pretty much summarised the way policy actors in Borås seemed to understand the local responsibility to manage climate change.

> But I mean... you have to set a good example. Everyone has to try to do their best possible, both as individuals of course, but also as a municipality. So of course, every little measure implemented in Borås will lead in the right direc-

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[600] Borås stad 2003b: 5.
[601] Borås stad 2003a; Borås stad 2008a.
[602] Inge Pettersson (Vägv), interview 2007; Cf. Jonas Edin, interview 2007.
[603] Jonas Edin, interview 2007.
[604] Borås stad 2008a: 2.
[605] Jonas Edin, interview 2007. My translation.

tion. Even if the measure in its own right is marginal, i.e. from a broader perspective may have a small impact, it nevertheless has an impact, howsoever a little one. And above all, you can set a good example, show that it actually is possible. And if you then can make all the country's municipalities to act from this point of view, then it will have a considerably greater impact. Can you get all municipalities in Western Europe to act upon this you will get a very big impact, and the whole world's municipalities... So you have to see it as an ongoing process where we try to set a good example.[606]

Apart from the emphasis on 'everyone's' responsibility, including both individuals and the municipality *per se*, the 2008 local environmental objectives took the national objectives as a point of departure. Borås chose to comprise them into six objective areas, thus emphasising the sometimes overlapping character of environmental problems. Thus, energy and traffic were dealt with together, since they both have to do with emissions into the air/atmosphere. By contributing to the management of climate change one would also contribute to e.g. reducing acidification or emissions of other particles injurious to people's health.

In terms of climate objectives the 2008 document was more elaborated than the 2003 document. It consisted of targets for 2010, 2015, 2020, and 2025, and was sometimes divided into general targets and targets for the transport sector. The most interesting thing with the general targets (i.e. regarding total CO_2 emissions) was that they were now expressed in per capita terms. Regarding reductions 1990–2010 the aim was to reduce annual CO_2 per capita emissions by 30 percent. The city government proudly established that local CO_2 emissions per capita had been reduced by 23 percent during 1990–2004. The aim was that CO_2 emissions should be 3,1 tonnes per capita/year.[607] Both the targets themselves and that they were expressed per capita-wise is quite radical compared to the other institutions analysed in this thesis. There were also explicit references to what IPCC considered sustainable per capita emissions.[608]

In Borås the city's responsibility is not debated at the political level. If anything is debated it is whether objectives are ambitious enough. Thus, the National Action story-line prevails in Borås. The normative guiding star is to set a good example. I argue that this norm is underpinned by another, which is not articulated, but rather latent: the norm of justice. Permeating the argumentation is the perception that Borås—like any other city in the industrialised world—has a moral responsibility to do its share, despite the fact that the worst effects of climate change will afflict other parts of the world. Skipping this responsibility would simply be unjust.

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[606] Ulf Olsson (S), interview 2007. My translation.
[607] Borås stad 2008a: 14, 38.
[608] E.g., Borås' aim is that in 2025 local CO_2 emissions are 1,8 tonnes per capita/year, which can be compared to the recommended 1,6 tonnes worldwide by IPCC (Ibid.: 38).

What needs to be done?

"Essentially I am a peddler (*knalle*) and often environmental friendliness and economic thinking go hand in hand."[609] The Win-Win understanding of caring for the environment and striving for economic gains is quite clear from this quote. This was also a pattern in the material analysed. However, it had not always been like that. Jonas Edin at the Environmental Monitoring Unit bore witness of this shift:

> JE: It's obvious that this 'climate thinking' has got a breakthrough. I have to say that, it has broken through by and large in all administrations, from what I can see.

> MZ: You said you have been working in the municipality since 1996. Can you see any difference, and how big is it in that case?

> JE: Well, it is a substantive difference compared to -96. At that time I perceived Borås as quite stuck in... that one was a couple of decades behind other parts of Sweden. I wouldn't say that Borås was at the very end, but definitely below average. There were old attitudes left from the remainings of the old industry too, which were alien in other parts of Sweden, I felt, but that is a subjective view.

> MZ: You're not from this area, are you?

> JE: No, I'm from the Gothenburg area, and I have seen other things, so to speak. I felt that there was kind of a stinginess here, an unwillingness to... because one was probably simply afraid of costs. Today, thank God, there is economy in thinking over one's choice of fuel, so we are pulled in the right direction. [...] So I think it brings with it something positive, that it is simply more expensive to be environmentally unfriendly. I think it brings with it a change of attitudes as well. It's not only the 'wallet question'. But we wouldn't have been able to change this from within. And would it be cheap with oil, we wouldn't have had a chance.[610]

This implies a gradual transition from the Sacrifice story-line to the Opportunity story-line. When faced with the problem of climate change, and not least the measures commonly regarded as necessary to overcome this problem, many actors perceived this as a sacrifice. Edin understands this against the social structure of the local community; attitudes left from the remainings of the old industry. However, the more these actors realised that taking climate friendly measures could constitute a Win-Win situation, climate policy could thus be viewed through the window of opportunity. I argue that this construction of climate policy distinguishes the city government of Borås from the other municipalities studied. Here I find the Win-Win story-line more salient.

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[609] Interview with the former Chairman of the Municipal Council Board, Björn Bergquist (M), in Borås stad 2007. My translation.
[610] Jonas Edin, interview 2007. My translation.

Despite this observation by the 'outsider' Edin, it is striking that among Borås' policy actors there is a widespread self-image of Borås having been out early in taking various measures for the environment.

> Our long-term work on the environment is often mentioned. One example is that we have merged our energy and waste management in one corporation— *Borås Energi och Miljö AB*. This effort makes it possible to optimise these activities and get an environmentally friendlier city into the bargain.[611]

> Well, the climate issue is important, it has been important for Borås for a long time, I have to say. I worked with these issues long before I entered the Environmental Services Committee [in 1998], a really long time before that. [...] And Borås took decisions quite early, that we should sort out our refuse, I mean you can sort out this to some extent by yourself.[612]

> Local environmental issues are not discussed much, actually. It's more national and international aspects that are discussed if you read letters to the editor or debate articles. And I think that it may be because we have been well to the front with these things, we have been working well with it.[613]

> The journey towards a sustainable Borås started early. Via municipal initiatives important steps towards adaptations to the natural cycle and sustainable development have been taken. Borås is a forerunner regarding preseparation at source, bio-fuels and public transports.[614]

Such early initiatives were understood to be the fruit of cooperative efforts between the city government and local commercial and industrial life. "Cooperation between the business world and the municipality has lead up to several successful projects with the focus on sustainability and considering the natural cycle."[615] Once again, such understandings bear witness of a belief in the Win-Win and Opportunity story-lines.

The Win-Win situation of climate policy measures in Borås is manifested most prominently in the city's production of biogas. Policy documents and actors quite proudly speak of the expansion of the web of district heating as well as the production of biogas for vehicle fuel. These bio-fuels are largely made out of renewable resources, household waste and at the municipal sewage disposal plant.[616] Borås has also applied for and was granted government support through the LIP (1999) and Klimp (2006) programmes, to a large extent (especially in the Klimp grant) for measures related to expanding the bio-energy

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[611] Interview with the former Chairman of the Municipal Council Board, Björn Bergquist (M), in Borås stad 2007. My translation.
[612] Inge Pettersson (Vägv), interview 2007. My translation.
[613] Morgan Hjalmarsson (FP), interview 2007. My translation.
[614] Borås stad 2005: 7. My translation.
[615] Ibid.: 10. My translation.
[616] Borås stad 2003b; Borås stad 2003a; Borås stad 2005; Borås stad 2008a.

production, including the web of district heating. In the words of the responsible local government commissioner Morgan Hjalmarsson (FP):

> I think we have come pretty far in Borås in a number of ways. We have an energy company that does not burn fossil fuels at all... well we have a stand-by liquified petroleum gas tank. Otherwise we mostly burn waste and pellets. That way I think we have taken a big responsibility in the climate issue. At *Sobacken*, where we take care of our refuse, we produce biogas out of—well, we sort out the refuse in black and white plastic bags as you may know. And at the disposal plant we also produce biogas which we use for running our buses and some municipal vehicles.[617]

The Head of the Environmental Services Committee Inge Pettersson (Vägv) by and large joined this appraisal:

> Well, today you could say that to 95 percent we heat with bio-energy or renewable energy, waste and refuse. Because the large part of what we heat the municipality with is chips, bio-energy. That is our circular flow.[618]

A partly different story was told by the leader of the local opposition, Ulf Olsson (S), who thought that the city government and especially the city-owned energy company have been passive, and not taken advantage of the situation when many people were on the point of abandoning their oil boilers.

> Large customers have been connected to the district heating plant. That is, industries, large dwelling areas have often been connected. But when it comes to small houses one has been very passive. Now the last year one has started to get going with a quite extensive expansion, which implies that more [houses] are connected. But unfortunately one has also lost many customers throughout the years, when they would have had the opportunity to change over to district heating. They have chosen other heating systems, it could e.g. be geothermal heating, which is quite common, and pellet is another. And of course, if you look at geothermal heating it is not—compared to our district heating, when it will be totally fossil-free, you have to admit that it is a much better alternative than geothermal heating. At least that's my point of view. [...] Unfortunately pretty many have taken own initiatives to find alternatives, when district heating has not been available.[619]

Whereas Olsson complained about the city government and its energy company being passive, Inge Pettersson, who also admitted that things were not as good as he wished regarding the affiliation to the web of district heating, instead blamed the state. According to him, the state should have governed this more forcefully instead of adhering to the "principle that each and everyone choose his own energy system." Instead, he argued, the state "should have

[617] Morgan Hjalmarsson (FP), interview 2007. My translation.
[618] Inge Pettersson (Vägv), interview 2007. My translation.
[619] Ulf Olsson (S), interview 2007. My translation.

given the municipalities the right to decide over the energy infusion". People have started looking for alternatives, e.g. drill for geothermal heating, and once they have invested in that they are not interested in changing over to district heating, and the energy company is not interested in supplying district heating "on a street where seven out of ten have drilled for geothermal heating". Nevertheless, even if he complained about the lack of legal room of manoeuvre for the municipality, Pettersson contemplated that "it might have been much better if we had put in enormous resources at that time, spent money and expanded the web of district heating even more forcefully".[620]

Regardless of the perceived downsides of the energy policy it is generally held up as the area where Borås has done and can do most in climate policy. However, Morgan Hjalmarsson (FP) nuanced the prospects for walking the bio-energy path.

> Is it a good thing to import ethanol from Brazil or, like our district heating plant do, import pellets from Brazil? Is that the right way to go? [...] We were among the first municipalities who burned pellets. At that time it was very easy to get raw material. But now every municipality wants to burn pellets. Then it becomes more expensive in Sweden, which leads to import from other countries. [...] Well, nowadays we try to burn more waste and refuse, but I have a feeling we are at the same point with that, that it gets a scarce commodity. And what happens then, if you struggle to import refuse? Is that a good thing?[621]

The above discussion of bio-energy partly concerns the transport sector too. But transports are generally considered much harder to govern locally, since municipalities often lack the opportunity to launch appropriate policy measures and because it concerns individual behaviour. We recognise this pattern from all other analysed institutions.

The transport objectives have been quite vague. The 2003 environmental objectives set no emissions target. Instead, Borås aimed at having 16 percent of its citizens using public transportation in the population centre and 12 percent in the rural areas until 2005. The target for 2010 was 19 percent and 13 percent respectively.[622] According to Jonas Edin there were no figures describing travelling patterns in the city, but when I interviewed him he had just got the figures for *Sjuhäradsbygden* as a whole (the city centre and the rural areas) and according to those 8 percent used public transportation. "Well, that's not very impressive". He estimated that the targets were thus unrealistic to reach, although they were not very ambitious.[623] In 2008 these target descriptions were deleted. Instead, the aim was a 20 percent reduction of CO_2 emis-

[620] Inge Pettersson (Vägv), interview 2007. My translation.
[621] Morgan Hjalmarsson (FP), interview 2007. My translation.
[622] Borås stad 2003a: 33.
[623] Jonas Edin, interview 2007. My translation.

sions from the transport sector by 2015 compared to the 1990 levels, i.e. a not insignificant reduction.[624]

The prospects for having a successful transport policy, from a climate policy perspective, depend on whether we look at the city's internal activities or at the private sector. The city services are perceived much easier to control. For example, the city has a travel guideline for its employees, which concerns both principles for purchasing vehicles, and what vehicle to use when in need to travel (walking, bicycling, using public transportation, using a car [run on renewable resources] from a car pool, and so on). Municipal employees should as far as possible avoid travelling in their private cars when in duty.[625] However, some of the city administrations were sceptical about the feasibility of these principles. That is, they were considered desirable in theory, but hard to implement for practical reasons.[626] The internal work is considered easier than influencing inhabitants because the city government can decide what kind of vehicles it uses not least through purchasing as a policy tool:

> It is called attention to this thing with vehicles, and I think there is a political pressure that we should exchange them as far as possible. I think we will manage the passenger cars quite easy, perhaps with the exception of some special vehicles for the home-help service or vehicles that need to be adapted for the disabled.[627]

Apart from being easier to influence the city's internal transport behaviour than the citizens' Jonas Edin contemplates that it may indirectly affect individuals, since the city employs about 10 percent of Borås' inhabitants:

> If your employer commits to purchase clean vehicles you may start thinking to get one yourself when it is time to buy a new car. Moreover, the city can this way actually help creating a market for e.g. ethanol vehicles in Borås. We purchase hundreds of vehicles, and then of course it will get cheaper for me as a private person to buy via some kind of local collective agreement.[628]

This does not obscure the general local conclusion that GHG emissions from private transportation, and private travelling patterns, are perceived to be quite difficult to govern locally. To a large extent this is because structural policy measures like carbon taxes are not available locally. The city government has provided two gas stations for biogas but these can do little to affect the spread of cars run on biogas. If there are no or few biogas cars available on the market it does not matter if biogas is available. Ulf Olsson (s) said that

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[624] Borås stad 2008a: 14.
[625] Borås stad 2008b.
[626] Borås stad 2006b.
[627] Jonas Edin, interview 2007. My translation.
[628] Jonas Edin, interview 2007. My translation.

Volvo has signalled that they are no longer interested in using biogas in their engines. So, we have to wait and see how the future for biogas will be, but we can appropriate relatively much when it comes to our own bus company, *Borås lokaltrafik*, whose buses run on biogas to a large extent.[629]

Moreover, Jonas Edin ascertained that "if everyone in Borås would get a biogas car then it would be a problem", because there simply is not enough biogas available to cover such a demand. Besides the production of biogas, which could potentially influence individual behaviour, the city can basically work with physical planning and public transportation. The city has invested quite a lot in bicycle lanes, which got granted by the LIP programme in 1999. Getting the citizens to abandon their cars in favour of using public transportation has proved to be difficult, as implied when I discussed the climate policy targets above. Despite a functional public transportation system it seems difficult to get people to travel collectively. One reason for this is that it is quite easy to travel by car in central Borås due to the fact that the motorway R40 cuts right through the city.

> We have a motorway that runs right through the city, which facilitates all communication from east to west in the city. This makes us one of the cities who have the fastest potential of communication for private cars because you go out on the motorway and drive 90 kilometres and then you are on the other side of town in practically no time if you're going to the *Viared* industrial area for example. And this makes it difficult to compete for the bus traffic.[630]

Traffic congestion is thus not a major problem in the eyes of the Borås citizens, a problem which is probably more acknowledged in e.g. Gothenburg. However, it is not only relatively easy to travel by car in Borås, but transports are essential to the structure of the local economy, where mail order companies and haulage firms are important. Their activities are to a large extent based on transports.

> Well you couldn't say that there is much high-tech here. It hasn't been that much inflow of high-tech companies, actually. Rather, we have seen more of storage and haulage activities. [...] So it has become more transport intensive, that's what you can see, that transports to and from Borås tend to increase. You can actually see that on the road without measuring it. There are a lot of heavy transports.[631]

In this articulation the transport sector is the child of sorrow in Borås. However, it is not constructed as a major problem by the city government. This may seem a bit contradictory, given the infrastructure's character, e.g. with a

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[629] Ulf Olsson (S), interview 2007. My translation.
[630] Ulf Olsson (S), interview 2007. My translation.
[631] Jonas Edin, interview 2007. My translation.

motorway cutting through the city, which makes private travelling quite easy, and the development of public transportation difficult. Add to this the local economy's dependency on transports, and we understand both the difficulty to radically change this pattern, but also that it is not viewed as a major problem. What is more, as the data shows, many actors in Borås have come to view climate relevant policy measures as an opportunity. For example, haulage companies have all incentives in the world to cut their emissions—and thus their costs—whether that is by changing fuels or vehicles, or designing their logistics smarter. All this does not mean the city government and the administration is not occupied with the traffic situation. Apart from some infrastructural measures, the city government tries to reach citizens through information. As we remember from above information in various forms is key in Borås' environmental policy, since one has launched an own environmental objective regarding knowledge.

My interpretation, which is in line with one of my main arguments, is that structural changes (e.g. the price on oil) together with a change of attitudes ('we should rely on renewable energy instead of fossil fuels') contribute to a possibly more long-term structural change. It is not only the price on oil that matters, although important, but also how actors understand their situation; who they are and their view of a legitimate social order and what actors that are legitimate in that order. The construction of the Win-Win situation is not simply about interests. At least as important is the valuation of 'the climate'. In other words, to say that actors are merely guided by interests is not enough of a clue. What is more interesting is how their interests are constructed. In this case it seems that interests have developed from simple economic interests, implying that 'we don't want to change', to the acknowledgement of the legitimate in taking climate measures, implying that 'we do want to change'.[632] Cutting one's costs (of e.g. fuels) ought to be an incentive to actors all the time. Thus, there must be something more in the social process of going from a construction of climate policy as a Sacrifice to an Opportunity than merely the oil price. Depending on which story-line actors cling to, their view of a legitimate social order probably varies.

Conclusion Borås

The construction of what climate change 'is' follows a similar pattern in Borås as in the other polities analysed. Thus, policy actors in Borås understand climate change in line with the consensual international discourse on climate change. According to this discourse humans are causing climate change through the emission of GHG's, which are concentrated in the atmosphere and

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[632] This is especially true for market actors, which Edin had in mind above. The city administration seems to be guided by more pro-social norms, implying a different incentive structure, cf. von Borgstede, Zannakis & Lundqvist 2007.

thus contributing to a rising mean temperature on the planet. The city government understands this to lead to severe consequences especially in other (poor) parts of the world. However, the leader of the local opposition acknowledged the negative consequences that are expected in the Borås area, and argued that this is generally not known by policy actors and citizens. Nevertheless, to overcome the problem the level of GHG's in the atmosphere need to be stabilised, and for this a drastic reduction of GHG emissions is needed.

But who should do this? Well, Borås does not deviate from the pattern found throughout the study. The city government recognises that the moral responsibility of Borås to contribute to the mitigation of climate change is quite self-evident. The case for a city like Borås, which is part of a rich society like the Swedish, is to set a good example by showing that such a city can and also does something. Underlying this argument is the notion that this is the only just thing to do given that rich countries have developed while emitting GHG's, whereas poorer countries that have not contributed to the problem that much have to face the worst of climate change's effects. This construction is similar to that of the Swedish state, although not equally elaborated. Thus, the National Action story-line is reproduced in Borås, and is moreover quite uncontested. The focus on moral responsibility and to set a good example is in line with a civic environmental discourse. The urge to formulate local targets per capita-wise from 2008 is also in line with this discursive position. However, elements from this discourse are not articulated very loudly, and what is more, it cannot be argued that Borås generally embraces this discourse's analyses. Rather, as will be clear below, the social analyses underlying the city government's construction of climate change are generally close to the discourse of ecological modernisation. But importantly, responsibility is not constructed using elements from the discourse of ecological modernisation. Rather, I argue that an 'impulsive' version of civic environmentalism informs Borås' construction of climate responsibility.

Contributing to the mitigation of climate change is not only considered a moral responsibility, it is also constructed as an opportunity. The analysis suggests that there has been a gradual shift from emphasising the Sacrifice story-line to emphasising the Opportunity story-line. Much of climate policy is either about saving energy through more efficient use of it, or switching over to non-fossil fuels. Both ways imply reduced costs, e.g. when it comes to abandoning oil for heating. Thus, the notion that caring for the climate is economically advantageous (i.e. you can save money by being climate friendly), summing up to the Win-Win story-line, has got structurated in the Borås polity. This is also institutionalised in policy, manifested in the city's production of biogas and the expansion of the web of district heating, which is run by waste and refuse. Although the production of biogas is for running vehicles the transport sector is not that easily managed. Partly because there is not biogas enough for solving the problem, neither are there enough vehicles that can be run on biogas. Moreover, Borås is a quite car friendly city and making people

using public transportation is easier said than done (converting intra-municipal activities is much easier). The city government sees few other options than rational planning of infrastructure, informing citizens about their moral responsibility and the advantages of travelling collectively, and 'involving the whole society' in climate politics. That is, rational planning is not merely about the city government deliberating, but rather deliberation between public and private actors. Hence, climate policy in Borås is formulated while reproducing the discourse of ecological modernisation.

<p style="text-align:center">*　*　*　*　*</p>

The Borås analysis is summarised in table 6.4 below. I have analysed articulated policies, norms, story-lines and discourses with regard to the questions of what climate change 'is', how the issue of responsibility is constructed, and what policy actors find necessary and possible to do in order to mitigate climate change.

Table 6.4. *Analysis of Borås' climate policy. Articulated discourses, story-lines, norms, and policies.*

Questions and analytical dimension	Discourses	Story-lines	Norms	Policies
What 'is' climate change?	Consensual international discourse on climate change	Human induced climate change through emissions of GHG's Thinking Globally → worst effects in other parts of the world	Emissions reductions Stabilisation of the level of GHG's in the atmosphere	Not applicable
Responsibilities	(Civic environmentalism)	National Action	Setting a good example Unarticulated but latent: Justice	*Target formulated in 2003:* Minus 4 percent emissions in 1990–2010 *Target formulated in 2008:* Minus 30 percent per capita emissions in 1990–2010 (= 3.1 tonnes of CO_2 emissions per capita/year)
What needs to be done?	Ecological modernisation	National Action Opportunity Earlier: Sacrifice Win-Win Situation	Rationality Planning Cost-efficiency Consensus	Local biogas production Web of district heating run by renewable energy sources Information

Note: **Bold** text implies institutionalised discourse, story-line, norm or policy, when there are others structurated.

We have seen in chapters 4–6 that the discourses, story-lines and norms that become salient in the analysed data depend on what analytical dimension we focus on. This holds also when analysing sub-national climate policy. First, the consensual international discourse on climate change—characterised by a scientific language—is mostly drawn on when sub-national actors discuss what climate change 'is'. Interestingly, the established truth of climate change, including what causes it and its possible consequences, is hardly questioned with a single word within the analysed political discourse. This is in itself a fruitful base for promoting policy measures in order to reduce GHG emissions. IPCC thus seems to be viewed as a legitimate and legitimising institution in that its conclusions are easily accepted; on this we find almost total consensus.[633]

Further, climate change is at all analysed institutional levels understood as a phenomenon that will imply severe consequences somewhere else (i.e., in poor and vulnerable parts of the world). The consequences for Sweden and the local area are either not elaborated or not considered that serious. The only exception to this was the Vice Chairman of the Municipal Council Board in Borås who emphasised that according to the Swedish Commission on Climate and Vulnerability Borås and Western Sweden will have to face some severe consequences following climate change. However, this was far from a structurated interpretation in the Borås polity. Likewise, the former Head of Environmental Bureau in Stenungsund argued that policy actors and citizens in Stenungsund are generally not aware of the local consequences of climate change.

Second, the scientific understanding is less relevant when climate change is discussed in terms of responsibility. The latter seems more relevant to discuss in terms of moral judgement. Thus, the tension between norms of cost-efficiency and justice, which coincided with the Thinking Globally and National Action story-lines, was apparent sub-nationally too. However, I was struck by the almost unconditional acknowledgement of the local level's own moral responsibility. This was even stronger than at the national level. Despite the social dilemma character of climate change, and the theoretical incentives for local polities not to contribute to the collective good, several local policy actors were quite provoked and puzzled when confronted with this logic. The common understanding of climate change is that it is self-evident that everybody—including municipalities—should do what they can to manage the problem. However, this can be negotiated through the use of the Thinking Globally story-line and the norm of cost-efficiency, as we saw especially in Stenungsund, but also in Gothenburg.

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[633] If we would go outside the political discourse on climate change—let's say to think tanks or paper editorials in the major newspapers—I guess we would find other story-lines articulated, questioning the 'established truth'.

Regionally, the County Board joined the National Action story-line whereas the Regional Council did the same more implicitly (the Regional Council does not have the mandate to set regional policy objectives). Locally, Borås followed a similar pattern as did the County Board and Sweden as a nation (at least the latter's institutionalised policy). The National Action story-line was embraced without really considering the Thinking Globally story-line, which is common in climate discourse. Both Gothenburg and Stenungsund were vacillating between these different constructions of climate responsibility, although only Stenungsund leaned more towards the Thinking Globally story-line.

To Think Globally in terms of responsibility has implied that one found the scaling down of national quantitative objectives irrelevant. This does not mean that local responsibility was not admitted, but that one embraced the idea that cutting emissions should be done according to the norm of cost-efficiency. Thus, it does not matter where on the planet (or within Sweden) emissions are cut. More important is that *global* emissions are reduced. That way local emissions can be legitimised, since they may imply increased emissions locally, but decreased emissions globally (i.e., if they replace or outcompete more GHG intensive activities somewhere else).

Third, I investigated what these sub-national public institutions found necessary and possible for them to do in order to contribute to the mitigation of climate change. A general conclusion is that to some extent all analysed sub-national public institutions vacillate between two rather different discourses when it comes to launching policy measures.

On the one hand some institutions recline on a traditional image of the public as representing a rational and potent bureaucracy that can plan and consequently build the desired society (administrative rationalism). This is especially the case for the County Board, whose main tasks are supervision and the weighing of conflicting interests. The municipalities show some signs of clinging to the discourse of administrative rationalism. For example, Stenungsund did it when the municipality's administrations were quite resigned a few years ago. At the same time the Thinking Globally story-line was most pronouncedly clung to. A more active tuning in to the National Action story-line came later, when the municipality saw that it could try to do something in climate policy.

On the other hand, in all cases we find clear indications of 'the new' environmental discourse which puts much more emphasis on e.g. market mechanisms and cost-efficiency (ecological modernisation). The other regional institution, the Regional Council, clearly draws on this discourse. The Regional Council does not have the same political mandates as the County Board, and has thus sought to find an appropriate role to play in environmental politics. This has by and large been to stimulate development of environmentally friendly techniques/fuels/energy sources, and to promote cooperative settings for various societal actors. Although we saw signs of the municipalities clinging to the discourse of administrative rationalism, it is fair to say that the discourse of ecological modernisation is institutionalised in their climate policy.

All three municipalities have the ambition to produce policy through cooperation between various societal interests. There are thus limits to what municipal governments can rationally plan. What is more, policy measures are often of a 'soft' kind, aiming to provide citizens and other actors the possibility to behave climate friendly. Change was expected due to both proper information and that it implied economic savings. This was not really the case regarding the transport sector. Although reducing one's driving consumption indeed would imply economic savings this argument does not seem to hold. Driving a private vehicle seems too important for many people, or the costs may not be high enough to abandon the car. As we know, policy measures to steer this is not available to municipalities, even if they hypothetically would have wanted that. Instead, we see attempts to provide alternative fuels (through own production), attempts to develop public transportation, or attempts to use the tool of municipal procurement, thus buying e.g. 'environmental cars' on a large scale which is expected to affect the market. In view of the development of the transport sector so far, these do not seem to be very effective measures.

The County Board clearly has a self-image of a rational administrator which should control things in the region. The Regional Council is a quite new actor in the environmental field and lacks the mandates to formulate regional objectives and forceful policy measures. Its all-encompassing goal is growth and development, and thus climate policy is fitted into this priority structure. The Regional Council primarily supports climate projects that contribute to economic growth in the region.

Gothenburg's heavy industry stands for a large part of local emissions, but is part of the so called trading sector and thus not part of what Gothenburg's policy actors think is the city's sphere of responsibility. The 'Gothenburg spirit' is about consensual decisions, not only within the political sphere, but also between politics and organised interests such as the business world. This also marks Gothenburg's climate policy in that it is made into a consensual issue with few conflicts of interest. This speaks in favour of a belief in the Win-Win story-line. Usually, this goes hand in hand with the Opportunity story-line, but I cannot find this salient in Gothenburg. Neither can I argue that it is constructed along a Sacrifice story-line. Rather, to mitigate climate change is considered a serious task that needs cooperation from 'everyone', although it is recognised that limiting emissions can definitely imply economic gains and even economic growth. What is more, climate policy is not constructed in a confrontational manner; reducing GHG emissions is supposed to be reached without harsh constraints or radical change of behaviour. However, this is true for all analysed institutions.

Stenungsund also has heavy industry, which makes the local emissions about ten times the national average. This heavy industry is, quite like Gothenburg's, part of the EU ETS. Although Stenungsund lately has recognised its responsibility in the climate change issue, the municipality's 'special circumstances' cannot be compromised. Thus, in Stenungsund we saw the recurrent

articulation of the Thinking Globally story-line. Further, the use of waste heat from the industry in the web of district heating not only implies energy savings, but can also legitimise the industry's position.

Borås is marked by its textile legacy, which today partly has transformed into a home of mail order companies, storage and haulage firms. Transports are thus the major problem from a climate perspective in Borås. The city is not home of heavy industry. In Borås, actors are quite proud of the handling of the energy sector, with own production of biogas out of waste and refuse, and an expanding web of district heating. The Win-Win story-line was salient regarding the energy sector; saving energy, cutting emissions, converting fuels all implied a positive economic outcome.

All analysed institutions in this chapter emphasised 'the involvement of the whole society' in their climate policy, just as national climate policy did. From a national point of view it was important to involve the municipalities, and one strategy to do this was by providing grants in the LIP and Klimp programmes. However, they are now terminated and the government decided not to prolong them, as we saw in chapter 5. From the analyses in this chapter we can tell that these grants were considered crucial (especially in Stenungsund) for an active local climate policy, not least since climate policy measures may imply a conflict with other deserving municipal tasks.

Sub-national climate policy in the cases analysed in this chapter tell us that cutting GHG emissions is supposed to be accomplished without questioning established norms or power relations in society. Emissions reductions should come about without threatening people's convenience or e.g. the local industry's position. Hence, it seems fair enough to conclude that the social structure of these public institutions function as road maps for how to handle climate change. Regardless of the global character of climate change and the international solutions to it, already beaten tracks, constituting the discursive repertoire, attract policy actors when faced with this sweeping environmental issue.

7. Conclusion: understanding Sweden's urge to 'go ahead'

I began by arguing that if we take seriously one of the most influential theoretical assumptions in the social sciences, the notion of the social dilemma, we must pose this question: How come cooperation happens when it shouldn't according to the vast and influential literature on social dilemmas in (international) environmental politics? That was the theoretical puzzle that started out this study. Sweden's behaviour in climate politics was a case which clearly contradicted such expectations. Therefore it was worth analysing in detail. Importantly, I did not assume that Sweden has no self-interests—that is far from my point. Rather, I argue that the interesting question is why Sweden has constructed its interests to be a forerunner in climate policy. Therefore I chose to use a constructivist theoretical framework, which above all is about analysing how actors construct their social realities.

It can be argued that the whole field of research concerned with international norms and their (domestic) impact is an effort to point at—and evidence of—the problem with taking rational and self-interested actors as a given. Chapter 2 showed the flaws and merits with this line of thought. In short, the problems were (1) the tendency to neglect domestic actors and structures at sub-national levels; (2) the sometimes static view of the cultural match argument, and; (3) the lack of sufficient analysis of power partly due to the simplistic assumption of the virtues of the international norms which are to teach 'backward societies'.

In response to this I argued first that sub-national actors and political institutions should be part of a 'thicker' analysis of the influence of international agreements and norms on domestic societies, in this case by including the Västra Götaland region and three of its municipalities. Second, the cultural match or fitness argument does not have to be abandoned, although we should be cautious not to treat fitness as merely doing a jigsaw. Rather, I instead chose to make use of the term localisation, implying that policy actors actively interpret international policy. But my assumption was that they do so while localising/fitting international policy into the extant social structures, which provide discursive identities and thus views on legitimate social orders. Third, power should be analysed as the power of established social structures, which influence how 'new' political phenomena are interpreted within a particular polity, and that this is actually in line with social constructivist thinking, but

seldom sufficiently recognised. Hence, I found it feasible to use discourse analysis when investigating Sweden's construction of what climate change 'is', what it implied in terms of the distribution of climate change responsibility, and what Sweden (and the rest of the world) 'ought' to do about it.

By using discourse analysis I could also investigate from which position climate change is interpreted. We know that the environmental field is discursively debated, ranging from the interpretation that humans are ultimately bound by the Earth's carrying capacity (implying there are limits to growth) to the interpretation that environmental problems are merely a question of market disorders that can be fixed if actors are given the right incentives. Since we may call all these interpretations environmental discourses, all making claims to protect the environment, we understand that there are lots of ways you can be an environmentalist. This in turn means that it does matter what interpretation(s) that are politically institutionalised. In chapter 3 I thus elaborated on this, while at the same time constructing helpful tools for the analysis.

The overall objective outlined in the beginning was to analyse Sweden's—both state and selected cases sub-nationally—discursive interpretation of climate change as a political problem, following the 'is–ought–do' distinction. This had to be compared to an analysis of international climate policy as institutionalised in the UNFCCC and the Kyoto Protocol. The questions regarding what climate change 'is', how responsibility is constructed, and what is necessary and possible to do to mitigate climate change, have guided the analysis throughout the thesis, and I will now return to each of them when discussing the major empirical and theoretical findings.

MAJOR FINDINGS

What 'is' climate change?

In chapters 4–6 I analysed international, national and sub-national climate policy as regards constructions of what climate change 'is', proper allocations of responsibility, and what should be done to mitigate climate change. Let me begin by concluding the first of these questions; what 'is' climate change? Well, the greenhouse theory is accepted in all polities analysed. Internationally there is a close link between the political arena (UNFCCC) and the scientific community, represented by IPCC. The latter has been more confident of the human impact on climate change for every assessment report it has published from 1990 to 2007. Thus, it is hardly a surprise that the UNFCCC and the Kyoto Protocol articulate a scientific language and description of climate change. We here find science-flavoured story-lines such as The Earth is not in balance and Human induced climate change through emissions of GHG's. Although being based in science, they also imply symbolic attraction to normative conclusions (i.e., the Earth should be balanced, and the concentration of GHG's in the atmosphere ought to be stabilised in order to prevent dangerous anthropogenic interference with the climate system). A strong norm is also that in order to

mitigate climate change scientific monitoring is crucial. These story-lines and norms are typical ingredients of the discourse of green governmentality.

Sweden's construction of what climate change 'is' is similar to this, although initially there were voices that questioned the truthfulness of the greenhouse theory. This has proven not to be legitimate in the Swedish polity. Over time opposing voices have disappeared from the political arena.[634] It seems that consensual science has a legitimising force that is hard to ignore. Add to this that Sweden had scientists who were important for raising the issue internationally, not least meteorologist Bert Bolin who headed the IPCC in 1988–1997. This has explicitly been referred to as important for Sweden's position. Generally, climate change is understood as a problem that will have its most severe consequences in already poor and vulnerable societies. Sweden joined this choir and by and large interpreted climate change as taking place somewhere else; other parts of the world will be worst off from the consequences of global climate change. The negative consequences for Sweden are seldom elaborated.

When looking sub-nationally, at the selected cases, I found a similar pattern. Although there are not very 'sophisticated' reproductions of climate science sub-nationally, the problem was no doubt taken seriously, and the scientific foundation for claiming the human impact on the climate was accepted without discussion. The messengers of the greenhouse theory were evidently considered trustworthy and legitimate in the eyes of sub-national political actors. Despite the similarities with the international and national levels analysed in the interpretation of what climate change 'is' I do not contend that the discourse of green governmentality is articulated sub-nationally. The reason for this is that the analyses typical for green governmentality, generating certain story-lines and norms, are not articulated in the sub-national cases. Since we merely see a general acceptance of the greenhouse theory and the consequences following climate change I argue that what is reproduced in sub-national policy is the consensual international discourse on climate change. By this I mean the parts of the discourse of green governmentality that is explicitly dealing with the human impact on the global climate, but the consensual international discourse on climate change is not as broad in character as green governmentality. However, the consensual international discourse on climate change is in line with the discourse of green governmentality.

Before turning to the issue of responsibility it is interesting to conclude that the Swedish (national and sub-national) interpretation of climate change is that it will cause the most severe problems in other parts of the world. In the short run, Sweden can actually benefit from a warmer climate, something which was occasionally recognised although not heavily emphasised. This is interesting because theoretical expectations of a rational, self-interested actor

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[634] But there are scientists and others who question the human impact on climate. My point is that it is not considered *politically* legitimate to question the greenhouse theory.

would lead us to believe that such a country has little to gain by (and hence few incentives to) taking action against climate change. Evidently, this is contradicted in the case of Sweden.

Constructions of climate responsibility

How, then, has the question of responsibility been constructed? In the UNFCCC we saw the norm of common but differentiated responsibilities institutionalised. This, in turn, is based on the norm of justice, a norm which has been contested. Should industrialised countries act first, because they have contributed much more to the problem than developing countries, or should a just international regime be based on "meaningful participation" by all countries? As we saw in chapter 4 some industrialised countries, most importantly the US, leaned towards the latter. Although they could also use this as an argument for not ratifying the Kyoto Protocol justice was in the Protocol interpreted as "differentiated" responsibilities, thus spelling out the moral responsibility of industrialised countries to act first. Here the National Action story-line thus got institutionalised. Industrialised countries got quantitative commitments according to previous actions and emissions, and they were responsible for complying with their commitment.

What about Sweden's construction of its own responsibility, which is analytically at a different level than the allocation of responsibilities internationally? Although climate change will not affect Sweden too hard compared to other countries, both state and sub-national public institutions almost unconditionally acknowledged their responsibilities in this issue: Sweden and its regions and municipalities should self-evidently contribute to the mitigation of global climate change. Let's investigate this in more detail.

Sweden's national strategy has to be viewed like this. The long-term objective is international commitments that include 'all' countries in the world, and that this contributes to significant emissions reductions (in the really long run carbon-free economies). In order to realise this, Sweden argues that rich countries should take the first steps, quite in line with the norms of the Kyoto Protocol. However, Sweden's role should be as a forerunner in this work, to 'pull' other industrialised countries forward. Crucial for Sweden's notion of its own responsibility is that the country's deeds can be legitimising in both industrialised (by showing that GHG reductions are compatible with stable economic growth) and developing countries (by showing that a rich industrialised country is serious about taking climate responsibility). In the long run both significant industrialised and developing countries have to introduce forceful climate measures if climate change is to be mitigated. Sweden is well aware that as a small country, it alone can do little for the global mitigation of climate change. Underlying such reasoning is an Ecological Justice story-line, which points out that the rich world has at least partly been able to develop (including the emission of GHG's) at the expense of poor countries, and that the only just solution

to the climate problem is if the former contributes more and takes action first. This part of Sweden's construction of its own responsibility thus clings to what I call the discourse of civic environmentalism.

But this is not enough for an understanding of how Sweden constructs its responsibility. Quite importantly, what the analysis has shown is the increasing importance of the Opportunity story-line. By showing that a rich country can take climate responsibility, it can also take the lead into the carbon-free society. That is, Sweden can gain from being in the frontline of developing 'green' techniques, which sooner or later have to be adopted worldwide. Add to this the frequent articulation of the Win-Win story-line, so popular in contemporary environmental discourse, according to which taking climate and environmental consideration does not have to imply economic sacrifices but rather benefits. That Sweden could actually benefit from being in the frontline in climate policy is an important narrative in Swedish climate policy, because it is legitimising in the eyes of potential opponents who could argue that too tough climate policy ambitions would imply economic losses and diminishing work opportunities. Thus there was not total consensus that Sweden should aim higher than obliged to. Critics remarked that it would be unwise to do more than necessary, because it would be too costly. They could do this while leaning on the Sacrifice story-line, which was influential not only on those who did not want to see Sweden 'going ahead'. Such a Sacrifice story-line has indeed also been articulated, but it has—at least so far—lost this discursive struggle against the Opportunity story-line. Together, these constructions of responsibility added to the conclusion that Sweden should aim for a tougher objective than needed to under the EU burden sharing agreement.

From the above it is logical that the analysis also showed a tension between the National Action and the Thinking Globally story-lines. According to the former, responsibility is primarily about justice; rich countries with quantitative commitments ought to reduce their GHG emissions by changing their domestic structures. The Thinking Globally story-line emphasises the global character of climate change, and that it does not matter from a climate perspective where on the globe emissions are reduced. It can even be argued that emissions should be reduced where they are cheapest to implement, thus opening up for flexibility regarding responsibilities. The important conclusion from this position concerns who should pay for emission reducing investments, not what activities that should be restructured and where.

Despite this tension, the National Action story-line became institutionalised nationally. Sweden opted for a 4 percent decrease of emissions while they could legitimately be increased by 4 percent under the EU burden sharing agreement, and this was to be done without accounting for the flexible mechanisms or carbon sinks. The flexible mechanisms make possible emissions reducing investments in other less developed countries, which the investing country can account for to fulfil its commitment in the Kyoto Protocol. However, the government will most probably change this policy for the next target

period, 1990–2020, where about one third of Sweden's emissions reductions are allowed to be accounted for through so called project mechanisms. Although the target itself (minus 40 percent) will probably be comparatively ambitious, the tendency is that Sweden more and more 'thinks globally' in terms of responsibility.[635]

This is interesting considering the future of climate policy. The embracement of the norm of cost-efficiency together with the Thinking Globally story-line implies a different discursive understanding of the question of responsibility than the one that has been prevailing so far. The more the Thinking Globally story-line is emphasised in terms of responsibility, the more difficult it ought to be for a country to keep an image of being in the frontline, at least in the eyes of all concerned parties.

The Västra Götaland Region's institutions and the municipalities analysed all saw it as self-evident that they (and Sweden as a nation) should contribute to the mitigation of climate change, at least rhetorically. This sense of responsibility was rather instinctive more than sophisticated, i.e. I could not see the same deliberate strategy in these analyses as I did in the analysis of the state level (with a very partial exception in Borås). 'Everybody' should contribute to this mission, and that's just it, policy actors seemed to think. However, responsibility was sometimes negotiated through the Thinking Globally story-line. When the Council Board should scale down the national target to Västra Götaland we saw traces of this tension, even though the National Action story-line was eventually institutionalised: the national target was simply adopted regionally. In Borås, nothing else than adopting the national targets (or the trumping of them) seemed an option. In Stenungsund and Gothenburg, however, it was not evident that local targets should be the same as the national. What was important, according to the actors, was that Sweden's national target was reached, but that did not necessarily imply that all municipalities should have the same target. For reasons of cost-efficiency these cities should thus (possibly) be excused from committing to the minus 4 percent target. Eventually Gothenburg stuck with the minus 4 percent target for 2008–2012 and a minus 30 percent target for 2020, but important policy actors deliberated along the Thinking Globally story-line. Besides, the minus 4 percent target will hardly be met in Gothenburg. Stenungsund deviated most from the pattern by formulating local targets quite late (in 2007) and divided into separate sectors, which together hardly summed up to minus 4 percent. Stenungsund's 'special circumstances' could not allow that. This, together with the way activities that would increase local GHG emissions were legitimised by the for-

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[635] The objective is formulated (Government Bill 2008/09:162) but my guess is that it will not be definite before the 'next Kyoto Protocol' is negotiated, presumably in Copenhagen in December 2009.

mer Municipal Councillor, sums up to the conclusion that the Thinking Globally story-line was structured in Stenungsund.[636]

What 'ought' to be done to mitigate climate change?

The third element in the is–ought–do analytical strategy concerned what action that is considered necessary and possible to implement in order to mitigate climate change. That is, what are the institutions analysed doing in order to turn their perceived responsibilities into action? My assumption impregnating this study is that we can expect little or no action without any sense of responsibility. This is why Sweden was an interesting case in the first place, since the country has opted for one of the world's most ambitious climate objectives (and has so far 'delivered'). How Sweden constructs its responsibility is thus interesting from an international perspective. When turning to policy measures we get closer to implementation, but my aim was not to evaluate the environmental effectiveness of the policy measures chosen.[637] Rather, the aim was to analyse what measures are framed in and framed out of the horizon of possibilities. Who and what is privileged by the solutions preferred? When scholars talk of environmental discourses, they often imply this aspect of policy making, i.e., action oriented policies. Ecological modernisation is said to be very influential in contemporary environmental policy in Western liberal democracies. The analyses of international, (Sweden's) national and sub-national climate policy regarding what climate change 'is' and constructions of responsibility showed us that this picture needs to be nuanced. Constructions of what climate change 'is' drew on the discourse of green governmentality or the consensual scientific international discourse on climate change (the latter is a less elaborated version of the former I argue). Climate responsibility was constructed along several discursive paths: civic environmentalism, liberal environmentalism, ecological modernisation, and administrative rationalism.

Internationally, we saw that UNFCCC and the Kyoto Protocol does not point out exactly what states should do more than specifying quantitative targets and providing the so called flexible mechanisms. The latter are optional, but they are supposed to be cost-efficient tools available to parties with quantitative commitments. Thus, cost-efficiency and flexibility are emphasised norms in international climate policy. But so are justice and sovereignty. Justice is a norm always latent, here mostly articulated by critics of the flexible mechanisms. But justice is a slippery concept since those who advocate the norm of cost-efficiency argue that cost-efficiency might even be what is most just. Jus-

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[636] I do not consider the Thinking Globally story-line institutionalised because rhetorically the municipal government recognises that Stenungsund self-evidently should contribute to the mitigation of climate change and to the Swedish target. Thus, we see some anxious vacillation between two narratives here.

[637] Besides, that would be difficult to do for a political scientist anyway.

tice can also mean that everybody should contribute to mitigating climate change, but the established definition of justice was that rich, industrialised countries should act first. Sovereignty was a norm hard to violate since 'intrusion' in domestic affairs was not considered legitimate. Thus we see little coordination of policy measures, even though the flexible mechanisms, including emissions trading, contribute to the loosening up of the concept of sovereignty. The heavy emphasis on flexibility and cost-efficiency contributes to the institutionalisation of the Thinking Globally story-line internationally. This does not imply that the National Action story-line is not important in international climate policy. However, I argue that it is more influential regarding constructions of the allocation of responsibilities, and less so when we analyse the third question, i.e., what needs to be done. Since policy measures outlined in the Kyoto protocol are very much concerned with cost-efficiency, flexibility, and with providing market actors with appropriate incentives, I conclude that the discourse of liberal environmentalism is institutionalised when it comes to this aspect of climate policy. Hence, the argued impact of ecological modernisation does not hold foot here, although liberal environmentalism can be said to be a version of ecological modernisation (cf. chapter 3).

How did Sweden interpret international expectations, even if they were vague in terms of policy measures? Sweden introduced a variety of policy measures, including CO_2 taxes, subsidies to renewable energy sources or other desirable activities, and stimulation of techniques which could facilitate energy efficiency. Moreover, typical for Sweden's strategy was the emphasis on involving the whole society, which implied that cooperation between various societal actors was desired. This was also true regarding the LIP and Klimp programmes, which were aimed at local investments contributing to emissions reductions, and conditioned on the involvement of both public and private actors. The flexible mechanisms were treated somewhat indecisively. On the one hand Sweden should not make use of them in order to reach its national target, in line with the National Action story-line. On the other hand they were embraced primarily for being cost-efficient and sustainable solutions to the climate problem (which is more in line with the Thinking Globally story-line). Thus, I found both norms of cost-efficiency and flexibility articulated, as well as norms of rationality and planning. Compared to international climate policy Sweden gave much more importance to the state and administrative capacity.[638] Combating climate change was thus certainly a mission for the rational state, willing and able to plan things from a central position. This smells a lot of the discourse of administrative rationalism. But it is hardly the whole picture. The solutions preferred were rather preventive measures than end-of-

[638] This may not be that strange given that there is no state at the international level. But international climate policy could nevertheless theoretically have discussed the state and state capacity more than it did.

pipe solutions. As pointed out above, other more market oriented policy measures were introduced too. The state thus recognised that it could not do all the work simply by enforcement, but needed to provide society with the right incentives. The consensual side to this (everybody should join this mission) implies that the government saw few conflicts, and I could also identify constructions of the Opportunity and Win-Win story-lines. This is no doubt typical features of the discourse of ecological modernisation. Since ecological modernisation, as explained in chapter 3, puts emphasis on rationality and planning too (but not only), I argue that Sweden's climate policy as regards 'what needs to be done' is clearly marked by ecological modernisation.

Regionally, we saw two institutions working in partly different ways. The County Board was mandated to formulate a regional target, something the publicly elected Regional Council could not do. The latter also lacked available policy measures other than the possibility to fund initiatives it saw as positive and stimulate and provide cooperative settings. Being an employer of about 50.000 people it could also use the public purchasing tool. The County Board (the state's prolonged arm in the region) was clearly marked by its legalist heritage, and saw few possibilities to act outside its mandates of being a supervisor of industries, providing information on e.g. how to save energy, and being the rational planner of the region. One important role for the County Board is to mediate among societal interests, e.g. when an industry wants to expand its activities. The Board then has to decide what interests are most important. The Board likes to think that it does so in a rational fashion after inspecting all facts on the table, and considering the Environmental Code.

The discursive difference between the County Board and the Regional Council is thus significant. The former by and large emphasises the norm of rationality and builds on the Administrative Mind story-line, conducive to the discourse of administrative rationalism. However, the County Board also to some extent draws on the Win-Win story-line, and thus articulates the discourse of ecological modernisation. However, the remaining impression is the echoing of administrative rationalism. The Regional Council primarily emphasises the norm of economic growth, but also consensus. Hence, potential conflicts are quite downplayed in the Council's narrative, which instead joins the Win-Win story-line. I thus argue that the discourse of ecological modernisation is manifested in the Regional Council's construction of how climate change can be mitigated (although the Regional Council also draws on some elements of liberal environmentalism).

Finally, turning to the municipalities under scrutiny a first conclusion is that they are discursively quite similar. The policy tools they find available are infrastructure and energy planning, production of biogas or other energy out of waste and refuse, and the provision of fuel or a web of district heating. Further, they all see it as a consensual issue and thus promote cooperation between various actors (both public and private), and emphasise the importance of information (both to citizens and the industry). Norms expressed concern

rationality, consensus, planning, but also norms of cost-efficiency, market incentives and freedom of mobility. The 'mission for the whole society' and the Win-Win story-lines were salient (in Borås also the Opportunity story-line). I find ecological modernisation to be the most influential discourse in all three municipalities, although both Stenungsund and Gothenburg show signs of drawing on administrative rationalism.

Various discursive articulations
depending on what aspect of climate change policy is analysed

The common knowledge that the discourse of ecological modernisation is hegemonic in contemporary environmental discourse can be nuanced after this study's analyses. I argue that the discourse of ecological modernisation is primarily articulated *domestically* in Sweden and regarding what state, regional, and local public institutions consider necessary and possible to do to combat climate change. International policy measures were more in line with the discourse of liberal environmentalism.

When I analysed constructions of what climate change 'is' the discourse of green governmentality was effectively reproduced internationally and by the Swedish state. Sub-nationally we found 'imitations' of this articulation, but in a significantly less elaborated manner. Thus, I concluded that the sub-national public institutions analysed here instead drew on what can be called a consensual international discourse on climate change, a far less elaborated version of green governmentality.

When turning to the question of allocation of responsibilities we find yet another, less straightforward discursive pattern. Internationally in the UNFCCC and the Kyoto Protocol there was a tension between the discourses of civic environmentalism and liberal environmentalism, where the former had bigger impact. Responsibility was constructed as a question of justice, where the institutionalised interpretation of justice spelled out that industrialised countries had to act firstly because they had contributed most to causing climate change. Sweden also drew on the discourse of civic environmentalism. But when constructing its responsibility partly in line with the Opportunity story-line, while emphasising norms of economic growth and the need to modernise society, the discourse of ecological modernisation was also articulated. Although sub-national institutions argued similarly on responsibility, here too the arguments were generally less elaborated than internationally and nationally. The 'self-evident' responsibility can of course be argued to contain some elements of civic environmentalism. But the Ecological Justice story-line, which was articulated at the other levels analysed, and which is central to the discourse of civic environmentalism, was not really articulated regionally and in the municipalities. However, we saw a partial exception in Borås, where the latest targets were expressed in per capita terms, aiming at what IPCC perceived as globally sustainable levels.

Another conclusive remark is that we find a link between diverse story-lines and diverse norms, so that specific norms seem to underpin specific story-lines. For example we have the norm of cost-efficiency which supports the Thinking Globally story-line. The norm of cost-efficiency is powerful in contemporary international climate discourse, and its importance is increasing. This is interesting since the norm of justice is also important. Since probable consequences of climate change are believed to affect already poor societies more than rich ones, justice has become a core norm in international climate discourse. But justice and cost-efficiency are not necessarily compatible, and what this study suggests is that the two contradictory norms sometimes lead to discursive insecurity, as manifested in the vacillation between the National Action and the Thinking Globally story-lines. The Thinking Globally story-line has its root in science, and gets legitimacy because of that. When used regarding responsibilities it gets the connotation that states (and sub-national polities) can avoid cutting emissions within their administrative borders. The norm of cost-efficiency is crucial in this line of argument.

The multi-level character of climate change

One of my theoretical points was that the norms literature needed to take the sub-national level into analytical account, because not everything of importance for successful implementation takes place at the state level. In climate policy it can be argued that sub-national activities are important if one wants to reduce GHG emissions. So, what can we conclude regarding this analysis? What is the sub-national level's discursive response to the climate change problem in relation to international and national interpretations?

I will not repeat all the major findings of the study once again. Suffice it to say that the regional and local institutions analysed by and large reproduce the Swedish state's constructions of what climate change 'is' and Sweden's and its sub-national polities' responsibility. Consensual climate science is at all levels accepted as the truth on climate change. Sub-nationally this seemed more instinctively than sophisticatedly elaborated. A similar result pertained to the question of responsibility. State, regional and local responsibility was constructed as something which was more or less beyond questioning. Again, sub-nationally this was not all that elaborated; it was as if political actors had an instinctive feeling that this was simply the right thing to do.

Regarding policy measures there was a difference between the international, national, and sub-national polities. The UNFCCC and the Kyoto Protocol were quite vague concerning concrete policy measures (but introduced the important flexible mechanisms). The Swedish state had a relatively broad repertoire of policy tools, including structural measures such as taxes and regulations. However, the regional and local institutions had to rely on softer policy measures such as planning, information, the encouragement of cooperative settings, supervision, and sometimes more innovative instruments such as own

production of renewable energy sources and the development of a web of district heating run on waste heat or renewable energy. This is mainly due to other available policy instruments than the state, which has more system-wide policy measures available, and not because of a different discursive interpretation. Sweden both nationally and sub-nationally to a large extent constructs climate change policy measures from the discourse of ecological modernisation. This can be contrasted with institutionalised international climate policy, which in this context leans on the discourse of liberal environmentalism.

We also saw indications that municipalities found it important that the state pushed the municipalities in the right direction, primarily by providing monetary support. But it could also be that the state was not always perceived as forceful enough, e.g. when the Head of the Environmental Services Committee in Borås argued that municipalities should have been provided the right to decide over energy provision in order to prevent sub-optimal choices. Moreover, the municipalities considered the Klimp programme crucial for an active local climate policy, not least since they potentially had to face choices between climate policy measures and other deserving needs. The Klimp programme's aim was to stimulate investments that would contribute to emissions reductions (but which could be positive measured by other standards too). It is too early to analyse the consequences of the abandonment of Klimp, but I guess that municipalities may be a bit worried (the interviews were made before this decision was taken or announced).

At the outset we saw that given the logic of social dilemmas local polities had all the incentives in the world not to cooperate, i.e., not contribute to the mitigation of *global* climate change. In other words, we should expect constructions of climate responsibility along the Sacrifice story-line. The analysis of municipal climate policy constructions in this study indicate that local policy actors may just as well behave contrary to these expectations, at least regarding constructions of climate responsibility. This responsibility was understood as more or less self-evident to take.[639] And this despite that what Sweden and its municipalities do can only do very little to mitigate global climate change, and despite that it cannot be trusted that other municipalities, both in Sweden and in other countries, will contribute likewise. This does not mean that municipalities are necessarily the most environmentally pro-active. In terms of targets and actual emissions we saw that the self-evident responsibility could be negotiated. But in all analysed cases the own moral responsibility was taken quite seriously when climate policy was to be constructed. Even if this was not always followed up by reduced GHG emissions, it is not as pessimistic a result than what could have been expected from a social dilemma per-

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[639] I am well aware that the few cases analysed here cannot easily be taken as evidence for a general pattern, not even in Sweden. However, the local cases in this study are not considered to be among the most environmentally pro-active municipalities in Sweden.

spective. If the responsibility should not have been admitted at all, then we could expect even less action to limit emissions.

It is now time to return to the theoretical puzzle outlined in chapter 1. If states are rational and self-interested in the rationalistic and social dilemma sense, it may seem unexpected that they—to some extent—comply with international agreements and subject themselves to introduce policy measures for something which they only vaguely may benefit from. The picture gets especially gloomy when there is a lack of institutions which can enhance trust and make actors believe that others will contribute to the common good. Global problems largely lack the characteristics that could overcome social dilemmas. However, since such theoretical anomalies do exist we should try to understand better why international (environmental) cooperation can lead to desired outcomes. Sweden's over-implementation of the Kyoto and its own national targets is a clear anomaly given such theoretical expectations. I argued that an analysis of how Sweden constructed its climate policy discursively could contribute to our understanding of the interplay between international agreements and state policies.

I started from the assumption that political actors construct policy and thus their interests by interpreting political phenomena through local public discourses, e.g. in the form of institutionalised ideas and norms; what I called the social structure. This should not be considered a static concept, neither as easy to eventually define. Quite the opposite; making such an analysis is difficult. To some extent it is about assumptions; what guides policy actors' interpretations is hard to establish or prove, but it is reasonable to assume that guidance comes through the discursive character of their social environment. At least in my view this is more reasonable than assuming that actors have exogenously given interests (which would be just as hard to prove). This is not the same as saying that people (including policy actors) do not have interests, only that interests are not exogenous to social interaction. They are always the result of social processes.

The question is how we should explain Sweden's theoretically unexpected behaviour in climate policy, and the over-implementation of Sweden's climate policy targets. This is indeed a deviant case if we assume that global environmental problems are social dilemmas. Why was the greenhouse theory and human induced climate change so easily accepted as a fact in Sweden? To begin with, there is probably a clue in how the problem has been presented internationally, primarily in the UNFCCC and the IPCC, which had a mission to synthesise consensual science. The robustness of findings in line with the greenhouse theory has been argued to have significantly increased throughout

the 1990's and 2000's.[640] But Sweden as a nation early on accepted IPCC conclusions as true and trustworthy. It seems fair to conclude that these international institutions were considered legitimate in the eyes of (at least) central policy actors. Sweden has a tradition of strong international orientation, being a small export-dependent country aiming at soft power. International institutions have 'always' had legitimate status.[641] According to Sweden's environmental self-narrative the country had also played an important role in putting the environmental issue on the international agenda, not least through hosting the 1972 UN Conference on the Human Environment, the first international summit on the environment.[642] Add to this that one of the initiators and the first Head of the IPCC was Swedish meteorologist Bert Bolin. Not taking alarms of climate change from scientists and UN institutions seriously would be strange given this identity. Furthermore, from 2006 and onwards, climate change has become one of the hottest topics covered in media. The film *An inconvenient truth* by former US vice President, Al Gore, and economist Nicholas Stern's so called *Stern Review* were very influential in the public debate on climate change, not least in Sweden. Following the September 2006 elections, the newly-appointed centre-right government, who had not made a big issue of environmental and climate policy in the election campaign, changed its mind quickly after climate change were boosted in media. Policy actors not taking climate change seriously (at least rhetorically) at this point in time would practically be committing political suicide. To question the greenhouse thesis would not have been considered legitimate in political discourse.[643]

Regions and municipalities are of course also part of Sweden, and it may be that they 'think' similarly in this context. The country is also a unitary state, where the regional level lacks political power comparable to a federal system like Germany. Despite municipal self-government, this is not strong enough to be too stubborn vis-à-vis the state. But the formal relationship between the state and municipalities does not *determine* how local policy actors should understand issues such as climate change. There *is* room of manoeuvre. However, future studies could contribute more to our knowledge by comparing dif-

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[640] E.g. IPCC 2007b.
[641] Cf. Bergman 2007.
[642] Cf. http://www.regeringen.se/sb/d/1977 (the government's web page): "Since Sweden took initiative for the UN's first conference on the environment in 1972 we have had a leading role in the UN's environmental programme, UNEP. Sweden also actively participates in the work on conventions aiming to protect the environment." My translation. Accessed 15 May 2009.
[643] There are of course many who question the greenhouse thesis, i.e. that emissions of greenhouse gases into the atmosphere contribute to the Earth's increased mean temperature, causing climate change which in the longer run will have serious ecological and social consequences. But such voices are rare in public and political discourse in Sweden.

ferent relations between the state and sub-national political levels, e.g. by analysing federal systems like Germany or Canada.[644]

Consensual climate science is nevertheless taken for granted sub-nationally, often without thoroughly discussing what this might imply in policy documents. This ought to imply that those who represent consensual climate science are viewed legitimate among policy actors sub-nationally. Interestingly, both national and sub-national climate policies emphasise the expected negative consequences of climate change, but most importantly that it is a problem with most severe consequences in other countries (quite far away from Sweden). I have argued that this is interesting given the often emphasised social dilemma character of climate change, according to which you would have less incentives to act 'pro-socially' if it primarily gains others.

This leads us to the question of responsibility. We saw that Sweden constructed its responsibility as something that was more or less self-evident. This was especially pertaining to the sub-national level of analysis. Nationally, the self-evident responsibility was more elaborated. Sweden's overarching objective was progress in the international efforts to mitigate climate change. Therefore, Sweden wanted to take on the role of a forerunner, in order to show that it was possible and that a rich country was serious about taking climate responsibility. Sweden hence opted for a tougher burden than necessary, and saw it as important to reach the target domestically, i.e., without accounting for the flexible mechanisms' possible emissions reductions in other countries. I interpret this as an expression of Sweden's wish to be a 'world role model' (although policy actors would not use such words themselves) in the environmental field. Compared to many other countries, it is often argued that Swedish politicians and the population are interested in and care for the environment.[645] This does not only make it possible to take on such a role, but also legitimate in the eyes of the population. It could also be interpreted as a manifestation of Sweden's consensual political culture, and the importance of international cooperation. Said Sweden's Assistant Chief Negotiator in climate policy, Anders Turesson, and former Minister for the Environment, Olof Johansson (c), respectively:

> I have a feeling that international agreements generally have a very heavy position in Swedish politics. I think we try to follow the agreements we sign, and I have also a feeling that they have a major impact on the public opinion.[646]

[644] Cf. Schreurs 2008.
[645] Lundqvist 2004b: 22f; cf. Eckerberg 2000; Lafferty & Meadowcroft 2000: 412f.
[646] Anders Turesson, interview 2001. My translation. Turesson became Chief Negotiator later in 2001.

No-one in this house, the *riksdag*, really questions this, what we have agreed on [internationally].[647]

That 'what has been agreed to internationally' is legitimising in the Swedish polity seems very clear. The peculiar thing about climate change is Sweden's over-implementation. The analysis suggests that *the combination* of an internationally oriented and rich country, rhetorically committed to environmental issues and international justice, and the construction of climate policy as an opportunity best explains Sweden's theoretically unexpected behaviour in climate politics. The picture that Sweden's urge to be a 'world role model', while tuning in to the Ecological Justice story-line, should thus be complemented with Sweden's interpretation that climate change policy may be looked at through the window of opportunity. Being a forerunner in climate politics can thus be constructed as a Swedish self-interest; Sweden actually has something to gain from 'taking the lead' and over-implementing international commitments. Taking on heavier burdens than necessary and than others do does not have to imply that Sweden becomes a sucker. We should not forget that Sweden's self-image is also that of a rich country with splendour of natural resources. Being rich made the Swedes morally responsible, but being rich on natural resources made it easier for Sweden to switch over to renewable energy sources. What is more; this strategy could be regarded as a chance for Sweden to benefit from taking the lead into the fossil free society.

This combination of ideational and material elements is theoretically interesting since it shows how a constructivist framework can shed light on how material elements are given meaning through discursive identities; constructivism does not have to 'censor' material factors. A rationalistic account of material elements and interests would not see the combination of ideational and material elements in Sweden's construction of responsibility, neither that what is interesting is how material elements are given meaning.

Sweden's policy measures are marked by the discourse of ecological modernisation both nationally and sub-nationally, with a few exceptions. This rests on a combination of the belief in rational planning, technological innovation and state investments on the one hand, and on the other hand providing the right incentives to market actors, who can thus choose if they want to pay for polluting or change behaviour. Important is also the Win-Win story-line, which implies that a successful policy without major conflicts is possible. In that way mitigating climate change can be a mission for the whole society. We should not forget that it is not only the state that is up for this mission. Practically all political levels and even the industry seem interested.[648] It is hard not

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[647] Olof Johansson (C), interview 2001. My translation.

[648] The industry's interpretation of climate policy is not specifically analysed in this study, but if the industry would have been very reluctant I am sure I would have noticed that in articulations by public institutions. Cf. footnote 142 in chapter 2.

to interpret this as the result of a collective-minded and consensus-driven society, where everybody is supposed to be involved, all of which can be argued as typical Swedish features.

Environmental management according to the discourse of ecological modernisation is about fixing market externalities. This indeed implies that regulating the market (in terms of traditional regulation or by economic incentives) can be legitimate. There is, in other words, a place for politics. That Sweden has interpreted its climate policy mission in line with this discourse is not surprising given Social Democracy's ideological heritage and policy tradition, according to which it is totally legitimate to regulate the market. In fact, you can say that it has been a Swedish trademark throughout the last century.[649]

<center>CLIMATE POLICY, POWER,

AND CONDITIONS FOR SUCCESSFUL INTERNATIONAL AGREEMENTS</center>

Let me finish this thesis with a few remarks on the discursive power of established climate policy and the conditions for successful international agreements. One of the merits with discourse analysis is that it can uncover things that are taken for granted because it provides the tools to investigate the limits of what is 'thinkable'. I started from the assumption that how you look upon environmental problems has consequences for how you think they should be solved. This study has shown what the consequences are if you assume this when analysing the deviant case of Sweden.

Despite nuances, depending on which analytical level we focus on, climate policy is expected to combat climate change within the existing international political order. That is, although structural change is depicted as necessary by almost everyone, it is rather the fuel of the machinery that is to be switched, not the machinery itself. The long-term sustainability of the Earth is acknowledged to be dependent on climate considerations, but these are evidently conditioned on the norm of economic growth and a capitalist economic order in a world of sovereign states with varying willingness and capacities to act against climate change.[650] Anything else than such an overarching result would be very surprising, I think. But this condition is seldom recognised in mainstream environmental policy-making. It is rather taken for granted. This condition, which is the result of what discourses that structure climate policy, is indeed about power. How the discourse on climate change is constructed is hardly a coincidence. A certain social order is taken for granted and this order is reproduced in climate policy, no matter if we look at the international, national or sub-national level. The partial exception to this is when climate responsibility is constructed in line with the discourse of civic environmentalism. Civic envi-

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[649] Cf. Rothstein 1996; Hicks 1999.
[650] But see Bäckstrand & Lövbrand 2007 for a discussion of potentials for a discursive shift in the 'post-Kyoto' process.

ronmentalism has the potential to restructure the international order, and thus power relations, if it were to be institutionalised or get more structurated. As this study showed, the potentially radical elements of civic environmentalism, which influence part of both the Swedish and international discourse on climate change, are renegotiated when concrete solutions and policy measures are to be launched. The latter rather draw on the discourses of ecological modernisation or liberal environmentalism.

If we take these results as the condition which future climate and global environmental policy-making have to take into consideration, what are the prerequisites for successful international agreements, i.e., agreements that lead to desired outcomes? First we can conclude that agreements somehow have to be complied with. I chose a different angle on this at the outset. I have not investigated the link between interpretations of climate change and constructions of own responsibility, policy implementation on the one hand, and outcomes in terms of environmental quality on the other. Rather, I wanted to make sense of Sweden as a theoretical anomaly. The country's 'willingness to act' was apparent at the outset but needed to be understood. We also knew that Sweden most likely was going to over-implement its Kyoto targets. Therefore, 'willingness to act' seems a key here, and the simple aim was to investigate what characterises Sweden's interpretation of climate change. Thus, I set out to analyse how Sweden, at various administrative levels, interpreted what climate change 'is', its own responsibility, and what should be done in order to contribute to the mitigation of climate change.

Of the analytical dimensions investigated I find the one concerning responsibility to be of special importance. The peculiar thing about Sweden's sense of responsibility was partly that it was seen as beyond questioning, especially sub-nationally—where dependence on local industry was sometimes more than obvious. But the state's construction of responsibility was more elaborated; it consisted of both an Ecological Justice story-line and an Opportunity story-line. I argue that this combination of idealistic and materialistic elements is the key to the understanding of Sweden's paradoxical behaviour. It can be understood to consist of both altruistic and self-interested elements. And most importantly, given the nature of international politics and the structurating influence of the discourses of ecological modernisation and liberal environmentalism (implying that ecological and climate considerations cannot compromise the pursuit of economic growth), it is probably of key importance that other states follow Sweden's example: looking at climate policy through the window of opportunity.

However, although this is in line with the discourse of ecological modernisation, which no doubt influences other industrialised countries too, the window of opportunity that Sweden looks through is probably bigger than most other countries (with the reservation that I have not analysed other countries' climate policy). The fact that Sweden is relatively rich on natural resources and relatively advanced regarding technological development is most probably an

important condition for the country to be able to construct climate policy as an Opportunity. But other countries are also rich on natural resources that can replace fossil fuels, and/or are technologically advanced. This study suggests that how climate change is made into a moral issue, constructed along the Ecological Justice story-line, is just as important for an understanding of Sweden's behaviour. It may even be that the presence of this sense of moral obligation contributes to the construction of climate policy as an Opportunity. Without a social structure that emphasises environmental values, justice and solidarity with the poor, and a strong belief in that it is totally legitimate for the state to attempt to steer society in a desired direction, it is probably less likely to construct climate policy as a window of opportunity.

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Lars Wilke, Chief Environmental Inspector, Head of Environmental Bureau. Interview by Lennart J. Lundqvist and Chris von Borgstede, 16/03/04.

Borås

Jonas Edin, Head of the Environmental Monitoring Unit (since the unit was launched 1,5 years before the interview). Before that he worked as Environmental Inspector in Borås since 1996. Interview conducted 26/06/07.

Morgan Hjalmarsson, member of the Municipal Council Board, and local government commissioner with responsibility for, *inter alia*, Environmental, Energy, Communication issues (representing the Liberal Party (FP), 13/06/07.

Ulf Olsson, Vice Chairman of the Municipal Council Board, and leader of the local opposition (representing the Social Democratic Party [S]), 14/08/07.

Inge Pettersson, Head of the Environmental Services Committee since 1998 (representing the local party Vägvalet [Vägv]), 27/06/07.

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