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SOCIAL FAIRNESS, INCLUSION & SUCCESSFULNESS IN EU COAL TRANSITION PROCESSES

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Abstract

Recent studies have shown that there are a number of flaws in current coal transition policies when viewed through a justice lens. The aim of the current research is to present how the social dimensions are integrated into the EU energy policy coal phasing out in the light of the theoretical framework of energy justice and its three pillars: distributional, procedural and recognition justice.

Interviews with five central actors reveal how social fairness, inclusion and successfulness in coal transition process is perceived. Firstly, it appears that social fairness and inclusion - through the energy justice lens – have a pivotal role in the successfulness of coal transition process. Secondly, the interviews reveal that new concepts such as empathy and perceptiveness emerge into the concept of justice in the coal phasing out as an integral part of coal transition processes. Thirdly, it seems that policy makers – including EU – have considered and included justice accommodating measures in their programs aimed at assisting coal transition processes.

In terms of further research it seems highly relevant further empirical research to be carried out with the aim of assessing how the three pillars of energy justice have been practically integrated when the coal transition process is accomplished in the all EU member states.

Keywords:

«social fairness», «distribution», «inclusion», «stakeholders», « energy justice»

Abbreviations

EBRD	Environmental and Social Advisory Council of the European Bank for Reconstruction and Development
EC	European Commission
EESC	European Economic and Social Committee
ENER	Energy Union and external policy
ETUI	European Union Trade Institute
EU	European Union
ILO	International Labor Organisation
NGOs	Non Governmental Organisations
UK	United Kingdom
UNFCCC	United Nations Framework Convention on Climate Change
VoIP	Voice Over Internet Protocol

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1. INTRODUCTION

1.1. Problem statement

The Paris Agreement has been a historical milestone with commitments by almost 200 nations to transform their development strategies in order to limit global warming by 2100 (UNFCCC, 2015). To be consistent with the Paris Agreement's terms, EU leaders have agreed to a target of net zero emissions by 2050 (EIB, 2017). This compels that the coal, the predominant fossil fuel in EU electricity generation and at the same time the most polluting component is phased out and EU should propose its member states to speed up the coal phase out process. Consequently, two thirds of coal mines in forty-one (41) European regions in twelve (12) European Countries which currently benefit from the State Aid are expected to close (Alves Dias, P. et al, 2018).

Coal regions have historically played a key role in many countries' economic and social development. As a consequence, their political and societal influence is strong and make structural change processes difficult. The coal transition will cause major economic problems and exacerbate pre-existing socioeconomic issues. Phasing out coal implies major transformations in societies as we know them and logically in the worlds of work, employment, and working families (Rosemberg, 2017). This transformation comes with important challenges and risks. Most immediately, the consequences are to be borne by workers, companies and regions (most of which are structurally weak) each being dependent in different ways on the economic activity generated by coal mining. Workers face risks related to finding desirable re-employment or, for some, managing their exit from the labor force; companies face reputational, financial and strategic risks; while regions will often have to adjust to the loss of a significant share of local economic activity in local communities. The way that these risks are managed is vital for the potential successfulness of a coal phase out process.

One factor seem to be pivotal for the potential success of coal phase out processes - justice in how the great economic and social stakes are handled. Thus the term “just transition” has emerged; its stated aim is to ensure that policies which are environmentally beneficial do not cause undue harm to the social or economic well-being of those who are, or have traditionally been, dependent on the fossil fuel sector (Robins et al., 2018).

1.2. Aim and research questions

There are a number of challenges in current transition policies when viewed through a justice lens. For example, few policies seem capable to deploy measures to improve the lives of people currently marginalized in the energy system. There also seem to have been limited analysis of whether current transition policies meet equity goals embedded in the concept of a just transition. By taking justice considerations into account, transition policies are arguably likely to accommodate social and political concerns and claims, and thus contribute to legitimacy and support, and hence gain greater chances for being implemented successfully (Piggot et al., 2019).

The aim of the current research is to develop and empirically explore an analytical framework that defines various aspects of justice in coal transition processes.

Tackling the aim, one research question is set down:

How are considerations and measures for social fairness, inclusion and successfulness perceived by a handful experts engaged in European coal transition processes?

2. PREVIOUS RESEARCH

2.1. Energy transitions and social dimensions

Even if historical transitions may have taken a great deal of time, the argument runs that a sufficient amount has been learned from them so that contemporary, or future, energy transitions can be expedited (Sovacool, 2015). The energy transition from traditional energy sources to fossil fuels, which is often considered a single event, was complex, involving numerous services and sectors at different times between 1500 and 1920 (Fouquet, 2010), using conversion technologies in the energy mix, such as the transition from wood and water power to coal in the 19th century or from coal to oil in the twenties (Sovacool, 2015). The important drivers for the energy transitions were the opportunity to produce cheaper or better energy services. In the majority of cases, a successful new energy source or technology provided the same service (i.e. heating, transport or light) with superior or additional characteristics (e.g. cleaner, easier or more flexible to use) (Fouquet, 2010). Past energy transitions have had major impacts on the incumbent industries which have declined, on economic transformations and on inequality (Fouquet, 2006).

Future transitions may also become a social or political priority in ways that previous transitions have not been – that is, previous transitions may have been accidental or circumstantial, whereas future transitions could become more planned and coordinated, or backed by aggressive social movements or progressive government targets (Sovacool, 2016). Nowadays, publics are increasingly attentive to energy and therefore energy decision-making (Miller et al, 2015) and there are growing calls for greater democratic voice and involvement. This according to Barry et al (2015), produces a “reconfiguration of transition arenas from spaces for “coalition of frontrunners” towards more open spaces for such deliberation, dialogue and participation”. However, existing energy policy processes from power plant siting planning decisions to the design of energy legislation tend to limit rather than expand public participation and engagement (Miller et al, 2015).

Recent studies suggest that a wide range of challenges such as identifying, diagnosing and redressing the social dislocations occur in energy transitions (Jacquet and Stedman, 2013); managing socio-technical transitions in a fashion that effectively integrates the social and the technical (Steinhilber et al., 2013) derive from the fact that existing governance institutions and approaches have largely neglected the social dimensions of energy transitions (Miller and Richter, 2014). Wiek and Iwaniec (2013) emphasize the centrality of the social as an element in many of the most criteria and recommend, especially, a systems approach to visioning that integrates social and technical elements and approaches. In contrast, approaches that focus solely on the technical can arrive at absurd conclusions (Miller and Richter, 2014).

Nowadays, following the emission reductions pathway agreed to in the 2015, a transition to a low-carbon energy system is underway and there are signs that its pace could accelerate. The European Green Deal for the European Union and its citizens (2019) resets the EC's Commitment to tackling climate and environmental-related challenges; it is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern resource efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use (EC, 2019).

The overall assessment of direct employment indicates that in the EU28 (this statistics was compiled when the UK still was a EU-member, and the EU had 28 members), coal activities provide jobs to about 237.000 people: around 185 000 are employed in coal mining and about 52.000 in coal-fired power plants in forty-one (41) European regions in twelve (12) European Countries (Alves Dias, P. et al, 2018). Overall, Poland hosts the largest number of jobs on coal (about 112.600), followed by Germany (35.700), the Czech Republic (21.600) and Romania (18.600) (Alves Dias, P. et al, 2018). Although the total number of coal-dependent jobs makes up only a small fraction of European employment compared to 219,8 million in 2017 and job losses in manufacturing and mining were more than compensated by job creation in other sectors, the challenge is that these are concentrated in a small number of regions with wide-ranging effects on the local and regional economy (Galgoczi, 2019). Low-carbon pathways modeling suggests that different regions could face very different

mitigation costs in a -2 degrees scenario (Galgoczi, 2019) and any change from one energy system to another leads to different social, political and economic order (Barry et al., 2015); a just transformation of the social-energy system is also a decision to live in a different type of society, not simply a low-carbon version of the current one (Healy and Barry, 2017).

Mining transitions can potentially have strong cross-sector or even cross-generational impacts on employment, but then in turn on values, health, educational attainment, and potentially social cohesion. For this reason, regional economic regeneration and strategies to break a potential vicious cycle of economic and social disadvantage in former mining regions is arguable the most important aspect of any transition strategy. Moreover, transition policies tend to ignore the potential cascading impacts of industry closure, such as how the loss of jobs in one industry might flow on to affect others. One example is given by the gendered effects of men's unemployment in former coalfields of the UK in the 1980s and 1990s. When coal jobs dried up, there were significant flow-on effects for women in mining regions, such as displacement from manufacturing jobs as unemployed male workers sought out new professions, the need to take on the "double-duty" of paid employment and domestic care to fill holes in household budgets, and psychological impacts resulting from a disruption to home life (Bennett, 2015; Waddington et al, 2001). However, based on case studies examined, this is perhaps one of the most neglected parts of historical coal transitions. Indeed, often times the actors in historical coal transitions appear to have focused too much on purely economic distribution questions and too little on broader human dimensions and risks (Caldecott et al., 2017a).

From a political perspective, the local societal challenges, if not addressed well, can also take on a global dimension: they can also have potential feedback effects on the willingness of populations and their governments to undertake the necessary action to phase out the use of unabated coal (Caldecott et al., 2017a) and pursue a progressive climate policy more broadly. There is need for stakeholders to develop plans to address, in a synergistic manner, the multiple challenges faced by working people and communities across the globe, including inequality, precarious or unsafe work conditions, and environmental degradation (Rosemberg, 2017).

2.2. The “just-transition” concept

As a means to mitigate the negative impacts that such structural adjustments might have on affected societies, the idea of the ‘just transition’ has emerged (Kumar et al., 2016). The concept of a “just transition” is a strategy originally proposed by global labor unions. One of the earliest formulations of the concept of a just transition stemmed from the 1980s US trade union movement in response to new regulation to prevent water and air pollution (Healy and Barry, 2017). In recent years the concept incorporated in the preamble of the Paris Agreement: “the imperative of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities” (UNFCCC, 2015). In this context, a just transition with inclusive climate action, can play a strong role in transforming gender norms and furthering gender equality, while ensuring women have the opportunity to participate as actors combating climate change and spurring green growth (ILO, 2018). While building a low-carbon economy, a just transition can ensure that women are not left behind, and their existing and potential contributions essential for stimulating green growth and achieving sustainable development for all, are not undermined (ILO, 2017).

To ensure that no region is left out in coal transition processes, and taking into consideration the necessity of the collective action towards the coal transition the EC launched the initiative for coal and carbon-intensive regions in transition. As part of this initiative, the 'Platform for Coal Regions in Transition' was established in 2017 promotes knowledge sharing and exchanges of experiences between EU coal regions, and represents a bottom-up approach to a just transition, enabling regions to identify and respond to their unique contexts and opportunities while all coal and carbon-intensive regions are invited to participate.

But the platform is at risk of not delivering balanced solutions due to lack of transparency, the absence of views and participation of local people and non-coal regional industry and to the receptiveness of industry propaganda of clean coal being part of the final solution. According to Zygmunt (2018) in two of the pilot regions of

the coal platform (Upper Nitra in Slovakia and Silesia in Poland) shows that insufficient participation and a bias for “clean coal” means that the platform is set to support coal companies instead of local communities in these two countries. In Poland there was a violation of the principle to participate as three meetings held with selected participants by the government were not publicly announced. There was no open invitation to participate either for civil society or for businesses and there was very little information available on who took part in the meetings and what was discussed (Zygmunt, 2018).

The European Green Deal (2019) refers that “the transition must be just and inclusive. It must put people first, and pay attention to the regions, industries and workers who will face the greatest challenges. Since it will bring substantial change, active public participation and confidence in the transition is paramount if policies are to be accepted”. The “just transition” concept places workers and communities at the forefront of the de-carbonization process by highlighting the need for proactive policy measures that support workers through the transition and beyond (Harrahill and Douglas, 2019). In the simplest of terms, “just transition” seeks to synthesize environmental, labor and social justice frames by advocating policies which are based on “just sustainability” (Christmas and Robinson, 2015). The concept seeks to address social concerns and inequities which emerge “from efforts to overcome environmental problems” (Snell, 2018) and deliver economic, environmental and social gains for localities previously dependent on “dirty” industries (Robins et al., 2018).

The stated aim of the “just tradition” is to ensure that policies which are environmentally beneficial do not cause undue harm to the social or economic well-being of those who are, or have traditionally been, dependent on the fossil fuel factor (Robins et al., 2018). From a functional perspective, just transition has two main dimensions: “outcome” (the new employment and social landscape in a decarbonized economy); and “process” (how we get there) (Galgoczi, 2019). The outcome should be a sustainable regional economy that has a long-term perspective with decent jobs and reduced inequality. Meanwhile, the process should be based on a managed transition with meaningful social dialogue at all levels to ensure that burden-sharing is fair and that nobody left behind (Galgoczi, 2009).

Working on just transition brings all actors who believe in fair regional development to the same table: unions, public administration, governments, civil society and others sharing this goal. All should be working together to find what is best for their regions and communities from creating good quality jobs to identifying sustainable development (Galgoczi, 2019). More generally, successful restructuring can be guaranteed only by a complex regional revitalization which includes such issues as transport, environment, health and social protection. This regional revitalization in ideal conditions, is a bottom up process shaped by local communities and their leaders, with in-depth knowledge of local situation (Caldecott et al., 2017a). Even basic things like concentration of mining activities matter. This militates in favor of consensus-driven dialogue with local actors and against the application of one-size-fits-all policies on “best practice” formulae (Caldecott et al., 2017a).

For transition to be socially just, one needs to have a good plan (Slimko, 2019). Experience gained by European mining regions shows that the first step towards devising such a plan should involve setting a deadline for ultimately phasing out coal. Another step should involve engaging all sides affected by the transition in the planning process. In Silesia in Poland one of the two regions in EU with the highest production in Europe, and one of the largest in terms of number of enterprises active in coal mining (Alves et al., 2018), these two elements are absent and that triggers fears in many people who are associated with the mining industry in Silesia (Slimko, 2019).

2.3. Coal transition policy in EU Member States

According to Jakub Chelstowski (Slimko, 2019), in Poland the absence of any consultations or contact between the investors and the civil society, and the fact that the two sides get an opportunity to meet only during administrative proceedings, are unacceptable because they challenge the justness of the transition process. Jakub Chelstowski (Slimko, 2019), used the term ‘just transition’ in the context of looking for a synergy between various stakeholders in preparing “constructive and mature projects”. The marshal’s declaration is all the more important because it was one of very few statements by decision makers to mention the need to seek synergies also in

contacts with social partners (Slimko, 2019). According to a research (Mustata et al, 2020) in Romania, citizens and their representatives - be it NGOs, associations or worker unions - must be involved in all steps pertaining to the planning, implementing or evaluating of the concrete strategies and projects and must be granted the power to make decisions or add and change relevant elements towards the coal transition.

As more and more developed countries transition away from coal, there are a growing number of practical interventions being explored. Sartor (2018) has summarized the experiences of different countries and identified several options that have been implemented: funding early retirement for older workers; redeploying workers across assets such as mines and plants; retraining or redeploying workers within the sector of firm; coordinating across firms to redeploy workers with particular skills; and retraining or reskilling workers for existing or future industries in the region.

Case studies also suggest that the reasons and “discourse” legitimating the transition can matter in terms of stakeholder buy in and this suggests another important role for local circumstances (Caldecott et al, 2017a); In the UK, for example, the transition was famously conflictual and this appears to have contributed to the severity of outcomes for the workers and regions in the regions. In other cases, such as the Netherlands and Poland conflict or the threat of social conflict has also played an important role in affecting the outcome of worker compensation packages (Caldecott et al, 2017a).

In Spain, closures of coal mines have been accompanied by funded transition strategies for workers of varying ages, alongside environmental rehabilitation plans that prioritize employment for former miners. Infrastructure development funding will be provided alongside the development of action plans for mining communities on renewable energy and energy efficiency and new industries (Industrial Global Union, 2018). However, social protests have occurred in relation to government restructuring plans, promoting an undesirable situation being continued with short terms solutions that are expensive and unsustainable (Caldecott et al, 2017a).

The Netherlands - thanks in large part to the discovery of a giant Groningen natural gas field in 1959 - started a rapid transition away from oil and coal to natural gas. To facilitate the transition, the government decided in December 1965 to abandon all coal mining in the Limburg province within a decade, doing away with some 75.000 mining related jobs impacting more than 200,000 people. What seem to have made the transition successful was that the government strategically steered it (Verbong and Geels, 2007), implementing countermeasures such as subsidies for new businesses, the relocation of government industries from the capital to regions of the hardest hit by the mine closures, retraining programs for miners and offering shares in Groningen to Staatsmijnen (the state mining company) (Sovacool, 2016).

Germany is the utmost European example of a successful coal transition; the case of the Ruhr demonstrates how important it is to involve a range of local stakeholders to secure the support and understanding of regional restructuring strategies. Unlike top-down measures coming from outside, bottom-up policies can tap the creative potential on the spot (Hospers, 2004). If anything, one overall lesson of the case of the Ruhrgebiet is the importance of what the economist Friedrich von Hayek (1948) has aptly called “the particular circumstances of time and space” in economic life.

Likewise, appropriate strategies for regional renewal in an enlarged EU should ideally emerge from a careful consideration of what is suitable, acceptable and feasible within the particular local context. Thus, there is no magic recipe for rejuvenating European regions hit by industrial transformation. Nevertheless, the Ruhr case is still useful for those areas: as a matter of fact, in every industrial region the precise nature and rate of structural change is not only determined by the particularities of time and place, but also contingent on policy responses by the local community (Hospers, 2004).

Despite all the efforts to remain competitive, many mines and plants were forced to close down. The closures, however, took place gradually and were socially controlled (Hospers, 2004). In mining, for instance, the workers who were fired were given large sums of money in compensation; alternatively, they were simply allowed to retire at the age of forty-nine. Simultaneously, however, a new generation of young miners

and steel workers was educated with subsidies from the local government (Hospers, 2004).

All in all, the debate on the transition plan should take into account a number of aspects because a just transition cannot be limited to phasing out coal or replacing coal mining and coal-based power generation with other types of economic activity (Slimko, 2019). It also involves changes to the job market, which should be implemented as smoothly as possible, and efforts to improve the quality of life in the region, and should be carried out as a bottom-up initiative, with the participation of various stakeholders and according to democratic standards so that it takes into account the interests and expectations of all affected groups in a fair manner (Slimko, 2019).

3. THEORETICAL FRAMEWORK

3.1. Energy justice

Reconfiguring energy policy as socio-energy design requires new strategies for integrating the human and social dimensions of socio-energy systems into processes of energy design, planning and policy-making. This requires understanding, acknowledging and incorporating the ways in which people inhabit energy systems: as residents, consumers, workers, investors, managers etc (Voss et al, 2009). Energy systems can only change when and if people make choices, whether these agents are business managers, policy officials, scientists and engineers or consumers. In turn, changes in energy technologies reshape social practices, values, relationships, and institutions such as new business models, forms of work, and ways of knowing and living (Miller et al., 2013).

Designing, creating and implementing energy transitions that replicate past injustices- or create new ones- not only does not lead to sustainable and equitable energy futures but also wastes a significant opportunity to create improved human outcomes via socio-technological systems transformation (Miller and Richter, 2014). Needed are new methods that (1) emphasize human thriving, social wellbeing, and social equity

as outcomes for energy systems (Medvecky et al, 2013); (2) assess how the benefits, costs and risks of socio-energy systems are distributed and evaluated within communities (Bell et al.,2013); and (3) evaluate the implications of socio-energy systems change for marginalized groups, so as to inform comprehensive and sustainable social planning that proactively addresses the social and environmental dislocations and ruptures that energy systems produce (Miller, 2012).

To better approach the energy policy as a socio-energy design a novel concept is increasingly being used: energy justice; it is a concept that it has only been explored very recently by McCauley et al. (2013), Sovacool (2013), Sovacool et al. (2013), Heffron and McCauley, (2014) and Sovacool and Dworkin (2014, 2015). In socio-energy systems energy justice is a question of both the distribution of human outcomes within these systems, the distribution of power and voice in energy decision-making and the deeper relationships between energy and the kinds of society humans fashion through and around it (Miller et al., 2013).

The challenge of energy justice theory is to apply a three-pronged approach not only to energy policy but to the entirety of the energy system There are three pillars of energy justice: distributional, procedural, and recognition justice that are interlinked and there are many overlapping issues (McCauley et al.,2013). According to Jenkins et al.,(2016a), however, on the grounds of their “what, who and how” approach the third pillar is placed in second place.

The first pillar of energy justice is distributional justice; the fair allocation of the costs and benefits of a transition throughout society (Piggot et al, 2019). It represents a call for the distribution of benefits and ills on all members of society regardless of income, race etc, (McCauley et al., 2013). Distributive justice concepts judge fairness by the final outcomes and thus consequentialist ethics (Henninghausen et al., 2008). Here an allocation is considered fair if every individual holds the means he is entitled to (Nozick, 1974; Konow, 2001). The first variant of this type is the need principle (Deutsch, 1975). It demands that every member of society, irrespective of his own abilities and initial allocation, is guaranteed sufficient material means for a tolerable living (Henninghausen et al, 2008).

According to the capability approach, well-being is understood as people's real opportunities to achieve valued functionings (functionings are 'beings and doings' (Nussbaum, 2000; Robeyns, 2003) and real opportunities are understood in terms of people's internal resources (e.g. natural abilities, aptitudes, skills), external resources (e.g. money, property, support networks) and structural conditions (e.g. material structures, laws, formal power relations and cultural and social norms) (Green, 2017b; Wolff and De-Shalit, 2007). A movement or policy to retire an entire industry cannot be credibly politically articulated - never mind succeed democratically - without paying attention or having one's attention drawn to the "winners" and "losers" of such a transition; that is, the distributional issues of who gains and who pays the cost, which calls for attention to energy (in)justice (Healy and Barry, 2017).

Governments -whether regional or central- and indeed other stakeholders, need to think about what a just distribution of benefits and costs from mining activities should be. A clear theme is that companies often tended to privatize many of the gains and socials many of the losses/liabilities from activities (Caldecott et al., 2017a). An UK research demonstrates that it is often the poorer and less powerful social groups that are disproportionately impacted (Todd and Zografos, 2005). However, stakeholders with long-term investment in local communities or mining activities appear to have an interest in ensuring that companies and governments (whether regional or central) are making the appropriate preparations and allocating costs and benefits of mining in a fair and just way (Caldecott et al, 2017a).

Survey evidence (Cai et al., 2010) and case studies from carbon pricing attempts in Australia (Chubb, 2014) and Canada (Harrison, 2012) suggest that people are more likely to support a climate policy where it is perceived that the incidence of the policy's costs will likely lie with polluting industries and more likely to oppose it where it is perceived that the costs will lie with vulnerable groups. In addition, policy-makers and other proponents of low-carbon transition lack a plausible fairness narrative and instead use transition policy for transactional vote-buying, it is likely that they will be ill-equipped to win the public debate over a proposed climate policy in the short term, let alone to build viable conditions for increasingly ambitious climate mitigation action over the longer term (Green, 2018).

The second pillar of energy justice is procedural justice. It manifests as a call for equitable procedures that engage all stakeholders in a non-discriminatory way (Walker, 2009; Bullard, 2005). Different groups of people who hold different sets of motives and interests may make different choices regarding the distribution of benefits and risks (Miller et al, 2013). Procedural justice states that all groups should be able to participate in decision making and that their decisions should be taken seriously throughout. It also requires participation, impartiality and full information disclosure by government and industry (Davies, 2006), appropriate engagement mechanisms (Todd and Zografos, 2005), the fair exchange of information and the consistency of decisions over time (Steg et al., 2013). In addition, due process is relevant to every level of energy decision-making at local, provincial, national and global (Heffron et al., 2015).

Sovacool et al (2015) make reference to eight principles of energy justice in the decision-making process: availability; affordability; due process; transparency, sustainability, inter-generational equity, intra-generational equity and responsibility. Dolan et al. (2007) argue that decisions are considered fair if every person potentially affected by them is given the chance to voice his opinion and concern in a transparent and consistent way. Effective participation, however, does not necessarily mean physical involvement; it means the inclusion of knowledge, discourse and stories in the decisions that can make a significant impact on policies (Jenkins et al., 2016).

The democratic participation of citizens in any energy transition is an integral component of the low-carbon transition (Healy and Barry, 2017). Political action by civil society will be required to accelerate the phased ending of the fossil fuel era. More than that, it must end it in such a manner that the transition to a low-or post-carbon energy future minimizes injustices of that transition and minimizes its democratic character (Healy and Barry, 2017). The political space for civil society mobilization is country dependent and normative interventions to stigmatize/delegitimize the fossil fuel industry may alienate coalitions (communities, unions) in fossil fuel dependent regions.

Country-specific strategies must be tailored in order to create coalitions between ecological and social movements, labor unions, communities of color and energy sector workers. Policy makers in turn need to connect and tailor their policy making to local contexts, best done by including those communities and citizens in collaborative policy-making (Jenkins et al, 2017). Communities can be valuable partners in renewable energy planning, not simply barriers to energy development (Miller et al., 2013). However, many changes are currently taking place with little input from community and consumer voices, potentially laying the foundations of yet more injustice in future (Miller et al., 2013).

The third pillar of energy justice is recognition justice. Recognition is not the same as participation, instead manifesting as "the process of disrespect, insult and degradation that devalue some people and some places identities in comparison to others" (Walker, 2009). Recognition justice is more than tolerance, and states that individuals must be fairly represented, that they must be free from physical threats and that they must be offered complete and equal political rights (Schlosberg, 2003). A lack of recognition can therefore occur as various forms of cultural and political domination, insults, degradation and devaluation. It may manifest itself not only as a failure to recognize, but also as misrecognizing - a distortion of people's views that may appear demeaning or contemptible (Schlosberg, 2003). Thus it includes calls to recognize the divergent perspectives rooted in social, cultural, ethnic, and racial and gender differences (Fraser, 1999; Schlosberg, 2003).

It is unclear the extent to which enacted just transition policies will ensure an equitable transition away from fossil fuels-that is a transition that doesn't leave certain groups in society worse off and ideally helps address existing inequalities (Piggot et al., 2019). Key proponents calling for the inclusion of a just transition in climate policy - such as trade unions and the international labor organization - view the necessary energy transition as a window of opportunity to improve social, environmental and economic outcomes for all members of society. This goal is echoed in the UNFCCC's guidelines for a just transition which call for an inclusive transition that reduces inequality, and pays particular attention to historically disadvantaged groups such as women, youth, indigenous and tribal opportunities

(UNFCCC, 2016). However, existing policies focus on compensating workers and communities directly affected by fossil fuel transition rather than on the broader gender and social equality concerns (Piggot et al., 2019). Human rights are at the heart of energy justice: energy is essential to human life (Miller et al., 2013).

Given that a society's socio-energy system shapes, enables and constrains the basic structure of that society, any transition from one socio-energy regime to another is monumental in its multi-faceted and multi-scalar impacts (including unintended ones) (Healy and Barry, 2017). If for this reason only, an appreciation of the political struggle at the heart of any energy transition process, together with the necessary interlinking of the issue of democracy, democratization and justice and injustice, mean that only a "just and democratized" entire energy life cycle transition will do. Ecologically saving "sacrifice zones" only to produce a new class or group of "sacrificed citizens" is neither politically feasible nor normative acceptable (Healy and Barry, 2017). Simply decarbonizing the status quo is not, in short, energy justice, and while such a narrow focus may achieve environmental sustainability, it may do so at the cost of bypassing both the claims of justice and democracy in the low-carbon energy transition. In short, overcoming "carbon lock-in" cannot be at the price of "energy injustice lock "in" (Healy and Barry, 2017).

3.2. Coal transition and successfulness of policy implementation

Transition management as a management tool is considered to "influence the direction and speed of transitions by coordinating and enabling the process that occur at different levels in a more systemic and evolutionary way" (Kemp and Loorbach, 2006). A growing body of research claims that system-wide transformations are required to address the challenges posed by climate change and the move to a low-carbon economy (Foxon et al, 2009; Jackson, 2009; UKERC, 2009; WSSD, 2002). However, it is perceived some of the limits to energy transitions; the possible alternatives, the varying winners and losers and thus crucially how this might work towards more socially just and politically inclusive transitions (Heynen et al., 2006; Monstadt, 2009).

It is acknowledged that transition management could potentially open up democratic opportunities by fostering more participatory, deliberative and plural forms of policy making (Voss et al, 2009), but “democratic attributes do not surface on their own, particularly for highly complex, technical issues. Instead procedural matters need to be “designed in” (Hendriks, 2009). One way to tackle the democratic deficit of transition management would be to concentrate on innovative ways to encourage participation and establish closer linkages with institution of representative democracy for deciding about what constitutes the public interest, for enforcing rules and resolving distributional conflicts (Meadowcroft, 2009).

The effectiveness of different transition policies will vary from context to context, but some general theoretical expectations can be stated. Backward looking policies (compensation and exemption) will tend to be administratively simple to implement, requiring less in the way of institutional capacity. Yet, the narrowness of the objectives of such programs threatens to undermine their fairness and political transformation potential. Forward –looking policies (structural adjustment assistance and holistic adaptive support) have more ambitious objectives and greater potential to be fair and transformative, yet are more complex to implement and require greater institutional capacity to succeed (Green, 2018).

According to the indicators of a just transition identified by ETUI to qualify the success or failure of policy measures taken (Abraham, 2017), a successful just transition is characterized by social dialogue; re-employability; re-training and a central role for the welfare state (Harrahill and Douglas, 2019). Social dialogue has been identified as an important tool for anticipating and managing the effects of decarbonization on workers and employers (ILO, 2016). In assessing the role of co-determination in the just transition process, key factor include the ability of workers or workers’ representatives to influence the process (Harrahill and Douglas, 2019). As far as the re-employability is concerned, the move towards renewable energy has the potential to create jobs for workers and associated benefits for communities.

Neo-industrialization involved the diversification of the types of industry (Galgoczi, 2014). Central to this is a bottom-up approach involving co-operation between

different actors - workers, communities, employers and government (Campbell and Coenen, 2017). Re-training for workers from a primarily low-skill base has been identified as vital for workers to have the necessary skills to work outside of “dirty” industries (Campbell and Coenen, 2017). A proactive approach to re-training is crucial to emphasize the importance of assisting workers and communities in adapting to life after coal (Campbell and Coenen, 2017). Last but not least is the role of welfare state that the state provides assistance to those who fall into unemployment such as “adjustment allowance” and individual compensation. However, (Spencer et al, 2018) argue that although compensatory policies help to smooth the political economy of coal sector transition in the short-term, their effectiveness in the long term is weak.

4. METHODOLOGICAL APPROACH

4.1. Research design

The study employed the approach of qualitative explorative study as its core scientific methodology since the purpose is to explore whether and how the developed theoretical framework for transition processes seem to be valid and productive when describing actual transition processes.

To operationalize the theoretical framework, interviewing has been regarded as the most appropriate research technique; powerful way of helping people to make explicit things that have hitherto been implicit - to articulate their tacit perception, feelings and understanding (Arksey and Knight, 1999). The interviewer subtly probes informants to elicit more information, which is developed later. The quality of interviews rests largely on choosing the right informants. Thus, informants are not selected through random sampling but their selection has been upon certain criteria (Kumar, 1986); firstly, their firsthand profound knowledge and the insights they have into the matters of coal transition; secondly, their centrality; the degree to which they can play a central role in the process of the coal transition; thirdly, they are considered representatives from certain groups: EC officials, to perceive the European view and representatives of national institutions, to perceive the national governmental views

on justice in the coal transition process and last but not least, their willingness to participate.

Explicitly, a brief presentation of interviewees is as follows:

-Interviewee A, male, middle-aged, been appointed member of EESC for 13 years, rapporteur for the EESC's opinions on topics: "Indigenous coal in the EU energy transition" and "Non-energy mining industry in Europe". Interview date: 17th of June 2020 by Skype, one and half hour interview, eleven-page transcribed text.

-Interviewee B, male, middle-aged, been working as European Official Officer for 33 years and the last 8 years works in the Unit of Energy policy, the Energy Union and external policy in Directorate-General "Energy" (ENER), participant in many stakeholders meetings for coal transition and appointed coordinator of coal transition in many European coal mining regions. Interview date: 25th of June 2020 by Skype, sixty-minute interview, nine-page transcribed text.

-Interviewee W, male, middle-aged, member of the Committee for Just Transition in Greece, ex-member of EC, participant in the stakeholders' meetings for Coal Transition in Greece held in Greece and in EC. Interview date: 26th of June 2020 by Skype, fifty-minute interview, eight-page transcribed text.

-Interviewee X, male, middle-aged, EC's Honorary Director, Member of EBRD, ex-Head of "Cohesion Policy and Environmental Impact Assessments" Unit in the Directorate-General for the Environment of the EC. Interview date: 11th of May 2020 by Skype, fifty-minute interview, five-page transcribed text

-Interviewee Y, middle-aged, member of Greek Parliament, elected in coal mining region, carried out a handful of reports to the Greek Government for the coal transition in Greek coal mining regions. Interview date: 20th of May 2020 by Skype, fifty-minute interview, five-page transcribed text.

Initially, the interviewees' list included eleven potential Interviewees. I have done what I could to interview as many as possible and feasible, since I have strived after as varied and multi-versed experiences, perspectives, and views as possible, so my

study to be conducive to the exploratory ambition. However, I end up in five interviewees.

Interviews are conducted using interview formats that list the topics and issues to be covered. The number of items listed in an interview format is limited to 15 since when an attempt is made to cover a wide range of topics and issues with a key informant, the discussion tends to become superficial (Kumar, 1986). The interview format (appendix I) has been generated from the theoretical framework: energy justice and its three pillars: distributional, procedural and recognition. In the current study, the theoretical framework is not used for theory-testing but for enabling understanding of the empirical evidence generated; how justice aspects can be understood and studied in coal transition processes. The questions have been phrased to elicit the experts' perception on what constitutes social fairness, inclusion, and successfulness in coal transition processes based on the experts' perceptions. Explicitly, questions - related to each pillar separately - have been formulated and posed to Interviewees who have been approached as respondents. Their views about justice have been required with the aim of making them feel much more at ease in responding, so they would not hesitate in sharing their views. When interviewees are asked about facts (and perceiving as fact providers), they tend to be scared off/silenced afraid that they give "the wrong answer". Since experiences, perspectives, views, ideas basically cannot be wrong, it is much easier to obtain good validity in informant interviews in comparison to respondent interviews.

4.2. The process of interviewing

The interviews are semi-structured to make the interviewer be actively engaged with the interviewees and pose follow-up questions depending on the answers of the interviewees and the course of interview itself (Brinkmann, 2013). Additionally, semi-structured interviews allows the interviewer to obtain knowledge provided by the interviewees who are experienced in the coal transition process while the interviews at the same time allowed for open-ended questions (Brinkmann, 2013); the respondents could talk freely and the interviewer could ask for clarification or elaboration in case an answer or something has been unclear.

Over the last decades, the technological changes in growth of the Internet have developed the experience of online interviewing in qualitative inquiry (Hooley et al, 2012). The present research has been conducted during the covid-19 pandemic. So the face-to-face interview method has been excluded due to health protection reasons and the alternative selected has been the use of the VoIP (Voice Over Internet Protocol) system which provides users with a way to send video and voice across the internet via a synchronous (real time) connection (Lo Iacono et al., 2012).

Currently the most popular services that use VoIP are Skype and Face time; Skype has been selected as a valuable alternative data collection tool (Lo Iacono et al., 2012) mainly for two reasons. Firstly, access to verbal and nonverbal cues in Skype interviews can provide an equal authenticity level with face-to-face interviews, because the opportunity allows that a visible part of the impression management process can be evaluated (Sullivan, 2012). Secondly, the interviewees have not had any obstacles to using Skype since they are accustomed to this internet interactive mode of communication. The Skype interviews have been conducted by the researcher, meaning that the researcher and the interviewer has been the same person; the interviewer has leaded the conversation to its research interests and create an atmosphere of trust, discretion and confidentiality inspiring. The interview's length was between fifty (50) and sixty (60) minutes apart from one that lasted almost one and a half hour.

4.3. The act of analysis

The content analysis approach has been applied to analyzing the qualitative data; the transcribed text that has been the basis of data through certain stages.

Responses have been documented by video-recording the Skype interview via a computer-based recording software. The recorded interviews have been transcribed which is a time consuming process. It took seven to ten hours to transcribe each interview. Yet, there is really no substitute for being able to see all the transcribed data at a glance during the analysis stage of the research (Gray, 2014). During the

transcription procedure, the questions asked by the re-researcher have been in bold to quicker distinguish questions from interviewee's answers. Then the transcribed text has been checked for clarity and accuracy; for example, square brackets with three dots, [...], have been used to indicate missing or unclear sections. The transcription procedure ensures also the accuracy of the study - an element of a quality indicator (Gray, 2014) -, as it is obvious that the data is a fair representation of what the interviewees have actually said.

The thirty-eight page transcribed text used and analyzed to draw the conclusions with the aim of answering the developed research question. The "Coding" has been used as a means by which the interview analysis has been conducted through the thematic organization of the interview questions (appendix II): the three pillars of energy justice. Each pillar of energy justice is connected with a "category". Each category is in turn connected to a list of search terms. On the basis of the research theory, key words such as "burden", "fairness", "distribution", "inclusion", "affected groups", "success", "justice" have been used. To search and code the scripts, a software for document analysis is used. It is worth noting that a search term has not automatically been connected to a code each time it has been found; coding has been based on how the search term is used.

4.4. Quality and validity

In Gray's words (2014), "the quality of the research will be assured by its validity and reliability that enhance the credibility of the study. Consistency, accuracy and neutrality will be further actors of quality indicators".

The issue of validity can be directly addressed by attempting to ensure that the question content directly concentrates on the research objectives (Gray, 2014). Building of rapport and trust between the interviewer and the interviewee has been a key element to strengthen the validity (Arksey and Knight, 1999); In order rapport to be established at the current study, the interviewees have been fully aware of the way the interview would have been conducted, how long it lasted and the general subjects covered. With the aim of creating a connection with the interviewees over time, a

series of emails have been exchanged before the Skype interview since emailing several times before Skyping might strengthen rapport (Seitz, 2015). The fact that the interviews have been made by the interviewees staying in their own chosen familiar environment has also enhanced the sense of rapport as Hanna (2014) states “both the researcher and the researched are able to remain in a safe location without imposing on each other’s personal space”.

As regards trust, the interviewees have been asked for permission to video record the Skype interview and there has been no objection to the video recording. Afterwards, the names of interviewees have not been displayed in the transcription enhancing in that way the confidentiality of the research (Gray, 2014). All the above steps have been followed with the aim of ensuring the issue of validity.

The issue of reliability lies in the avoidance of the “interviewer effect” as interviewer bias can creep into the interview situation in many subtle and not so subtle ways (Kumar, 1986). However, the only way to avoid this kind of systematic error is the interviewer’s behavior to be standardized (Gray, 2014). The interviewer/researcher has been remain objective, professional and detached yet relaxed and friendly. For that reason, interview guidelines have been followed by the interviewer/researcher before each Skype interview (appendix I). According to these interview guidelines, the interviewer/researcher repeated a question if asked, accepted a respondent’s refusal to answer a question without any sign of irritation and last but not least probed in a non-directive manner. All the above mentioned have strengthened the neutrality of the study as the researcher has been fully aware of the possible consequences of its own actions and perceptions.

4.5. Ethical considerations

Ethics is central to data collection methods in every piece of research (King and Horrocks, 2010), including those carried out using Skype (Lo Iacono et al, 2016). All the empirical qualitative studies must respond to a range of ethical considerations defined by Plummer (2001) as including: 1) Intellectual property, 2) Informed consent, 3) Right to withdraw, 4) Unintended deception 5) Accuracy of portrayal, 6)

Confidentiality and 7) Financial gain. The standard ethical procedures have been followed to make sure that Plummer's considerations have been met; the interviewees have been informed about the purpose of the study and their written consent (appendix, III) has been required in order the Skype interview to take place (Gray, 2014); they have been pre-warned and asked if the interviews could be recorded; the interviewees had the right not to answer any question that the interviewee considered individual or even the interviewee has been entitled to terminate the interview before its completion in case it has been deemed that a question has been insulting or to stop the recording of the interview at any time; the interviewees had the opportunity to choose day and time of the Skype interview.

With a Skype video interview though, there are some additional ethical considerations to take into account, namely the issued created by the fact that the interaction is mediated through the use of technology (which is owned by third parties) (Lo Iacono et al, 2016); the verification of participant's identity; the issued raised by the interview environment and the nature of recording this. As regards the verification of participant's identity, the participants' identities have been available for verification on online media (such as Facebook and Twitter). For the interview environment, the issue has been addressed by advising participants on the selection of appropriate locations which they were interviewed with reference to issues of privacy since participants may be unaware of what is within range of their camera and inadvertently disclose something that would rather keep private (Lo Iacono et al, 2016); Finally, the nature of recording the Skype Interview; In order to address this, participants additionally to being informed when recording had begun, was paused or stopped, the opportunity has been offered to listen to a copy of the video recording of the interview, thus responding to Plummer's (2001) considerations of Unlimited deception and Accuracy of portrayal respectively.

To meet confidentiality, the researcher ensures the answers to the questions posed would be used only for scientific purposes while once collected the data would be stored on a password protected computer and only the people involved in the research would have access to the research data. Last but not least it should be clarified, the anonymity of the transcription as only the interviewer is aware of the interviewees'

personal data. The choice of anonymizing is made in order not to allow for any identification. Thus, all interviewees are named randomly as “Interviewee A, Interviewee B, Interviewee W, Interviewee X, Interviewee Y” (Reference, I).

4.6 Limitations

Limits of this study and most qualitative research include non-generalizability, as the goal of qualitative research is exploration. This exploration can inform future research, including investigation about whether the subjective norms of justice identified by these participants hold true for other interviewees as well.

5. Discussing pillars of justice in coal transition processes with five experts

Tackling the aim of the current research to develop and empirically explore an analytical framework that defines various aspects of justice in coal transition processes, one research question is set down: How are considerations and measures for social fairness, inclusion and successfulness perceived by a handful experts engaged in European coal transition processes?

To answer the research question, interviews made on the basis of energy justice’s analytical framework and its three pillars. The first one is related with the distribution; the fair allocation of the costs and benefits of a transition throughout society. The second with the procedures; the way all the stakeholders are engaged through the appropriate mechanisms in the preparation, planning, decisions, and implementation of coal transition processes. The third one with the recognition; the social groups who explicitly or implicitly are engaged in the coal transition process taking into consideration the stakeholders’ interests.

5.1. Distributional pillar

5.1.1. Distributing burdens among social groups

In various ways all the interviewees maintain that the most impacted in coal transition processes are the coal workers. Interviewee A formulates it like this:

The most impacted are the workers which are directly working in the area so the coal miners are the directly impacted as it is the target group of this transformation (Interviewee A, transcript page: 1)

As Interviewee A pointed out for the coal workers the active / passive measures have not been always successful as “there is the temptation to give them something but afterwards nobody knows what will happen with them” (Interviewee A, transcript page: 1).

The views provided by the Interviewee B suggest that the burdens shared depend to a large degree on the subgroups they are distributed to the elder, those who have a very high standing in the workforce and the high skilled (Interviewee B, transcript page: 11). As regards the elder, the early retirement guarantees or bonuses given to them seem to be an effective measure. The high skilled seem to be the complicated one as they earn two-three times more than the normal workers, explaining in the following way by Interviewee B

It is of course very difficult for them, if you find a new business a new economic opportunity these people will never find the post which will guarantee them the same level of wage (Interviewee B, transcript page: 11)

Another group is the young one; those who traditionally in their planning and their working life time is occupied in the power plant. For them, according to the Interviewees A, B and Y, it should be given a new perspective and setting up re-skilling programs; through this process for the mine workers with their practical experience will be much easier to be occupied into the jobs that are created at the time using the existing power plants and all work force that is there in continue because for

the coal workers it is irrelevant whether producing electricity from coal or wind or from other energy sources so this the way to have them in the labor market (Interviewee A, transcript page: 2, Interviewee B transcript page: 11, Interviewee Y, transcript page: 34). Actually a new approach emerges; from a social package to reskilling/upskilling. Consequently, the role of businesses is decisive; according to Interviewee B they should be attracted in the specific regions and there are of course businesses that are valid in mining and win also their existence through the mining:

the transformation process here is to see how the businesses participate in the development in the business opportunities (Interviewee B, transcript page: 11).

5.1.2. Ways of preventing unjust burden distributions.

All interviewees express the view that the focus on programs covering all valuable groups and the most affected social groups should be helped in priority through the EU Just Transition Mechanism. As Interviewee B points out “no-one to left behind that is the visionary” meaning that “whoever is in concern by the transformation process her/his concern means to be captured in the strategic” (Interviewee B, transcript page: 11).

Interviewee A emphasizes that the initiatives programs should be financed and the burden has to identify the right partners to implement projects (Interviewee A, transcript page: 2). All interviewees emphasize the important role of partnerships in the coal transition; firstly the role played by the government, secondly by the private investors but also with the partnership between the government and the social partners which are in the area as they also can take a part of this burden and thirdly all the citizens who have their share of burden.

However, apart from the direct impact, Interviewee B points out the indirect one and the role played by the government to surmount the difficulties (Interviewee B, transcript page: 12). Interviewee A explicitly refers that if “you do not have something to compensate will be spelt by the citizens in the area” (Interviewee A, transcript page: 2).

At this point the issue of energy poverty has raised and the remark that these issues should exist to policy measures and financial assistance measures such as the availability of unemployment allocations and the need for derogations from general unemployment law which might have some conditionality or limitations in time conditions. So any law restriction should be deleted because it is about a critical situation. Actually as Interviewee B emphasizes

there is no one problem you really have to identify and you have to address it in a way that all these concern groups are properly addressed (Interviewee B, transcript page: 13).

5.1.3. How authorities relate to compensatory claims articulated by stakeholder groups

Interviewee B declares that he is unable to answer the question as he was not in the meetings between the local authorities and stakeholders so he does not know what kind of claims they got (transcript page: 13). Interviewee X raises the issue of circular economy by stating that “the compensatory claims are considered in the strategy, plan and circular economy” (Interviewee X, transcript page: 30)

The account of Interviewee W reveals the crucial role of stake-holder:

the role of stakeholder is vital and for that reason they are called to participate in the shaping of local policies that create a context for fair incomes, new jobs and a decent life for all those affected by climate mitigation and adaptation measures (Interviewee W, transcript page: 22)

An interesting view is conveyed by Interviewee A that refers to a concrete example of a debate during which the stakeholders articulated ten points in order to ameliorate the situation of the region (Interviewee A, transcript page: 3). Among the points was a social package related with retirement schemes, compensatory wages, training

programs; reskilling, upskilling. There was an infrastructure package; linking a department road with a national one, connecting thus regions and giving the chance to diverge economic activities. There was an economic package focusing on the idea of having an industrial park in the area such as a bicycle company and finally was a creative cultural package as the proposal was: “why don’t we build the museum”.

5.2. Procedural pillar

5.2.1. Practical involvement of stakeholders groups in the planning, discussing, decision-making and implementation of coal transition processes.

The views provided by all interviewees suggest the decisive role played by the stakeholders. Explicitly Interviewee W argues that

the stakeholders play a decisive role in the consultation and preparation – submitting sustainable proposals, participating in out of spreading information about the phasing down coal and knowledge for a future strategy (Interviewee W, transcript page: 23).

The Interviewee B emphasizes that the stakeholders must be involved also in the implementation of the transition project (transcript page: 14) while the Interviewee X strengthened the importance of digital consultations and open dialogue through the “just transition” platform (Interviewee X, transcript page: 30). The term “practically” for the Interviewee A means legally:

In the social dialogue relations which are considered to be very practically are forced by law. Practically first of all means to participate in the social dialogue processes, developing certain kind of economy at governmental level where the trade unions can be directly and practically involved in this discussion having a direct impact to the contracts or agreements which are concluded between the parties (Interviewee A, transcript page: 4).

According to the Interviewee A, other practical issues are the implementation of educational training programmes and partnerships with other organizations and also volunteer initiatives (Interviewee A, transcript page: 5). The Interviewee A refers to two layers; to bring everybody to certain level of development with a clear organization who is doing that and the need for coordination among the different groupings in order to make this process efficient (Interviewee A, transcript page: 5).

5.2.2 Making a constructive dialogue with all the stakeholders' groups

“Tailored agendas” was the view of Interviewee X emphasizing the role of concrete and specific discussion themes around the just transition (Interviewee X, transcript page: 31). The Interviewee A’s view was that authorities should have the patience to listen as it is not always easy to find these kind of authorities nowadays explaining that

the authorities just want to escape from the problem not to engage in it, claiming that they have a lot of other problems, focusing on issues related with the future forgetting that –if they do not resolve the unsolved issue of the past -will be very complicated to look in the future. So the authorities have to engage to respect the law. (Interviewee A, transcript page: 5).

Interviewee A also emphasizes that the European and national legislation ask the governments to respect the law and solve issues of such complexity (Interviewee A, transcript page: 5). Indeed, the coal regions are complex regions with problems on environment issues and with opportunities for the citizens and the authorization of population:

So they (the authorities, my remark) have to have good attitude and ideas; there should be very competent local central authorities to understand the issue (Interviewee A, transcript page: 5).

5.2.3. Social groups who may be excluded from the involvement in the planning, discussing, decision-making and implementation of coal transition processes and ways of preventing it

One very interesting point raised by the Interviewee A (transcript page: 5) is that many of the excluded social groups will never be found as it is not realized that they have been excluded from the process. On this, the role of authorities is of utmost importance:

The authorities should make awareness campaign if they really have the good attitude to discuss and listen as many as voices from the local but this is not normally the case as the authorities want to settle the issue as soon as possible and not have too many problems (Interviewee A, transcript page: 5).

However, from the other side, the Interviewee A continues that every organization which is proactive has a chance now with the platform for the coal mining regions and the process at EU level to interact if they want “nobody will say do not interact with this group or the other” if they can prove their legitimacy”, Interviewee A (transcript page: 6).

The perspective of Interviewees B and Y is that the NGOs in the beginning have been excluded but this was really before discussing the rewarding, the initiatives etc., (Interviewee B, transcript page: 16, Interviewee Y, transcript page: 35). The Interviewee Y points out that everybody from the coal platform it is understood that the inclusion of stakeholders was for the success of transition and since then there are no further complaints and definitely answers that no particular grouping has been excluded (Interviewee Y, transcript page: 35).

5.2.4. The involvement of stakeholder groups and their contribution to the transition processes

All the Interviewees pronounce in various ways the perspective that each party has its own contribution, for example formulated in this way by Interviewee A (transcript page: 6):

every organization interested in the topic can have its own contribution being a study, a campaign, a program, a discussion with commission, focusing the attention on the region issues. So everybody can contribute to it (Interviewee A, transcript page: 6).

Interviewee A (transcript page: 6), W (transcript page: 24) and Y (transcript page: 35) point out that the involvement of stakeholders varies from country to country (Interviewee A, transcript page: 6, Interviewee W, transcript page: 23, Interviewee Y, transcript page: 35) while Interviewee W emphasizes that the involvement of local stake-holders can determine whether the transition succeeds or whether it is delayed, resisted and derailed, arguing that “in fact they (the stakeholders, my remark) must take the ownership of the plan in a inclusive dialogue”, (Interviewee W, transcript page: 24). The Interviewee B stresses specifically that local stakeholders and communities will support the implementation if they are the driving force behind development since local communities have unrivalled insight into their needs and desires, even if on their own they do not have the resources and expertise to actualize them:

Falling to involve local communities will risk missing essential information into their needs desires and strengths and can drive resistance to change (Interviewee B, transcript page: 16).

5.3. Recognition pillar

5.3.1. Groups who were treated as stakeholders by authorities in the coal transition processes and the reasoning.

All the Interviewees convey in various ways the view that the main target group is the coal miners, their families, and the coal mining community as a whole. Interviewees

A and W stress the importance of the direct involvement of the trade unions as it is a very important process even if the workers are not always unionized and the company itself is also a stakeholder but of minor importance (Interviewees A, transcript page: 7, Interviewee W, transcript page: 25). On the other side, all Interviewees convey the views that the local communities start to play more and more an important role in the dialogue and the environmental NGOs as well.

Interviewees B, W and Y mention that other stakeholders are research centres and academies at local level (Interviewee B, transcript page: 17, Interviewee W, transcript page: 26, Interviewee Y, transcript page: 35). The Interviewee A emphasizes the active citizen (Interviewee A, transcript page: 7) while Interviewee B refers to the importance not only of stakeholders but also the population and the crucial role played by the communication:

The communication and the information telling what this transformation process doing in the region which is the cornerstone of success in the transformation process (Interviewee B, transcript page: 17).

Interviewee W provides a broad stakeholders' definition pointing out that

stakeholders are all these who are influenced, involved and are interested in the coal phasing out procedure and they have been selected as stakeholders as their inclusion in the holistic approach is vital for the success of the operation and the ownership for the success is of paramount importance (Interviewee W, transcript page: 26).

5.3.2. Groups that the authorities did not treat as stakeholders at all. In case of a positive answer the reason was asked.

Interviewees W, X and Y maintain that the public consultation is open to any member of the civil society and therefore any group can express its views and everyone who claims to be interested and participating is considered as a stakeholder even if the views of the directly affected are considered more seriously (Interviewee W, transcript page: 27, Interviewee X, transcript page: 32, Interviewee Y, transcript page:

36). Interviewee A points out that the focus is given on certain groups as they are social partners and there is a specific legislation for social partners in many countries (Interviewee A, transcript page: 7). Additionally, environmental organisations are more privileged from “the text of law” explaining that being organized gives the groups more possibility and interest with the political factor while small organizations can contribute but not in the front line.

It is interesting, though that according to Interviewee B in some cases the trade unions have been left out at the stage of getting them involved in the design of the concept of transformation process explaining the reason for that:

This has been done due to the absence of understanding the importance of including the stakeholders right from the beginning in the very early early stage when designing the strategy of transformation, (Interviewee B, transcript page: 18).

Interviewee W expresses what seems to be a commonly held view among all the Interviewees

No stakeholder has been left out deliberately (Interviewee W, transcript page: 27).

5.3.3 Actions of non-represented groups to articulate criticism of not being treated as stakeholders.

Interviewee B seems to be a bit irritated by this question stressing that

I need them (the stakeholders) this is quite clear we never make an assessment of the one group left out or the reason as it was more to urge people and the region to the stakeholders' involvement as early as possible, (Interviewee B, transcript page: 18).

Though it should be noticed that the same Interviewee claims that he is unable to answer the question since they have never looked and kept this kind of complaints though he has made reference to some complaints arisen from NGOs which express also their concern about the environment and the forthcoming social consequences

(Interviewee B, transcript page: 18). Interesting though Interviewee B mentions that there have been some complaints from political parties

some political parties complained that have been left out for instance in Eastern Germany just to be the population at the local/regional elections and they have succeeded it, (Interviewee B, transcript page: 18).

According to Interviewee A (transcript page: 8), there are those who complain about losing the historical memory:

There are memories of the activities as history but with a clear focus on changing the status quo and not remaining in the stagnation, (Interviewee A, transcript page: 8).

Last but not least, Interviewee W claims that he does not perceive any as the “the process is open”, (Interviewee W, transcript page: 27).

5.3.4. Arguments that non-represented groups put forward when trying to voice their interest

Interviewee A explicitly states that the main argument put forward when non-represented groups try to voice their interest is too much focus on traditional stakeholders:

it is claimed all the time that since “nothing has changed in the last three decades, we can no longer go with the same narrative in the future’ so it is time to diversify. (Interviewee A, transcript page: 8).

Interviewee A claims that all kind of organizations like trade unions can no longer represent the entire community since “they used to be hundreds of thousands of workers and now are thousands ” so they can no longer represent the dominant point of view regarding the future of the region, (Interviewee A, transcript page: 9).

The Interviewees B, W, X and Y answered negatively, (Interviewee B, transcript page: 19, Interviewee W, transcript page: 28, Interviewee X, transcript page: 32, Interviewee Y, transcript page: 37).

5.3.5. Involvement by authorities of various stakeholder groups in different ways

Interviewee B stresses that the stakeholders' involvement was more on a strategic view but this has changed practically as EC has worked with all the regions over one year for guidelines for stakeholders' involvement despite the fact that

each region is following a bit also its own way of view and this is in agreement with stakeholders to include them (Interviewee B, transcript page: 19).

Interviewee A asserts that the authorities involved various stakeholder groups in different ways (Interviewee A, transcript page: 9); as regards restructuring issues and the direct consequences of the dismissal they directly get involved with the trade union organization and employers' organization. As far as planning strategies is concerned- specifically the access to future plans which are might be available- it seems that the authorities like more to involve these EU and Global NGOs which are not necessarily from the region:

They (NGO's, my remarks) have the know-how to communicate with the government and try to be important for any kind of project to be financed by the EU, the national governments or the world bank, (Interviewee A, transcript page: 9).

There is the issue of collective bargaining, the Interviewee A explains

so they (the NGO's, my remark) are doing this (reskilling/upskilling, my remark) better than some trade unions and this is the reason why they try always to present and emphasize their activity which is presented to be more concrete, more pragmatic and not necessarily related to the task, (Interviewee A, transcript page: 9).

Interviewee X emphasizes that targeted public consultations should ideally be organized according to the affected groups and their interests as people might move to other regions because of the phasing out of the lignite activities (Interviewee X, transcript page: 33). Yet, Interviewee W stresses that the plan will be successful:

only if it is well accepted and supported by the local society and this implies a full participation of the stakeholders in the core of the project, (Interviewee W, transcript page: 28)

5.3.6. Involvement of stakeholder groups and their contribution to the transition processes

In various ways, all Interviewees express the importance of the stakeholder groups' involvement for the process' successfulness. Interviewee W mentions:

If you don't have each stakeholder taking ownership of the process simply it won't work; the plan will be successful only if it is well accepted and supported by the local society and this implies a full participation of the stakeholders in the core of the project, (Interviewee W, transcript page: 28).

The above quote reveals a rationale according to which there is no alternative if the authorities want a success even if each group has its own contribution as an holistic process in the coal mining depending on their field of activity. According to the experience of the Interviewee B, the trade unions if they are not incorporated they will be against; if the social partners won't be keen on transformation status then it will be very difficult to get them on board and the same applies to the representatives of work force:

there are different representatives of work force that they do not have very very important voice in this process and they simply will try to lock it and you have really to have them on board, (Interviewee B, transcript page: 19).

About the local authorities, Interviewee B continues his reasoning that without any doubt the local authorities cannot be left behind in process

there are a lot of hurdles in the way that they will slow down the transformation process, (Interviewee B, transcript page: 20).

Interviewee A explicitly states that the knowledge and the academic capacity in the region can be very useful to develop the concept. He simply refers that “non using is a failure”, (Interviewee A, transcript page: 10).

The Interviewee B claims that unfortunately the majority is not in the process from the beginning but in the end there is a comprehensive switch as it is explicitly acknowledged the necessity of the stakeholder groups’ involvement

all these forces they hold the project in the same direction without this you will always have this fighting, of course if they are not part of the process or left out you will watch them to take down. So there is absolutely no alternative if you want a success you can only have to get them with all the relevant groupings who have tradition or representing people of region, (Interviewee B, transcript page: 20).

5.3.7. Understanding justice in coal transition processes

Surprisingly, Interviewee A raises the issue of “empathy” towards the coal mining regions, (Interviewee A, transcript page: 10). To boost its statement he refers to Romania as example where there were many protests in the beginning of the 90s and miners were not very sympathetic for the population because of their association with political movement and their political manipulation. As a result the coal miners lost the empathy of the rest of population towards their profession, their job and their activity.

Interviewee A also explicitly states the role of communication and campaigning so as to raise the level of empathy of both the authorities and the public general over the coal regions with the aim of bringing them in line with the potential opportunities in

other part of the country resulting not to leave the coal regions behind, (Interviewee A, transcript page: 10). He continued by explaining further the role of empathy:

a new profile/ a new brand is necessary for these regions and there is no other future and this is explicitly have been understood by the EU. The situation is not the same in all the coal regions since there are rich countries with a lot of opportunities like Germany and countries with different features such as Romania, Spain, Poland or Greece. However in all countries and regions “empathy” is the right word not only for coal regions but for all the regions that might be affected by the industrial restructure”, (Interviewee A, transcript page: 10).

Interviewee X emphasizes that importance of transparency and full consultation in the coal transformation process, (Interviewee X, transcript page: 33) while according to Interviewee W “justice in the transition procedure will be successful if nobody stays behind”, (Interviewee W, transcript page: 28).

Interviewee B (transcript page: 20) explicitly refers to the inter-connection among social fairness, inclusion and successfulness in the coal transition process:

the first and foremost is the social fairness, the direct and indirect effect which is all needed to properly addressed especially for the workforce and those who are directly linked to the mining and the coal, discussing with them their length to see the inclusion there is in order to have success in this transition process; of course what you need is a kind of perspective what is called namely successfulness, (Interviewee B, transcript page: 20).

Interviewee B further clarifies his viewpoint by pointing out that it is necessary to identify the potential for other businesses while energy may remain the core economy activity in the coal region as there is a mono-economic environment based on coal mining (Interviewee B, transcript page: 20). There should be an economic transformation resulting in a new picture -what has been referred to as a new brand by Interviewee A in the coal region at the end of the transition process:

you have to see what it is that can be differ very much from region to region, in some regions will be agricultural, tourism, in others there may be going more to the research centres, others would go into attracting more companies such as data centre to mechanical production that can be extended, (Interviewee A, transcript page: 10).

On this, the Interviewee A describes that transition is not something that you are just doing in order to get out of coal you are doing something that also you have to “know what are you heading to and this turns very very much”, (Interviewee A, transcript page: 10).

Interviewee A emphasizes once more the social pillar of inclusion and therefore the overarching strategy that needs to be grown up in the first place and the creation of so called the capture teams; how they contribute to the coal transition process by collaborating with each mining region separately, discussing with everybody and demonstrating what is the possible economic development for the future in the region, (Interviewee A, transcript page: 11). This is crucial and for that reason “it has to be done in a very conscious manner”, (Interviewee A, transcript page: 11).

The Interviewee B maintains what is successfulness pointing out the utmost importance of perceptiveness:

if you do not have the hearing and the perspective that you want to apply in the region all the rest you cannot do, you will not get to the social fairness you can only do what you needed, when you know where do I go, what do I do and who do I lose on the way to the new economic environment that I have created, (Interviewee B, transcript page: 20).

6. Analysis

As regards the first pillar of justice, the distributional one, the interviews reveal that there seem to be a clear understanding of “who” is the most affected group: the coal workers. As it discussed in the theoretical framework, the interviews’ findings assert that local, regional, national and European authorities have a key role to play in the

coal transition mainly by satisfying the need principle (Deutsch, 1975) and the capability approach specifically the valued functionings (Nussbay, 2016; Sen, 1999). At this satisfaction aims the granting of the retirement guarantees or the bonuses to the elders. The main problem seem to be the young and the high skilled who a new perspective should be given to through reskilling/upskilling programs giving them new opportunities in terms of people's internal resources. That is a new approach adopted in the just transition which is in line with the distributional pillar of energy justice.

Another striking perspective that is pronounced by the interviewees is that the governments play a decisive role in the distributional process; due to the need of collaboration with all the stakeholders involved (the social partners, the NGOs, the citizen) the governments should make the appropriate preparations and allocate costs and benefits of mining in a fair and just way (Caldecoth, 2007), by taking policy measures and financial assistant measures such as unemployment allocations, law derogation and the overcoming of any law restrictions. The issue of compensatory claim for coal workers, the social, the infrastructure and the cultural package are the main claims by those involved in the coal process in order to smooth the burden of transition to the most vulnerable groups.

Another interesting issue conveyed by the interviewees is that some stakeholders seem to worry about the non-financial losses, such as loss of culture or identity associated with industry closure while it does not seem that the authorities adopt any measures to meet such losses.

As far as the procedural pillar is concerned, according to Kunze (2016), all of society need to participate in and engage with the process of energy transition; it appears from the interviewees' views that it is the overarching aim all society to be engaged in each phase of coal transition (consultation, submission of proposals and implementation), taking however into consideration two logics: the first one that each stakeholder has its own contribution depending on its motives and burden shared and the second is that the involvement of stakeholders varies from country to country. There is no one size fits to all approach; the findings in this interview study reveal that

partnerships is a central policy of the functioning of the just transition process and even if each member state has its own institutional traditions, the EC plays a decisive role to the just transition process and how it will be applied to all EU member states.

The interviewees stresses that there are tools such as the just platform, open consultations, targeted agendas with the stakeholders' meetings, which give the chance to every person potentially affected to voice his opinion and concern in a transparent and consistent way (Dolcan et al, 2007). However it is noticeable that the interviewees highlight that there are some groups that may be left out because of lack of legitimacy or some groups will never be realized that have been excluded from the process.

Interestingly that even if the authorities play a key role in the coal transition, they want, on the one hand, to settle the issue of coal phasing out and escape from as soon as possible without many problems and on the other the same authorities should have the patience to discuss and listen as many voices as possible from all the stakeholders which is not normally the case. The interviewees seem also to suggest that an important role played by the local communities as all the interviewees agree that the involvement of local stakeholders can determine whether the transition succeeds or whether it is delayed, resisted or derailed. This acknowledgement is crucial for the coal transformation process to be accomplished in a fair and just way.

As regards the recognition pillar of energy justice, the interviewees underline that the stakeholders are the coal workers, the trade unions, the NGOs, the authorities (local, national), the local communities, the investors, the research centres and generally all these who are influenced, involved and are interested in the coal phasing out procedure. The reason for being selected as stakeholders seems to be their inclusion in the holistic approach is vital for the success of the operation and the ownership for the success is of paramount importance. Interestingly, the interviewees express two different viewpoints as regards the groups that are not treated as stakeholders; one that no groups left out as it is an open process and anyone interested can participate, and another stressing that there are groups that are privileged by the text of law such as environmental NGOs and some social partners. In addition to the latter viewpoint, it is

monumental that in some regions trade unions have been left out at the stage of getting them involved in the design of the concept of transformation process. This has been done due to the absence of understanding the importance of including the stakeholders right from the beginning in the very early stage when designing the strategy of transformation. Yet, the main point is that no stakeholder has been left out deliberately, on contrary, there is an urge to the stakeholders' involvement as early as possible.

It appears from the interviewees that existing policies focus on compensating workers and communities directly affected by coal transitions, rather than on the broader gender and social equality concerns. The question though remains how support could be distributed across companies, workers, households and communities to ensure that the existing unequal relations of gender, race, class, age and ability are not exacerbated.

The existence of some complaints from groups for not being treated as stakeholders reveals that a lot of actions have been taken to get all those affected and mostly the vulnerable groups involved in the coal transition process and it is a process that is getting better and better as the coal transition proceeds. The involvement of various stakeholders' groups in different ways is related with the different stages of the coal transition process in order the best results to be achieved in the on going process while civil society and businesses may need to lead where government action is lacking. Furthermore, the interviews do not reveal that any differentiation is related with any discrimination as regards the gender, the place of birth, the socio-economic environment, the age or other circumstances and in the endeavor of addressing the socio economic consequences there are equal opportunities for all interested in participating in the process.

Importantly, it appears from the interviewees that all the stakeholders should "be on board" to avoid the "lock in" in the coal transition process. It is of paramount importance the ownership of the process since the plan will be successful only "if it is well accepted and supported" and this implies a full participation of stakeholders in the core of the project. In the light of findings it seems that the stakeholders' involvement

should be from the very beginning in order the just transition to be achieved, supporting impacted groups and the regional economic diversification by identifying a clear set of policy and investment activities to address the just transition challenges.

As regards further the energy justice in the transition process, it appears from the interviewees' perspective that communication and campaigning is important for the transition process for raising the level of empathy of both the authorities and the public general over the coal regions. Thus "empathy" emerges in the coal transition as a vehicle to the creation of the new profile and the rebranding for each coal region which differs from country to country due to the different opportunities and country's economic status. European Commission is aware of this diversity and it seems to be the interviewees' view that successfulness is related with the effort made to give a new perspective both to the vulnerable groups and the coal regions that are lagging behind with the aim of creating new growth opportunities and bringing the gap with the front runners.

In the coal transition process, the interviewees stress that the overarching strategy is essential to path the way to the successfulness, mainly by the potentiality of other businesses as the coal regions are mainly mono-economic regions. According to Galgoczi (2014), neo-industrialization involved the diversification of the types of industry and this seems to be the case of coal transition while successfulness as Interviewee B states "it, (my remark) seems to be in where the regions go, what is done and who is lost on the way to the new economic environment that is being created", (Interviewee B, transcript page: 20).

7. Conclusions

7.1. Social fairness, inclusion and successfulness in EU Member States

The aim of the current research is develop and empirically explore an analytical framework that defines various aspects of justice in coal transition processes. Eventually the study contributes to a better understanding of the EU coal transition energy policy as a socio-energy design and the novel approach: energy justice.

As a first remark, this study has shown that the three-pronged approach of energy justice: distributional, procedural and recognition seems to spell out in the coal transition. It suggests that there is a awareness of “who” are the affected groups and the significance of the stakeholders’ engagement in the coal phasing out without any discrimination.

Secondly, the interviews reveal that new concepts such as empathy and perceptiveness emerge into the concept of justice in the coal phasing out. The former as a vehicle for each coal region to create its new profile and its rebranding, the latter as an integral element of successfulness in creating new growth opportunities and bringing the gap with the front runners in coal transition. The interconnection between these two concepts and the coal transition may be the scope of new research conducted in the future.

A few remarks on the political implications of the conclusion can also be made. It seems that policy makers – including EU – have considered and included justice accommodating measures in their programs aimed at assisting coal transition processes. Yet, the interviews reveal that the local stakeholders express their anxiety to retain the cultural heritage of coal mining regions in the fear of losing historic identity. Thus, it may be justified to claim that policy makers should undertake additional policy measures other than those exclusively concentrated on the phasing out’s financial losses.

A few remarks on the coal transition process can also be made. Historic transitions may have been accidental or circumstantial. Insofar as the ongoing coal transition is concerned, it seems to be planned, coordinated and backed by European/national policies with the aim of identifying, diagnosing and redressing the social dimensions of the phasing out. Thus, the empirical findings may come as good news, as it seems that without an energy justice dimension, phasing out runs the risk of “locking-in” in patterns of inequity and injustice.

7.2. Avenues for further research

The current study has demonstrated that social fairness, inclusion and successfulness seems to be facilitated by the energy policy under the three pillars of energy justice. Taking into consideration that this study has been conducted while the whole process of coal transition process is still in the beginning - at the stage of planning for most EU Member States -, in terms of further research it seems highly relevant to carry out further empirical research to assess how the three pillars of energy justice have been practically integrated when the coal transition process is accomplished in the all EU member states.

Although probably challenging from a practical point of view, a comparative study among the EU members States and their policies on fair and just transition constitutes a scientific path for the future transitions when the on-going one becomes historic.

APPENDICES

Appendix I: Interview guide

Position title:	
Respondent name:	
Interview date:	Interview time:

Interview preparation

- Record respondent details as per table above; and
- if available review respondent resume focusing on the most relevant information related to this current project, this may include previous work experience, or educational background.

Interview starts

- Meet and greet the respondent;
- clearly and in detail explain the purpose of this research; and
- explain the interview process, including:
 - number of questions and expected time for the interview;
 - post-interview process and how collected information will be used;
 - clarify with the respondent that his/her personal information won't be used in the final report; and
 - briefly give a timeline for this research and date of the final report to be published.
- inform the respondent that the interview will be recorded, and additional notes will be taken during the interview.

Establishing rapport

- Do not take sides;
- do not reveal your approval or disapproval;
- do not agree or disagree with your respondent;
- control your body language and expressions;
- do not challenge answers or engage in debate with the respondent;
- be objective and unbiased; and
- nod, smile and encourage the Interviewee candidate throughout the interview.

Probe and ask follow- up questions

- Ask follow-up questions;
- if something is unclear ask the respondent to elaborate or clarify; and
- prompt the candidate to obtain missing or additional information.

Take notes

- Write down everything you believe may be used in the transcription and analysis process; and
- it is fine to focus on writing notes while respondent continues his answer.

Appendix II: Interview format

Distributional Justice:

1. In your view, how are the burdens of coal transition distributed among various social groups?
2. How do you think that unjust burden distribution can be prevented?
3. In your views, which compensatory claims that were articulated by stakeholder groups were met or not met by the authorities ?

Procedural Justice:

1. How do you perceive that stakeholders groups can practically be involved in the planning, discussing, decision-making and implementation of coal transition processes?
2. In your view, how can the authorities make a constructive dialogue with all the stakeholders' groups?
3. In your view, are there any social groups who may be excluded from the involvement in the planning, discussing, decision-making and implementation of coal transition processes? How should it be faced?
4. If I may ask you about the overall view, how do you think that the involvement of stakeholder groups contributed to the transition processes?

Recognition Justice:

1. In your view, which groups did the authorities treat as stakeholders in the coal transition processes? Why do you think that these groups in particular were treated as stakeholders?
2. In your view, were there any groups that the authorities did not treat as stakeholders at all? (if yes) Why do you think that these/that group/groups were not treated as stakeholders?
3. Did you perceive that non-represented groups acted out publicly to articulate criticism of not being treated as stakeholders? (if yes) What kind of actions (words and deeds) did you perceive were taken by various groups?
4. What kind of arguments did you perceive that non-represented groups put forward when trying to voice their interest?

5. Did you perceive that the authorities involved various stakeholder groups in different ways?

6. If I may ask you about your overall view, how do you think that the involvement of stakeholder groups contributed to the transition processes?

Final Question: Do you want to add something that adds to the understanding of justice in coal transition processes

Appendix III: Written consent

Dear Mr.....,

In 2018, the European Commission adopted a strategic long-term objective which pledges a full decarbonisation of the economy by 2050 in order to be consistent with Paris Agreement. This compels that EU Member States should speed up their phase out coal transition. Taking into consideration the coal transition's socio-economic consequences, I decided to dedicate my Master's thesis in European Studies at the University of Gothenburg to present how social fairness, inclusion and successfulness in coal transition management is perceived and defined in the European coal transition processes.

After a thorough research, I have come to the conclusion that you are a central person in the issue of just transition. Since you have experience of coal transition and expertise in the issue of just transition I am convinced that your views could contribute much to the research theme and my study would thus benefit greatly from an interview with you. I would require no more than an hour of your precious time and I am very flexible regarding the method of communication-we could talk via phone or skype-.

In case you are interested in my study, please send me an email message of consent "I,.....(name) have read the above information. I freely agree to participate in this study" and I will contact with you.

I would be extremely grateful for your interest in my study and I appreciate your consideration.

Sincerely,

Togariidou Konstantina

REFERENCES

I. Interviews

- A. Interview with Member of EESC, 17th of June 2020
- B. Interview with Deputy Director General in EC, 25th of June 2020,
- W. Interview with member of the Committee for Just Transition in Greece, 26th of June 2020
- X. Interview with EC's Honorary Director, Member of EBRD, 11th of May 2020
- Y. Interview with member of Greek Parliament, 20th of May 2020

II. References

Abraham, J. (2017). "Just Transitions for the Miners: Labor Environmentalism in the Ruhr and Appalachian Coalfields". *New Political Science*, 39:2, 218-240, DOI: 10.1080/07393148.2017.1301313

Arksey, H. & Knight, P. T. (1999). "Interviews and research in the social sciences". In *Arksey, H., & Knight, P. T. Interviewing for social scientists (pp. 2-20)*. London: SAGE Publications, Ltd doi: 10.4135/9781849209335

Alves Dias, P. et al., (2018). "EU coal regions: opportunities and challenges ahead". *EUR 29292 EN, Publications Office of the European Union, Luxembourg, ISBN 978-92-79-89884-6, doi:10.2760/064809, JRC112593*

Barry, J., Hume, T., Ellis, G., Curry, R. (2015). "Low carbon transitions and post-fossil fuel energy transformations as political struggles: Analyzing and overcoming 'carbon lock-in'. In: *Energy & Environmental Transformations in a Globalizing World: An Interdisciplinary Dialogue. second ed. NomikiBibliothiki, Athens, pp. 3-23.*

Bell, D., Gray, T., Haggett, C., Swaffield, J. (2013). "Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy". *Environ Polit.*; 22 (1) :115-35.

Bennett, K. (2015). "Women and economy: complex inequality in a post-industrial landscape". *Gender, Place & Culture*, 22(9). 1287-1304. DOI:10.1080/0966369X.2014.958066

Brinkmann, S. (2013). "Qualitative interviewing". *New York: Oxford University Press.*

Bullard, R. (2005). "Environmental Justice in the Twenty-first Century". In: *Dryzek, J., Schlosburg, D. (Eds.), Debating the Earth. Oxford University Press, Oxford, pp.322-356.*

Cai, Beilei, Trudy Ann Cameron, and Geoffrey R. Gerdes. (2010). "Distributional Preferences and the Incidence of Costs and Benefits in Climate Change Policy". *Environmental and Resource Economics* 46(4): 429-58.

Caldecott, Ben, Oliver Sartor, and Thomas Spencer. (2017). "Lessons from Previous "Coal Transitions": High-Level Summary for Decision-Makers". *Paris. [http:// www.iddri.org /Publications/Rapports-and-briefingpapers/COAL_Synthesis Report_v04.pdf](http://www.iddri.org/Publications/Rapports-and-briefingpapers/COAL_Synthesis_Report_v04.pdf)*

Campbell, S., Coenen, L.(2017). “Transitioning beyond coal: lessons from the structural renewal of Europe's old industrial regions”.*CCEP Working Paper 1709*. Available at: <https://coaltransitions.files.wordpress.com/2017/11/australian-coal-transitionindustrialization-final.pdf>.

Chubb, Philip.(2014). “Power Failure”. *Melbourne, Australia: Black Inc.*

Christmas, C.M., Robinson, J.L. (2015). “Towards a green economy in Canada. Working in a warming world working number”. Available at: http://warming.apps01.yorku.ca/wp-content/uploads/WP_2015-02_ChristmasRobinson_Towards-a-GreenEconomy-in-Canada.pdf

Davies,A.,R.,(2006). “Environmental justice as subtext or omission: Examining discourses of anti-incineration campaigning in Ireland”. *Geoforum,Volume 37, Issue 5, Pages 708-724*, <https://doi.org/10.1016/j.geoforum.2005.06.005>.

Deutsch, M. (1975). “Equity, equality and need: What determines which value will be used as the basis for distributive justice?”. *Journal of Social Issues 31:137-149*.

Dolan, P., Edlin,R.,Tsuchiya, A., Wailoo,A.(2007).”It ain’t what you do, it's the way that you do it: Characteristics of procedural justice and their importance in social decision-making”, *Journal of Economic Behavior & Organization,Volume 64, Issue 1,157-170*.

European Commission.(2019). “The European Green Deal”. COM(2019) 640 final. Available at: https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

European Commission. (2017). “Platform on Coal and Carbon-Intensive Regions Terms of Reference”. Available at:https://ec.europa.eu/energy/sites/ener/files/crit_tor_fin.Pdf

European Investment Bank. (2020).“EIB Group Climate Bank Roadmap 2021-2025 – Position paper”. *Published by the European Investment Bank*. Available at: https://www.euractiv.com/wp-content/uploads/sites/2/2020/06/final_eib_group_cbr_position_paper_15_06_2020.pdf

Foxon T J, Reed M S, Stringer L C.(2009). “Governing long-term social-ecological change: what can the adaptive management and transition management approaches learn from each other?”. *Environmental Policy and Governance:19 3 – 20*

Fraser,N.,(1999). “Social justice in the age of identity politics: In Henderson, G. Geographical Thought: A Praxis Perspective”. *Taylor and Francis,London,pp.56-89*.

Fouquet, R. (2016). “Historical energy transitions: speed, prices and system transformation”. *Energy Research & Social Science,22.7-12. DOI: 10.1016/j.erss. 2016 .08 .014*

Fouquet, R. (2010).“Divergences in the Long Run Trends in the Price of Energy and of Energy Services”. *BC3 Working Paper Series 2010-03. Basque Centre for Climate Change (BC3). Bilbao, Spain*.

Galgóczi,B.(2014).“The long and winding road from black to green: Decades of structural change in the Ruhr region”. *International Journal of Labour Research 6 (2),218-236*.

Galgóczi, B.(2019).“Just transition towards environmentally sustainable economies and societies for all”, *International Journal of Labour Research*, Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_647648.pdf

- Geels, F.(2014). “Regime resistance against low- carbon transitions: introducing politics and power into the multi- level perspective”. *Theory Cult. Soc.* 31, 21–40. <http://dx.doi.org/10.1177/0263276414531627>.
- Green,F.(2017b).“Legitimate Expectations, Legal Transitions, and Wide Reflective Equilibrium”. *Moral Philosophy and Politics* 4(2): 177–205.
- Green, F. (2018). “Transition Policy for Climate Change Mitigation: Who, What, Why and How ?”.*Centre for Climate Economics & Policy, Crawford School of Public Policy, Australian National University, Canberra, Australia.* <https://coaltransitions.files.wordpress.com/2018/05/transition-policy-for-climate-changemitigation-2.pdf>.
- Hanna P. (2012). “Using internet technologies (such as Skype) as a research medium: a research note”. *Qualitative Research*, 12/2: p. 239-42. DOI:10.1177/1468794111426607 [doi:10.1177/1468794111426607]
- Harrahill, Kieran & Douglas, Owen. (2019).“Framework development for 'just transition' in coal producing jurisdictions”. *Energy Policy*. 134. 10.1016/j.enpol.2019.110990.
- Harrison, Kathryn. (2012). “A Tale of Two Taxes: The Fate of Environmental Tax Reform in Canada”.*Review of Policy Research* 29(3): 383–407.
- Healy, N, Barry. J. (2017). “Politicizing energy justice and energy system transitions: Fossil fuel divestment and a “just transition”. *Energy Policy* 108 451–459, [https:// doi.Org /10.1016 /j.enpol.2017.06.014](https://doi.org/10.1016/j.enpol.2017.06.014).
- Heffron, R.J., McCauley,D.(2014). “Achieving sustainable supply chains through energy justice”. *Appl.Energy* 123,435-437.
- Heffron, R.J., McCauley, D., Sovacool, B.K. (2015). “Resolving society's energy trilemma through the Energy Justice Metric”. *Energy Policy* 87, 168–176. <http://dx.doi.org/10.1016/j.enpol.2015.08.033>.
- Hendriks, C.(2009).“Policy design without democracy? Making democratic sense of transition management”. *Policy Sciences*, 42(4), 341–368.
- Hennighausen, Tanja; Heinemann, Friedrich; Bischoff, Ivo. (2008). “Individual Determinants of Social Fairness Assessments: The Case of Germany”.*ZEW Discussion Papers, No. 08-063, Zentrum für Europäische Wirtschaftsforschung (ZEW), Mannheim.*
- Heynen, N., Kaika, M., Swyngedouw, E. (Eds). (2006). “In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism”. *London: Routledge.*
- Hooley, T., Wellens, J., & Marriott, J. (2012). “What is Online research?: Using the Internet for social science research”. *New York: Bloomsbury Academic*
- Hospers,Gert-Jan.(2004).“*Restructuring Europe's rustbelt: The case of the German Ruhr- gebiet*”,*Intereconomics*, Vol. 39, Iss. 3, 147-156. Available at: https://www.researchgate.net/publication/24055891_Restructuring_Europe%27s_Rustbelt [accessed Aug 14 2020].
- Industrial Global Union. (2018). “Framework Agreement for a Fair Transition of Coal Mining and Sustainable Development of the Mining Communities for the period 2019-2027”. Available at: http://www.industriall-union.org/sites/default/files/uploads/documents/2018/SPAIN/spanish_plan_for_coal_eng_oct_2018.pdf. [accessed July 14 2020].

International Labour Organization.(2016). “A just transition to climate-resilient economies and societies: Issues and perspectives for the world of work”. *International Labour Organization, Geneva*.

International Labour Organization.(2017). “Gender, labour and a just transition towards environmentally sustainable economies and societies for all”. *International Labour Organization, Geneva*.

International Labour Organization.(2018). “World Employment and Social Outlook 2018: Greening with jobs”. *International Labour Office – Geneva*.

Kumar K. (1986). “Conducting Key Informant Interviews in Developing Countries”. *AID Program Design and Evaluation Methodology Report No. 13. A.I.D., Washington D.C.*

Jackson T.(2009).“Prosperity Without Growth”. *Earthscan, London*.

Jacquet JB, Stedman RC. (2013). “The risk of social-psychological disruption as an impact of energy development and environmental change”. *J Environ Plan Manag.* doi:10.1080/09640568.2013.820174

Jenkins, K., McCauley, D., Heffron, R., Stephan, H., Rehner, R. (2016a). “Energy justice: a conceptual review”. *Energy Res. Soc. Sci. 11, 174–182.* <http://dx.doi.org/10.1016/j.erss.2015.10.004>

Jenkins, K., McCauley, D., Forman, A.(2017). “Energy justice: a policy approach”. *Energy Policy.* <http://dx.doi.org/10.1016/j.enpol.2017.01.052>.

Kemp,R.,D. Loorbach. (2006). “Transition management: a reflexive governance approach”. 103–130 in *J.-P. Voß, D. Bauknecht, and R. Kemp, editors. Reflexive governance for sustainable development. Edward Elgar, Cheltenham, UK.*

King, N., &Horrocks, C.(2010). “Interviews in Qualitative Research”. *1 edition. Los Angeles: Sage Publications Ltd*

Konow, J. (2001).“Fair and square: the four sides of distributive justice”. *Journal of Economic Behavior and Organization 46,137-164.*

Kumar, S., A. Americo and C. Billingham.(2016).“*The New Social Contract: A Just Transition*”. Brussels: FEPS.

Lo Iacono Valeria, Symonds Paul & Brown David. (2016). "Skype as a Tool for Qualitative Research Interviews". *Sociological Research Online, Sociological Research Online, vol. 21(2), pages 1-12.*

McCauley,D.,Heffron,R.J.,Stephan,H.,Jenkins,K.(2013).”Advancing energy justice:the triumvirate of tenets”. *Int. Energy Law Rev.*32 (3),107-110.

Meadowcroft, J.(2005). “Environmental political economy, technological transitions and the state”. *New Polit. Econ. 10, 479–498.* <http://dx.doi.org/10.1080/13563460500344419>.

- Meadowcroft, J.(2009).“ What about the politics? Sustainable development, transition management, and long term energy transitions”. *Policy Sci.* 42,323–340. <http://dx.doi.org/10.1007/s11077-009-9097-z>.
- Medvecky F, Lacey J, Ashworth P.(2013).“Examining the role of carbon capture and storage through an ethical lens”.*SciEng Ethics*. doi:10.1007/s11948-013-9474-z.
- Miller, C. (2012).“Energy justice: Ensuring human dignity in the post-carbon future”.*Cairo Review of Global Affairs*, May, 46–59.
- Miller Clark A.,Alastair Iles,Christopher F. Jones, (2013).“The Social Dimensions of Energy Transitions”, *Science as Culture*, 22:2, 135-148, DOI: 10.1080 /09505431.2013 .78 6989
- Miller, C.A., Iles, A., Jones, C.F. (2013). “The social dimensions of energy transitions”. *Sci. Cult.*22,135–148. <http://dx.doi.org/10.1080/09505431.2013.786989>.
- Miller, C.A., Richter, J.(2014). “Social planning for energy transitions”. *Curr. Sustain. Energy Rep.* 1, 77–84. <http://dx.doi.org/10.1007/s40518-014-0010-9>.
- Miller, C.A., Richter, J., Jason, O.’Leary.(2015).“ Socio-energy systems design: a policy framework for energy transitions”. *Energy Res. Soc. Sci.* 6, 29–40.
- Monstadt, J. (2009). “Conceptualizing the political ecology of urban infrastructures: insights from technology and urban studies”.*Environment and Planning A*, 41(8), pp. 1924–1942.
- MustațăAlexandru,Nazare Laura, Dan Dobre. (2020). “Financing a Just Transition in Gorj, Romania”. *Bankwatch Romania*
- Nozick, R. (1974). “Anarchy, State, and Utopia”. *New York: Basic Books*.
- Nussbaum, M.C.(2000). “Women and Human Development: the Capabilities Approach”. *Cambridge University Press, Cambridge MA*.
- Piggot, G., Boyland, M., Down, A., & Torre, A. R. (2019). “Realizing a just and equitable transition away from fossil fuels”. *Stockholm Environment Institute*.
- Plummer K. (2001). “Documents of Life 2: An Invitation to a Critical Humanism”. *Revised Edition edition. London: Sage Publications UK*.
- Robeyns, I.(2003). ”Sen's capability approach and gender inequality: selecting relevant capabilities”. *Fem. Econ.* 9 (2–3), 61–92.
- Robins, N.,Brunsting, V., Wood, D.(2018). “Investing in a Just Transition: Why Investros need to Integrate a Social Dimension into Their Climate Strategies and How They Could Take Action”. *Centre for Climate Change Economics and Policy,Leeds*.
- Rosemberg, A.(2017).“Strengthening Just Transition Policies in International Climate Governance”. *The Stanley Foundation, Muscatine*.
- Sactor O. (2018). “Implementing coal transitions: Insights from case studies of major coal-consuming economies”. *IDDRI and Climate Strategies*.Available at: <https://coaltransitions.org/publications/implementing-coal-transitions-insights-from-case-studies-of-major-coal-consuming-economies/>
- Schlosberg, D.(2003). ‘The Justice of Environmental Justice: Reconciling Equity, Recognition, and Participation in a Political Movement’, in *Andrew Light and Avner de*

Shalit, (eds.), *Moral and Political Reasoning in Environmental Practice*, Cambridge, MA: MIT Press.

Seitz, S. (2015). "Pixelated partnerships, overcoming obstacles in qualitative interviews via Skype: a research note". *Qualitative Research*, p. 1-7. DOI: 10.1177/1468794115577011 [doi:10.1177/1468794115577011]

Ślimko, E. (2019). "Just Transition of Silesia. Challenges from the civil society perspective – analysis and recommendations". *Alliance of Associations Polish Green Network, 1st edition*.

Snell Darryn.(2018). 'Just transition'? Conceptual challenges meet stark reality in a 'transitioning' coal region in Australia". *Globalizations*, 15:4, 550-564, DOI: 10.1080/14747731.2018.1454679

Sovacool,B.K.,Sidortsov,R.,Jones,B.(2013). "Energy Security Equality and Justice". *Routledge,London*.

Sovacool,B.K.(2013). "Energy & Ethics: Justice and the Global Energy Challenge". *Palgrave MacMillan,New York*.

Sovacool, B.K.(2014). "What are we doing here? Analyzing fifteen years of energy scholarship and proposing a social science research agenda". *Energy Res. Soc. Sci. 1, 1–29*. <http://dx.doi.org/10.1016/j.erss.2014.02.003>.

Sovacool,B.K.,Dworkin,M.H.(2014). "Global Energy Justice: Principles, Problems and Practices". *Cambridge University Press, Cambridge*.

Sovacool,B.K.,Dworkin,M.H.(2015). "Energy justice: conceptual insights and practical applications". *Appl. Energy 142, 435-444*.

Sovacool, B K. (2016). "The history and politics of energy transitions: Comparing contested views and finding common ground". *WIDER Working Paper, No. 2016/81, ISBN 978-92-9256-124-6, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki, <http://dx.doi.org/10.35188/UNU-WIDER/2016/124-6>*

Sovacool, B., Heffron, R.J, McCauley, D., Goldthau, A. (2016). "Energy decisions reframed as justice and ethical concerns". *Nat. Energy 1, 16-24*.

Spencer, T., et al.(2018). "The 1.5°C target and coal sector transition: at the limits of societal feasibility". *Clim. Policy 18 (3), 341–342*.

Steg L, Van Der Berg AE, De Groot JIM (2013) "Manuale di psicologia ambientale e deicomportamentienenergetici". *FerrarisinibaldiEdizioni, Milano*.

Steinhilber S, Wells P, Thankappan S. (2013). "Sociotechnical inertia: understanding the barriers to electric vehicles". *Energy Policy. doi:10.1016/j.enpol.2013.04.076*.

Sullivan, J. R. (2012). "Skype: An appropriate method of data collection for qualitative interviews?". *The Hilltop Review, 6, 5460*.

Synder,B.F. (2018). "Vulnerability to decarbonization in hydrocarbon-intensive countries in the United States: a just transition to avoid post-industrial decay", *Energy Research & Social Science 42,34-43*

Todd,H., Zografos.C. (2005). "Justice for the environment: developing a set of indicators of environmental justice for Scotland". *Environ.Values 14 (4).483-501*.

UKERC.(2009). “Making the transition to a secure and low-carbon energy system: synthesis report”. *UK Energy Research Centre, London*.

UNFCCC.(2015). “The Paris Agreement”. Available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

UNFCCC. (2016). “Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs”. *United Nations Framework Convention on Climate Change, Bonn, Germany*. <https://unfccc.int/sites/default/files/resource/Just%20transition.pdf>

Verbong, G, Geels.F.(2007). “The ongoing energy transition: Lessons from a socio-technical, multi-level analysis of the Dutch electricity system (1960–2004)”. *Energy Policy, Volume 35, Issue 2, 1025-1037, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2006.02.010*.

Von Hayek F.A.(1948): “Individualism and Economic Order”. *Chicago, University of Chicago Press*.

Voss, Jan-Peter & Smith, Adrian & Grin, John. (2009). “Designing Long-Term Policy: Rethinking Transition Management”. *Policy Sciences. 42. 275-302. 10.1007/s11077-009-9103-5*.

Waddington, D., Critcher, C., Dicks, B. and Parry, D. (2001). “Out of the Ashes? The Social Impact of Industrial Contraction and Regeneration on Britain’s Mining Communities”. *The Stationery Office, Norwich, UK*

Walker, G., (2009). “Beyond distribution and proximity: exploring the multiple spatialities of environmental justice”. *Antipode 41 (4).614-636*.

Wiek A, Iwaniec D.(2013). “Quality criteria for visions and visioning in sustainability science”. *Sustain Sci. doi:10.1007/s11625-0130208-6*.

Wolff, Jonathan, and Avner De-Shalit. (2007). “Disadvantage”. *Oxford: Oxford University Press*.

WSSD.(2002). “Plan of Implementation World Summit on Sustainable Development”. *Heinrich Boll Foundation, Johannesburg*

Zygmunt, I. (2018). “Poland: Lack of Partnership Principle in Platform for Coal Regions benefits coal companies”. Available at: <https://www.just-transition.info/poland-lack-of-partnership-principle-in-platform-for-coal-regions-benefits-coal-companies/>

