



# How just are just transition plans? Perceptions of decarbonisation and low-carbon energy transitions among peat workers in Ireland

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## ABSTRACT

The concept “just transition” refers to the principle important to underpin policies to mitigate negative socio-economic consequences that arise during the transition to a low-carbon society. However, the concept has been subject to different interpretations and currently lacks theoretical and practical clarity. As a result, a just transition plan can fail to deliver intended justice and mitigate adverse outcomes. This paper seeks to examine how the overarching aim of a just transition is translated into practice. We use distributive, procedural and restorative justice as an explanatory framework to analyse how a just transition programme can be designed based on theory. We illustrate this by using a case study that involves a just transition process taking place in the Irish Midlands. More specifically, we used qualitative research methods to collect data to look at how workers perceived the just transition programme designed to provide them with a just transition. We discuss how discrepancies in the interpretation of justice and its theoretical and practical application can lead to tensions between stakeholders, which may obstruct the just transition process in general. We argue that the discrepancy between the “theory” and “practice” can be attributed to the absence of structure in a just transition process. This process is needed to safeguard the design of a practical just transition programme based on the theoretical interpretations. This article elaborates on what such a process might look like for the benefit of all.

## 1. Introduction

Reducing dependence on fossil fuels will inevitably benefit some and be costly for others. In other words, the energy transitions will create ‘winners’ and ‘losers’ ([1], p. 569). ‘Winners’ can be found, in the renewable energy sector, which generates a considerable number of employment openings and profitable opportunities for business investments. At the same time, however, some groups will be negatively affected by decarbonisation. These include workers and communities that depend on fossil fuel activity and are expected to suffer from the phasing out of these industries (e.g., in terms of job losses and economic turmoil) [1–4]. The main challenge in the short-term for such groups is to find alternative local employment, as fossil fuel industries often tend to dominate entire local labour markets, and there is little potential for other industries to absorb displaced workers. The absence of re-training or re-skilling renders job displacement even more problematic and may require physical relocation. In addition, communities face long-term challenges too. They often rely on the spending capacity of the local workforce and their families, whose income supports local businesses.

Consequently, one may also expect that displaced workers and affected community members will rely more on social services and public assistance programmes, which increases the pressure on these programmes [5–8]. Finally, the loss of local jobs and its concomitant dampening effect on economic vitality can lead to political unrest and the destabilisation of social order [3]. In broad terms, it can be argued that the phasing out of the fossil fuel industry will significantly impact on the local communities that depend on it.

Simultaneously, however, there is a strong political drive to reduce the negative socioeconomic impacts on workers and communities in the phase-out of fossil fuel industries [1–4,8–12]. Internationally, policy-makers, scholars and activists have embraced the concept of a *just transition* as the underpinning principle for policies to mitigate the negative socioeconomic consequences of the shift to a low-carbon society [2,9,10]. The term “just transition” originated in the context of the US labour movement in the 1970s and its reaction to the closure of the chemical industry as a result of stricter environmental regulations. It was emphasised that such a move should not, under any circumstances, have debilitating effects on workers and their communities [9]. In the

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past decade, trade unions, labour organisations and governments have increasingly used the term to underline the significance of protecting workers' rights and the socioeconomic well-being of communities while phasing out fossil fuels [10]. In 2015, the International Labour Organization (ILO)'s governing body adopted a set of non-legally binding guidelines for a just transition aimed at workers affected by energy and climate policies. These guidelines prescribe that a just transition should ensure the protection of fundamental rights, maximise decent work, create (green) jobs that accommodate displaced workers, provide localized solutions, and reduce gender biases and other inequalities [10]. Furthermore, the need for a just transition for workers and communities dependent on the fossil fuel industries has recently gained more comprehensive support, as evidenced by the final agreement of the 16th United Nations Climate Change Conference (COP) held in Cancun (2010), the Paris Agreement (2015), the UN Solidarity and Just Transition Silesia Declaration (2018) and the Just Transition Declaration of COP 26 of 2021 [9,11]. Finally, the European Union's commitment to a just transition is reflected in the Coal Regions in Transition Initiative and the Just Transition Fund created to support and revive vulnerable regions that are economically tied to the fossil fuel industries [12,13].

The term "just transition" is widely used in the broader context of climate, energy and environmental justice (see [19]). As Wang and Lo [19] point out, however, it is difficult to provide one clear definition of what a just transition entails, as various disciplines have interpreted the concept differently. As a result, one can find multiple ambiguous definitions and theoretical approaches to a just transition in the literature. In spite of this diversification of opinion, there seems to be an overarching consensus that the aim of a just transition should be the prevention, mitigation and minimisation of social injustices emanating from the energy transition. Therefore, a number of scholars argue that as climate policies are causing disruptions to workers in the fossil fuel industry, their losses should be addressed based on equity, fairness and justice [1–3,9,10,14–18].

Furthermore, drawing on just sustainability, as well as environmental and climate justice theories [20,21], there is also a consensus that a transition can be just and fair only if it can ensure social justice for the vulnerable groups in society [22–24]. The ambiguity found in the literature centres on how a just transition should be defined and how it can be achieved in practice. This is widely debated in many disciplines and often approached from the perspectives of multiple stakeholders [19]. In conclusion, the idea of justice as an intrinsic part of the energy transition is widely embraced as a critical policy aim to prevent social injustices. There is no consensus, however, on the theoretical basis and practical implementation of a just transition. This is problematic because increased clarity regarding the construct of a just transition can be useful in informing its practical implementation.

Recently, Winkler [25] proposed a neoGramscian model for a just transition theory that can explain the processes that underlie its practical implementation. In this model, a just transition is described as an ideology, which is a system of ideas and ideals that bind the multiple stakeholders who subscribe to it. By extent, it can be understood that a clear vision of what a just transition should achieve and how this can be realised brings stakeholders together. Following this reasoning, the opposite may also hold true. If stakeholders cannot agree on an ideal outcome for a just transition or if they have different interpretations of its practical implementation, conflict is likely to arise [8,26,27]. The latter is common because stakeholders need to balance different interests, values, priorities and objectives.

Vulnerable groups in just transitions are often overlooked as important stakeholders in the just transition process [22–24,28]. Especially, workers and communities affected by the transition to greener technologies are considered vulnerable [2–4]. Farrell [29] argues that a successful just transition must be built on the engagement and participation of a representative cross-section of a given community. Local participation can contribute to a post-transition vision that meets local aspirations and addresses its disadvantages. Most literature that focuses

on workers' and communities' perception of the just transition looks at their attitudes, as well as participation and acceptance levels of future developments in the form of renewable energy projects or specific types of renewable energy infrastructure (for an overview, see [19]). The perceptions of affected workers and communities of the just transition process itself, however, are scarcely examined. For instance, in a case study on the Powder River Basin, Wyoming, the largest coal mining region in the USA, Cha [30] reports that the energy transition and just transition are deeply contested among coal mine workers and frontline communities. Similarly, Sanz-Hernández et al. [14] found a host of factors that create social polarisation and act as barriers to a just transition in the Spanish coal regions. Others have argued that the just transition agenda should consider place attachment [31], the role of trade unions [8], and how nostalgia and partisanship [32] may affect a just transition. Finally, it has been argued that information campaigns on the necessity and benefits of energy transition may reduce the despair felt by affected workers and communities about their situation. This will be further alleviated if the proper support is provided to enable them to cope with or adapt to the ensuing changes [15]. These studies also point to the lack of clarity on how a just transition can be achieved. This is problematic, as rapid decarbonisation is essential in order to contain global temperature increases, while at the same time ensuring that social inequalities are not exacerbated. Therefore, it is crucial that just transition is conceptualised, so that it can inform robust and effective policy-making.

The research goal of this paper is to understand how the overarching aim of a just transition is translated into practice. We use McCauley and Heffron's [24] framework of distributive, procedural and restorative justice as an explanatory context against which to analyse how a just transition programme can be designed. We use a case study to illustrate how stakeholders can have different interpretations and perceptions of how justice may be achieved. More specifically, we look at how workers and communities perceive the just transition programme designed for them. We discuss how discrepancies in the interpretation of justice can lead to tensions among stakeholders and may result in creating considerable doubts in the just transition process.

### 1.1. Framework of distributive, procedural and restorative justice

Energy justice has emerged as a new interdisciplinary social science research agenda [33], which recognises that avoiding or reducing social injustices is an essential part of the low carbon energy transition narrative. In alignment with this, scholars have argued that to understand and evaluate a just transition, principles of social justice must be considered [22–30]. In other words, there should be an emphasis on all people affected by the low-carbon transition being treated as equals in the processes and outcomes of a just transition plan. Discrimination based on socioeconomic, legal and political grounds regarding access to wealth, well-being, privileges and opportunities must be avoided. Drawing on the environmental justice literature, Heffron and McCauley [22] propose that a just transition must be based on the principles of distributive justice (referring to a just distribution of costs and benefits), procedural justice (referring to the use of just procedures) and restorative justice (referring to the rehabilitation of those who are harmed in the process) (see also [21,23,28]).

Distributive justice refers to the perceived justice of the distribution of costs and benefits inherent in any transition. Therefore, a just transition process based on distributive justice would aim to prevent an inequitable or unequal distribution of harms and benefits across groups in society [22,24]. In practice, distributive justice translates into programmes that compensate workers and communities in order to reduce losses and increase benefits [14,15]. For instance, re-training or re-skilling, compensations and other support mechanisms (such as job guarantees), employment services and social securities (such as pension agreements) and community support schemes can address distributive injustices [3,8,14,15].

As with environmental and climate justice, procedural justice is a cornerstone of a just transition. Procedural justice refers to the perceived fairness of the procedures used to design a just transition and all the steps taken to implement such plans. It requires that all stakeholders participate in a just process and are treated as equal partners, having the same capacity to influence decisions [34,35]. To this end, meaningful participation in the just transition process is essential [29]. Building on principles of procedural justice, the just transition process must create formal participation structures. These would include vulnerable groups, workers and communities, acknowledging that participation in such processes may often be new and challenging for them. Resources, information and technical support can facilitate this. Participation should start early in the process so that all stakeholders are involved in the decision-making process from the outset.

Finally, restorative justice focuses on the process of rehabilitation from an adverse event [36,37]. Redressing damage inflicted and transforming the conditions that led to the damage in the first place are key tenets of restorative justice [38]. Building a just transition plan on the principles of restorative justice would include the rehabilitation of workers in the broad sense. For instance, it would include restoring their status and dignity, their sense of trust and respect, and their expectations for just outcomes. In addition, it should lead to their reintegration into the social and economic structures of their local communities and environment. Restorative justice implies long-term planning and aims to enhance the resilience of vulnerable groups and rural communities, for instance, by regenerating rural areas and creating a healthy, local labour market prior to the finalisation of the fossil fuel industry phase-out. Moreover, Braithwaite [39] points out that while pursuing restorative justice, one group should not dominate another on account of any power imbalance between them, as all stakeholders should be equally empowered to speak in their own voices.

Restorative justice is closely interconnected with long-term distributive and procedural justice. It can be achieved in a systematic way that would ensure a fair distribution of outcomes and the opportunity for all to participate in the process, be heard, and influence decision-making in the long term [36,39]. Restorative justice is key to a just transition because it addresses key aspects of the rehabilitation of a region, namely the recalibration of its socioeconomic context, which requires expert knowledge of the broader socioeconomic, cultural and historic circumstances prevalent prior to transition. Given that a just transition builds on restorative justice, it is essential to recognise that it requires more than providing workers with jobs and consultations. It acknowledges that workers' families and communities are affected in a broad sense and that their livelihoods and overall well-being need to be supported as well.

### 1.2. This study

In this paper, we use the distributive, procedural and restorative justice framework as the basis to analyse a just transition process. As a case in point, we explore the peat-based electricity industry located in the rural Midlands of Ireland, which shut down at the end of 2020. The government committed to a just transition and the region has also qualified for access to the European Union's Just Transition Funds. We capture and document the beginning of this just transition process, from the announcement that two peat power plants would be closed. We specifically focus on the perspective of workers and communities. The aim is to systematically analyse how they interpreted the just transition programme introduced in the Irish Midlands. We use the distributive, procedural and restorative justice framework to explain discrepancies in their perceptions of elements of the just transition programme. Through such an analysis, we illustrate how differences in interpretations can lead to tensions among stakeholders resulting in exasperations with the just transition process.

## 2. Background

### 2.1. The rise and fall of the Irish peat industry

Of the total surface area of the Republic of Ireland, 17.2% is covered in peat, a sub-category of brown coal widely used as an energy source. There is a complex and long history around peat burning in Ireland, which is intimately connected with the sociocultural identity of several communities [40], especially in the middle of the country (the so-called Irish Midlands). From the 1930s onwards, modern industrial-scale peat extraction processes were established, the aim of which was to generate thermal electricity. The first turf fire station was built in Port Arlington, becoming a symbol of Irish engineering in the 1940s [41]. A semi-state company called Bord Na Móna (BNM) was formed to extract peat from 86,000 ha of peatlands on an industrial scale to ensure the continuous supply of peat to thermal power stations [42]. Thus, peat-based electricity became a national enterprise, the roots of which could be found in the Irish Midlands, where it was a source of local pride [43].

Until 2019, there were three peat-fuelled power stations (two owned by the Electricity Supply Board, the primary electricity producer and distributor in Ireland and the third by BNM) in the Irish Midlands. BNM is the owner of the peatlands and the only peat supplier in the region. As such, BNM was the leading employer in the Irish Midlands. Thousands of jobs and related economic opportunities supported the communities around the peatlands [42]. Hence, many in the region built a career around BNM and the peat industry. The workforce was largely unionised and primarily consisted of male workers, who often spent their entire working lives at BNM [42]. For young people, peat-related jobs were considered lucrative owing to the lack of other local, stable and well-paying options. Apart from permanent employment, BNM also offered many seasonal opportunities for work, especially in the dryer summer months when peat was cut and extracted. These seasonal jobs often helped young people to fund their education, earn additional income alongside that made from farming or acquire skills to pursue other career options. Many small farming communities expanded to larger settlements as people took advantage of rare seasonal and permanent local employment opportunities at BNM. The peat related jobs helped local communities to thrive especially in an area that has witnessed decades of outmigration [31]. In sum, over time, BNM became one of the largest semi-state enterprises in the region, and a stable employer. The company grew to be the second-largest peat producer globally [43].

In recent years, the focus on reducing CO<sub>2</sub> emissions and concerns about the destruction of peatlands as biodiversity habitats resulted in different views on the peat-based electricity production industry in the Irish Midlands. In the Climate Action Plan 2019, the Irish government announced its intention to phase out peat power plants by 2030 [44]. In mid-2019, however, ESB decided to stop using peat in two of its Midland power plants, namely Lanesborough and West Offaly, by the end of 2020, as certain planning permission related to changes in the plant building and mixing peat with imported woodchips for fuel was rejected by *An Bord Pleanála (the Irish Planning Board)*. As a result, BNM, as the only supplier of peat, lost its biggest customer and announced its withdrawal from industrial-scale peat harvesting. Hundreds of peat workers were faced with an uncertain future.

### 2.2. A just transition for the Irish peat workers and their communities

As the closure decisions were announced, BNM provided a set of re-training programmes to the workers as part of their just transition commitments and announced redundancy plans for those employees opting for early retirement. The company also offered to shift some workers to other BNM projects such as re-wetting the peatlands, horticulture, pisciculture, and waste management with which the company planned to reinvent itself. Subsequently, the government promised a just transition approach for a low-carbon future as part of the Climate Action Plan of 2019, focussing on re-training and re-skilling programmes for

workers [44].

In mid-2020, the Irish government created a National Just Transition Fund, around six months after the closure decisions were announced. The aim was to support communities to adjust to a low-carbon transition in the wider Midlands region by re-training workers and funding green enterprises [45]. Then, between 2020 and 2021, 46 projects were contracted by the government to access the National Just Transition Fund [45]. Most of these projects are aligned with the idea of making the Irish Midlands region an attractive place to live and work like setting up remote hubs and exploring other local business opportunities [45]. In addition, the Irish Midlands were recognised as one of the 31 regions currently in transition from coal in the European Union, enabling Ireland to access €84 million of the European Union's Just Transition Funds [46]. The government also committed to adding complementary contributions to this funding. In summary, different pots of money were allocated or are currently earmarked for development in the region to reduce the effects of the phased-out local peat industry, long after the closure announcements were made.

### 3. Materials and methods

#### 3.1. In-depth interviews

In this paper, the lived experiences and perceptions of people directly and indirectly affected by the closure of the peat industry since late 2019, when the decision was announced, are reported. The research was designed based on a "criticalist approach" ([47], p. 378), which allows the exploration of the multiple ways people look at a phenomenon and how these interpretations shape its understanding [47]. The aim was to explore how workers and community members perceived and experienced the just transition process. Therefore, qualitative research methods were used to collect extensive and detailed descriptions of the events and experiences of the research participants [48].

Data collection methods, including semi-structured interviews, participant observations and document research, provided a well-rounded, multi-layered understanding [48,49] of the perceptions of workers, union representatives and community members by using thought-provoking questions to comprehend their personal experiences [50]. Participant observation in election rallies, public conferences, peat factories and local pubs helped in attaining a deeper understanding of the people, the place, the cultural and historical context, and the social, economic and political implications of the peat industry in the Irish Midlands. Observing people working in the peat factories, witnessing the camaraderie they shared, or heckling unpopular political opinions in local election rallies helped us to understand the people's tangible connections with the peat industry and the palpable tensions on its closure.

All of the above helped in framing the questions for the semi-structured interviews. Participant observation further enabled us to establish a rapport in the community so that the researchers were not considered outsiders or tourists in the region. The physical presence of the interviewer in different places and the impromptu informal conversations that took place contributed to trust-building and gathering anecdotes and conversational tidbits that enriched the interview process, as explained below. The research ethics board of the authors' university approved the study.

Scores of journal articles, book chapters, newspaper clippings, oral history repositories, documentary films, radio interviews, social media posts, blogs, policy documents and grey papers were used to gather background information on the peat industry, and contextualise it within its social, economic, cultural and environmental setting in the Irish Midlands. This information was also used to create the interview protocol, which consisted of 15 open-ended questions. These explored themes such as the socioeconomic impact of the peat jobs, the historical and cultural ties of the region with the peat industry, the impact of closure on local life, benefits and challenges identified by the interviewees in the plans and processes of just transition, and how they

perceived their future and the region's future. Follow-up questions were asked to gather additional information.

Prior to and during the interviews, considerable time was spent establishing relationships of trust with the interviewees. Participant observation helped in building rapport with the community. This was a critical step given the nature of the interviews that dealt with stressful situations such as job loss and future uncertainties. This was achieved by spending time in the communities, increasing visibility, visiting peatlands, factories and local pubs, and referring to anecdotes and conversations that the interviewer came across relevant to the context of a specific interview question. For instance, the interviewer would begin specific questions by referring to their experience meeting others in the community, anecdotes heard in a local pub, allusions to a particular event and newspaper articles. It was providing such trivial information that helped in trust-building, allowing interviewees to relax and be open with their answers. As a result, the interview questions were asked in a conversational way rather than in a question-and-answer session, enabling the respondents to narrate their experiences and express emotions [51,52].

#### 3.2. Procedure: recruitment and data collection

In total, 30 in-depth interviews were conducted. Twelve workers and four trade union representatives were interviewed. These respondents were directly affected by job loss and were aware of the company-union negotiations. In order to maintain diversity, the interviewed workers differed in their skills and position in BNM. They were welders (4), technicians (6), locomotive operators (3), supervisors (2) and factory managers (1). Interviewees were between 34 and 60 years of age. Interviewing workers in different age groups allowed for a consideration of how job loss affects people differently at different life stages. In addition, fourteen long-time community members who lived around the peatlands and the thermal power plants were interviewed. They included local business owners (3), community leaders (3), retired BNM workers (4) and people associated with community groups (4). All had significant interest in the peat-related developments in their region.

Fieldwork began in November 2019, just after the closure decision of the two peat-based thermal power plants was announced, which subsequently affected the industrial-scale peat extraction industry in the region, run exclusively by the semi-state company BNM. Data collection continued until the end of February 2020, covering a time when the country underwent a national election. The economic loss ensuing from a contracting peat industry and just transition in the Irish Midlands were issues debated both locally and nationally.

The lead interviewer visited factory sheds, canteens, pubs, trade union offices and other public places in communities surrounding BNM peatlands to recruit participants. Interviewees were recruited using purposive sampling [53] and snowball sampling [54].

Face-to-face interviews were conducted in interviewees' homes and offices. The length of the interviews ranged from 20 to 85 min. They were audio-recorded with the interviewees' permission.

#### 3.3. Data analysis

Each interview was transcribed verbatim, cross-checked with field notes for accuracy, read and then re-read by the lead interviewer. Each transcribed file was printed and the lead researcher performed coding by highlighting text lines and phrases relating to a theme, while a code was ascribed in the margin. This coding process was performed for all the interview transcriptions. When new codes emerged during this process, comparisons with older ones were made for further insights. In addition, repeated sub-themes were identified using the thematic analysis approach [55]. Next, the transcripts were analysed in NVivo 12 Plus, using the codes that had emerged manually. NVivo was primarily used to facilitate data storage and the digital retrieval of interconnected text segments belonging to the same codes. Broad themes emerged from the



coding process: peat industry intertwined with history, culture, identity; deficits in training programmes; (lack of) communication and participation in decision-making on the closure of the peat industry; job loss, displacement, quality, compensation, guarantees; perception of just transition; and long-term future of the community. These themes were then interpreted using the explanatory framework of distributive, procedural and restorative (in)justices.

## 4. Results

### 4.1. Distributive justice: distribution of burdens and benefits

A significant component of BNM's just transition programme was focused on ensuring the future employment of their workers by offering training, re-skilling and up-skilling programmes [56]. These training programmes included retrofitting houses for energy efficiency, welding courses and similar skills training. Therefore, in principle, workers and BNM had the same objective: enhancing workers' employability in other labour markets. This is a critical component of a just transition for the workers [57,58] and an essential component of distributive justice. The workers aligned their thinking with the idea of re-training and re-skilling programmes as critical to a just transition.

Although workers fundamentally agreed that training and re-skilling are important components of a just transition plan, many expressed feelings of apprehension about what these types of training would help them achieve. Many examples illustrate a clear discrepancy between "theory" and "practice". For instance, the overarching objective to enhance workers' employability in other labour markets was not systematically translated into practical elements in the just transition programme. First, workers pointed out that a series of training programmes were uniformly provided and catered towards developing specific skill sets, without any consideration for their needs, physical abilities, experience, or accomplishments. These training programs were not particularly tailored for the BNM workers and were similar to training programs provided to people on state offered jobseekers' allowance in Ireland. As a result, there was a mismatch of what the workers wanted to learn and what training they were provided. To quote one interviewee who pointed out the difficulty in benefiting from the training programmes given his life stage:

There's a lot of training going on [...] there's people doing courses. It doesn't make sense. I was offered a course that I could have gone and done: welding courses. I've welded OK for 40 years. Why would I need to go and do anymore? [...] because this money is coming in, I think that you can spend it on training people. You go for a couple of days course; it's not adequate training. It just looks good, and you can say, look, we're providing training. (Interviewee B018)

This quote points out how the workers felt about the training programs being prescribed randomly without consideration to the specific needs of the workers, what they want to learn or what livelihoods they would like to embrace in future. As a result, the workers were doubtful of the purpose of the training programmes and what such training would help them achieve.

Second, workers were aware that with the closure of the peat industry, their skill sets would be incompatible with the existing labour market that now offered very few local jobs. They were aware that the local job market has changed and lacked the skills to get employment in the local labour market. They identified various areas in which they lacked skills or needed support that were not actually addressed in their training programmes. For instance, some pointed out that they lacked computer skills, which was a barrier to searching and applying for jobs online and uploading resumes. Overall, workers felt inadequately supported by BNM's just transition programme and questioned the company's motivations behind similar up-skilling and re-skilling programmes. For instance, one worker captured the general feeling in

the following way:

It's hard to get a handle on that [just transition plan], I think. It's hard to get what really is going on behind the scenes, yeah. Someone's going to make big money out of this, that's why all these things, someone will get a big pay-out. It won't be the people on the ground. (Interviewee 24)

As they saw it, workers did not benefit from the training and re-skilling programmes to an adequate degree and they questioned why money was spent on a just transition plan that failed to meet solve their problems adequately.

Finally, the Irish Midlands is identified as a prospective region for renewable energy development. To this end, the government was set on creating local "green" jobs as part of the just transition. The training programmes, however, did not explicitly re-train peat workers in developing employable skills in the local renewable energy industry, especially in the wind energy sector. Many wind farms have been proposed in the area making use of the degraded peatlands for wind farms. Peat workers, however, were not guaranteed that these new "green" jobs would be earmarked for them. The type of green jobs created locally, for instance, in the maintenance and upkeep of wind turbines did not require the kind of skills they possessed and were very few in numbers. However, the massive green industrial complex developing in the region based on wind energy created a large number of manufacturing and manual skilled jobs abroad. As a result, interviewees felt that, as they were losing their jobs, energy produced from renewables was on the rise locally, but it created no space for them. Though the industry was growing locally, the bulk of the jobs were created abroad. One interviewee expressed her exasperation by saying:

...all the political will in this country is towards wind turbines and that's driven by Europe. They're given the grants. They're not really giving it to any other renewable energy. It's wind turbines. Where are the wind turbines made? Germany [...]. Jobs, engineers, factories? In Germany. We're not idiots. It's all politically driven. It's globalisation on a local scale and there's no jobs locally in wind farms. (Interviewee 021)

Overall, we observe a discrepancy between the "theory" and "practice" of the just transition in the Irish Midlands. We argue that this discrepancy arose because there was no systematic process in place to ensure that the "theory" was aligned with the "practice" of the just transition. A just transition process based on distributive justice would have helped workers to find how they could fit their skills, interests, experiences and capabilities with the local labour market and guide them to acquire new skills as they may require for certain jobs. Therefore, the just transition programme should be organised to support the workers to bridge the chasm between their skills and the current job market that has changed rapidly during the time they were employed in the peat industry and help them acquire relevant skills.

The consequence of the gap between "theory" and "practice" of just transition, especially in how distributive justice was left under-addressed was a sense of apprehension among workers about the purpose of the just transition programme. In their view, the training and re-skilling programmes did not sufficiently support them and increased their anxiety levels about employability. Trust in the assumption that training, up-skilling and re-skilling would deliver a just transition was not present. As the process of just transition was inadequately developed, uncertainty clouded the expectations of any beneficial outcomes. These uncertainties made them doubt the intention behind the just transition initiatives. Not surprisingly, some workers clearly saw the just transition programme as merely a political act rather than one designed to reduce their burdens of job displacement or relieve the local community from the dampening effect the loss of the peat industry had on

the local socioeconomic life.

Given the strong emotional responses, a just transition process should include mechanisms to mitigate such (unexpected) responses from stakeholders, especially from those whose professional and private lives were directly affected. Hence, in addition to supporting workers in new skill acquisition to ensure future employability, a just transition should also cater to the emotional consequences of such a life-changing event.

#### 4.2. Procedural justice: timely information, fair participation and dialoguing

The sudden decision to close the peat power plants ten years early took BNM, their workers and their union representatives by surprise. As a result, there was little time for BNM to develop a just transition plan, and the subsequent processes that ensued offered little opportunity for workers and union members to engage in the planning process. As a result, the decision to close the peat extraction plants was taken without the knowledge of the workers and their respective communities, to whom it was publicly announced. This follows the decide-announce-defend model Wolsink [59], which characterises a top-down approach. Such an approach restricts information exchange between the company (BNM) and workers, resulting in confusion and uncertainty among the latter. Moreover, workers expressed in the interviews that they felt being excluded from the negotiations that did not happen locally and felt they were not being heard. As a result, many of their problems and concerns were not recognised, considered or addressed. This caused strong and persistent feelings of frustration among the workers and union representatives. To quote one interviewee:

And the other thing I'd say is there's not a lot of openness going on as well at the moment, within the company... We're not told. Everybody needs a certain amount of leadership, everybody needs a certain amount of support, everybody needs a certain amount of direction. Some people need to be told exactly what to do. Some people like to know what's going to happen next... And some of the decisions will be made on the high streets of Dublin [national capital] rather than down at the coal face (Interviewee B023).

This lack of input, consultation and negotiation is why top-down models are often seen as offensive to workers and their communities. It is also often the reason why top-down governance approaches are met with a lot of resistance from those who feel excluded from the decision-making process [59].

After the announcement to close the peat plants, there was a small window of opportunity for the workers and unions to participate in the just transition process. However, union representatives were frustrated with the scope of engagement provided in this opportunity. As one trade union member suggested that there was a 'lack of engagement, real engagement, with people who represent the workforce' (Interviewee 027). Not all felt, however, that they could exercise their rights openly, as they worried about the consequences of this limited opportunity. Some workers were concerned about being labelled as agitators, causing fallout with their social network, and limiting their chances for a replacement job in the alternative businesses proposed by BNM like rehabilitating the peatlands, horticulture and aquaponics. As one interviewee said:

If you were the favourite, you'd get plenty of work. If you weren't the favourite or if you opened your mouth or you said anything, you mightn't get any work at all... there is a culture of fear in Bord na Móna, because if you ever said anything, you may not get work (Interviewee 009).

This perception of fear and inability to express their opinions and

concerns about their very uncertain future limited their participation in any consultation between the workers and the company. The workers mostly depended on their union to negotiate on behalf of them. Some workers argued that the unions could negotiate only a 'mid-merit' just transition plan with the company (Interviewee B014) because the bargaining power of the unions have decreased over the years as union membership has dwindled over time. The interviewees felt that unions also lose their negotiating leverage when businesses close, as measures such as protests and strikes cease to be impactful tools. This points towards power differences among the stakeholders involved in the just transition process, where workers and unions perceived themselves as unequal stakeholders in this process. Particularly, legacy staffs with years of service to the company felt frustrated with being left out. Other stakeholders like BNM pensioners who lack bargaining power being retired workers yet whose pension is linked with the company's future also felt out in the negotiations. This suggests that the scope of consultations, negotiations, social dialoguing was few and lacked in including diverse groups of stakeholders.

The time limit under which a just transition process was laid down also put pressure on workers to make hasty decisions about their future. For instance, BNM offered severance packages to the workers. Interviewees mentioned that they felt an urge to accept any severance package on offer without much negotiation owing to their anxiety about how the situation would eventually unfold. Reflecting on this in the interviews, they thought they had been given little opportunity to (re) consider their decision or bargain about the package.

In conclusion, the just transition in the Irish Midlands followed a top-down approach, whereby workers and unions had limited opportunity to be part of the decision-making process. This implies that procedural justice was not secured in the process. In addition, on the limited occasions that workers and unions were involved, they were not seen or treated as equal parties and their needs were not recognised. Both are fundamental elements that should be part of the just transition process if this is to be a meaningful participatory process [1–9]. To create a meaningful process, they should be fair and designed to be inclusive. They should be built around the recognition that vulnerable groups can have limited social and economic power and that they might lack the ability to access information and the experience to be part of such a process in a meaningful way. Moreover, as rural communities are often close-knit and it is challenging to differentiate professional and personal relationships, proper attention should be paid to designing processes where affected groups can participate without the fear of bias or prejudice that would impact their future social life. A just transition process should anticipate this and ensure safeguards of procedural justice so that the needs and vulnerabilities of all who participate are recognised and supported and allow all to express their opinions freely without fear of consequences.

#### 4.3. Restorative justice: regional rehabilitation

Bord Na Móna and the Irish government had planned to build on the principle of restorative justice, that is, to provide measures aimed at rehabilitating those affected by the peat industry's end of operations. The Irish government introduced the National Just Transition Fund in 2020 to support the just transition, which commits to investing in rural Ireland until 2027. As the peat industry closed down at the end of 2020, these investments came too late to provide a reasonable basis for restorative justice for peat workers in the Irish Midlands.

As part of the rehabilitation efforts, BNM offered limited opportunities for peat workers to be employed locally at other divisions of their company. For instance, there were job opportunities in the restoration and conservation of peatlands, as well as jobs in horticulture, aquaponics and herb cultivation on former BNM lands [60,61]. Many interviewees pointed out that these plans were inherently problematic and seen as inferior. Overall, BNM workers had well-paid, stable jobs with perks and overtime facilities. They did not find the same merit in the

alternatives offered as they did not have the same level of social and economic benefit. Other alternatives, for instance in the renewable energy sector, were not seen as realistic, as such jobs went to private companies through competitive tendering. In summary, interviewees were generally pessimistic about the local alternative opportunities offered by BNM and thought that they would contribute little to economic rehabilitation. One worker summarised that as follows:

I said, no matter what you get, you will never replace this industry (BNM). That's my view. OK, the other thing, I suppose, wind. There is scope for wind, but it's not going to create employment. Solar, there is scope for that as well, but it's not going to create long-term, sustainable employment. I don't know, it's going to be very hard to replace employment in the Midlands. (Interviewee B018)

Similarly, the interviewees were pessimistic about the number of alternative economic opportunities created by the government in the region. They were not convinced that these would be able to absorb the economic blow that followed the closure of the peat plants. They also pointed out that rehabilitating the prospects of workers and communities under a just transition plan would be impossible without significant investments in the area that should have started long before the closure of the peat industry. There was little faith that these investments would ever be made, as there is hardly anyone who wants to be the *'somebody who is going to be left holding a bill at the end of the just transition plan'* (Interviewee B027).

Our findings thus suggest that even though there are elements of restorative justice present within the government and BNM plans for the region, they lack strong conviction and purpose in revitalising the local economy. Workers did not see significant investments now or in the future. Most expressed the hope that funding from the European Union Just Transition Fund would drive the just transition process in the Irish Midlands. Up until now, however, no substantial progress has been made in terms of investment planning in the region. This lack of urgency fits well with the historic urban-rural divide in Ireland, which is a cause for frustration in deprived areas such as the Irish Midlands [62]. Again, there was a sense of rural Ireland being used and underprioritized by policy-makers and industry leaders whose focus is much on urban areas.

Finally, a point that is often overlooked when applying principles of restorative justice is the knock-on effects of job loss on the mental health of workers, their families and the wider community. Many interviewees talked about the emotional toll the closure of the peat industry and the loss of their job had taken on them. They talked about how they missed the sense of community they had built over this job, the *craic* (Irish for news, gossip, enjoyable conversation), and how *'BNM was part and parcel of life'* (Interviewee B015). They would miss their men's sheds in the middle of the bogs, where they gathered every day and discussed professional and personal problems. As one interviewee pointed out, *'if you come in with a problem in the morning, you went home with it solved in the evening'* (Interviewee B022). Therefore, restorative justice is more than replacing jobs and economic rehabilitation; concepts such as human dignity and the capability to lead a meaningful life should lie within the ambit of restorative justice. The quality of jobs and a recognition of the contributions these jobs made in the lives of the workers and the communities in a just transition plan is necessary to help workers rebuild their sense of pride in their work and their sense of purpose in their lives.

In conclusion, building a just transition process on the principles of restorative justice is a long process. It aims to restore and rehabilitate workers and their communities and the wider region following the closure of an industry. There were clear aspirations from BNM and the Irish government to invest in the economic rehabilitation of regions, communities and human capital. However, these aspirations did not translate into concrete action plans on time in order for them to have a positive effect on the region. It required the establishment of resilience in labour markets and in workers. For the latter, the mitigation of the mental impact of job loss and changes in lifestyle and community

structures by creating hand-holding programmes is critical when applying restorative justice principles. From the workers' points of view, the options for alternative employment offered by BNM and the government investments in economic rehabilitation were seen as too little, too late.

#### 4.4. How just was the just transition?

The idea of a just transition offered little meaning to the workers because it could not be translated into practice and not be designed into any programme. The use of the term "just transition" by BNM and the government repeatedly in itself evoked hopes of justice without delivering. As one interviewee pointed out, "lots of people are borrowing the language of Just Transition, but they're not delivering on it" (Interviewee 019). It is this lack of deliverance of just transition while creating the expectation that is central to what the interviewees found frustrating. Along with the frustration was the anxiety of losing their jobs. Most of the workers that we interviewed had worked for BNM all their lives and had a strong sense of pride in the work they performed in a semi-state enterprise producing energy that contributed to running the country. All their lives, the workers were employed in an highly critical sector, which gave them a sense of purpose. Losing their jobs meant that their job security and their pride in their livelihood were taken away, which caused the high levels of anxiety. They were also acutely aware that with the closure of the peat industry, the labour market where their particular skillsets were desirable was shrinking. Alternative employment was not as prestigious or as stable as working in the energy industry. As a result, when the idea of a just transition was floated, they were hopeful about a just transition, yet they received little clarity on how they would receive a just transition. To quote one interviewee:

They [BNM] came with this Just Transition. But sure, no one has a clue what Just Transition is. We have asked the question on umpteen occasions, what is Just Transition? And Just Transition is a word that no one can explain, and you can go to the dictionary, but the explanation is not there. (Interviewee B20)

Owing to the lack of understanding surrounding the term "just transition" and what it entails, what was offered to workers as part of the just transition plan failed to meet their expectations. Based on this, we argue that a process should have been put in place to manage the expectations and interests of different stakeholders and ensure that their interpretation of the objectives and outcomes of the just transition were balanced and aligned. We elaborate on what such a process might look like in the discussion.

What emerged from this was a strong sense of scepticism towards the just transition in the region emerged from our interviews. The use of the term "just transition" implied a promise made by the BNM and the Irish government that had created hope among peat workers. The practical reality was, however, that the transition was not seen as just, which heightened negative emotions against a government that had promised justice. The following quotation provides an illustrative example:

It is not a just transition, it is just a transition [...] I would have very little faith in the just transition, to be honest. ...the just transition is a political thing. It's politicised and it's all a game [...] Politicians don't want negative PR and it's about soundbites. It is soundbites for the politicians to cover up these little happenings at the moment until it's done and dusted. I guarantee you that just transition will be a bygone word here in about two years', or three years' time. (Interviewee B022)

This quotation highlights the workers' scepticism regarding the just transition, as well as a strong sense of frustration, anger and betrayal. These feelings were embedded in feelings of injustice that we found could be explained using the principles of distributive, procedural and



restorative justice. As a result, strong resentment against the government was expressed. The way in which the just transition was implemented undermined the workers' trust in BNM and the Irish government, leading workers to question the latter's competencies and motivations. More specifically, the sense that the government only pretended to implement social policies to enhance their reputation at the expense of the peat workers was widespread. Hence, there was little faith in a positive outcome and little hope for a better future.

## 5. Discussion and conclusion

A just transition is often described as an ideology [8,25], that is, a system of ideas and ideals that aims to reduce the negative impact of energy transition on vulnerable groups. This idea of a just transition as an ideology has gained much traction in recent years, especially in the context of decarbonisation and the energy transition. On an ideological level, stakeholders have reached consensus that vulnerable groups should be protected and supported. This, however, is often challenging in practice, as the interpretation of what is just and how a just transition is achieved is often approached from very different perspectives. In the case study presented in this paper, we found that, in principle, all key stakeholders, including peat workers and community members, agreed that a just transition programme for the Irish Midlands was a critical policy tool that could support vulnerable groups. We also found, however, an apparent discrepancy between the "theory" and "practice" of the just transition. That is, those who were meant to be supported by the just transition felt that the just transition programme itself fell short on its basic tenet (i.e being "just").

The gap between the "theory" and "practice" of the just transition has resulted in much frustration, anxiety, feelings of betrayal and anger among peat workers. These emotions were exacerbated by the promise of a just transition, which in the eyes of the workers was not upheld. Overall, the workers expressed strong scepticism towards the effectiveness of the just transition programme and distrusted the political motivations behind the implementation of a just transition. Such scepticism and distrust regarding just transition programmes can undermine local support for regional development and green jobs, most relevantly in the renewable energy sector [30,62–68]. A transition to renewable energy is often planned for these regions but it can stall owing to local resistance, which can hinder, delay or block it [68]. Therefore, a failed just transition process in the eyes of the public can have detrimental effects on energy transition.

In response to the frustrations that arose in the Irish Midlands among peat workers and their communities, the Irish government recognised the need to make changes. Delivering a just transition in the Irish Midlands is among the core goals of the Climate Action Plan 2021 [69]. A rural development plan was also proposed in the same framework [69], which can be described as a recovery plan to boost development that aims to revitalise the Irish countryside [70]. This builds on principles of restorative justice. Regional plans are also being established to address the skills and training needs of stakeholders in the Irish Midlands [71]. A recent report, however, suggests that Ireland has yet to prepare a territorial just transition plan for accessing the European Union Just Transition Fund [72]. In sum, the Irish government's goal to promote social justice by aligning the just transition process with local demands delivered mixed results when the government was faced with the consequences of its hasty decision to suspend the operation of the peat industry in the Irish Midlands, which led to a wave of frustrations and criticism from local stakeholders.

The management of the Irish Midlands' just transition process and its aftermath provides key lessons for other regions that will need to phase out fossil fuel in the future. This, however, comes too late for the workers and communities in the Irish Midlands. The most important lesson to be drawn is that to translate distributive, procedural and restorative justice principles into concrete objectives and action points a clear just transition *process* needs to be in place. This article has argued that the key

element missing from the Irish Midlands case was such a process to safeguard the transformation of an ideology of just transition into the reality of a just transition programme. We argue that such a process should be led by an independent party, which must be fully aware of the theoretical basis for a just transition, and should also be based on justice principles. In order to put principles into practice, individual and objective conversations need to be conducted with all relevant stakeholders. Understanding their interpretation of a just transition is pivotal for the success of this process. Justice principles can be used to structure these conversations, as they act as a bridge between the ideological objectives of justice and the practical interventions needed to achieve them [25]. An iterative process of analyses, discussions and consensus-finding among stakeholders on these interpretations is needed in order to build trust and, most importantly, to align expectations from a just transition programme. These discussions should include short-term and long-term planning. Short- to mid-term planning typically focuses on distributive and procedural justice components and includes the broader social and economic impact of transitions on workers, communities and regions. Conversely, long-term planning needs to focus on restorative justice and the allocation of regional investments for the creation of parallel industries, which would ensure that workers can continue to thrive. Importantly, the planning process should safeguard the equal treatment of all stakeholders and their needs to avoid power imbalances. It is important that they can all feel able to speak freely and openly about them and that their views will be taken seriously. Addressing these issues requires time to reflect and run consultation groups and negotiations with all stakeholders. Any reactions that are likely to take place should be mitigated with relevant measures that can be built in the process.

In conclusion, the growing consensus is that carbon-intensive industries need to be phased out. As a consequence of this process, socioeconomic disruption and changes in the local industrial landscape can be expected in many parts of the world. The just transition in the Irish Midlands illustrates how the sudden decision to shut down an industry can undermine the just transition process. It has become plain that the declaration that a transition is just is not tantamount to fact. By neglecting to seek consensus on how distributive, procedural and restorative justice can be achieved in practice, strong negative emotions and distrust among those who are affected are likely to emerge. In turn, this may result in a sub-optimal just transition process, which may stall energy transition. A just transition influences public support for renewable energy projects and climate change policies and, if absent, tends to undermine trust in the relevant industries and government as a whole. Our case study demonstrates the importance of using theoretically constructed justice principles to create just transition programmes in practice, which engage all stakeholders. Given that many countries are in the process of phasing out fossil fuels, this case study provides valuable lessons on the pitfalls to avoid on the way to designing a just transition.

## Declaration of competing interest

The authors whose names are listed immediately below certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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## References

- [1] S. Carley, D. Konisky, The justice and equity implications of the clean energy transition, *Nat. Energy* 5 (8) (2020) 569–577, <https://doi.org/10.1038/s41560-020-0641-6>.
- [2] J. Cha, A just transition: why transitioning workers into a new clean energy economy should be at the center of climate change policies, *Fordham Environ. Law Rev.* 29 (2) (2017) 196–220. <https://www.jstor.org/stable/26413303>.
- [3] P. Johnstone, S. Hielscher, Phasing out coal, sustaining coal communities? Living with technological decline in sustainability pathways, *Extr. Ind. Soc.* 4 (3) (2017) 457–461, <https://doi.org/10.1016/j.exis.2017.06.002>.
- [4] S. Weller, Just transition? Strategic framing and the challenges facing coal dependent communities, *Environ. Plan. C Politics Space* 37 (2) (2019) 298–316, <https://doi.org/10.1177/2399654418784304>.
- [5] S. Weller, Financial stress and the long-term outcomes of job loss, *Work Employ. Soc.* 26 (1) (2012) 10–25, <https://doi.org/10.1177/0950017011426307>.
- [6] J. Brand, The far-reaching impact of job loss and unemployment, *Annu. Rev. Sociol.* 41 (2015) 359–375, <https://doi.org/10.1146/annurev-soc-071913-043237>.
- [7] S. Linkon, *The Half-life of Deindustrialization: Working-class Writing About Economic Restructuring*, University of Michigan Press, Ann Arbor, 2018.
- [8] D. Snell, 'Just transition'? Conceptual challenges meet stark reality in a 'transitioning' coal region in Australia, *Globalizations* 15 (4) (2018) 550–564, <https://doi.org/10.1080/14747731.2018.1454679>.
- [9] D. Stevis, R. Felli, Global labour unions and just transition to a green economy. *International environmental agreements, Polit. Law Econ.* 15 (1) (2015) 29–43, <https://doi.org/10.1007/s10784-014-9266-1>.
- [10] International Labour Organisation, Guidelines for a just transition towards environmentally sustainable economies and societies for all. [https://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/@emp\\_ent/documents/publication/wcms\\_432859.pdf](https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_432859.pdf) (accessed 1 Jan 2022).
- [11] UN Climate Change Conference UK, Supporting the conditions for a just transition internationally. <https://ukcop26.org/supporting-the-conditions-for-a-just-transition-internationally/> (accessed 1 Jan 2022).
- [12] European Commission, Coal regions in transition. [https://ec.europa.eu/energy/topics/oil-gas-and-coal/EU-coal-regions/coal-regions-transition\\_en](https://ec.europa.eu/energy/topics/oil-gas-and-coal/EU-coal-regions/coal-regions-transition_en) (accessed 1 Jan 2022).
- [13] European Commission, Financing the green transition: The European Green Deal Investment Plan and Just Transition Mechanism. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_17](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_17) (accessed 1 Jan 2022).
- [14] A. Sanz-Hernández, C. Ferrer, M. López-Rodríguez, M. Marco-Fondevila, Visions, innovations, and justice? Transition contracts in Spain as policy mix instruments, *Energy Res. Soc. Sci.* 70 (2020), 101762, <https://doi.org/10.1016/j.erss.2020.101762>.
- [15] S. Carley, T. Evans, D. Konisky, Adaptation, culture, and the energy transition in American coal country, *Energy Res. Soc. Sci.* 37 (2018) 133–139, <https://doi.org/10.1016/j.erss.2017.10.007>.
- [16] B. Snyder, Vulnerability to decarbonization in hydrocarbon-intensive counties in the United States: a just transition to avoid post-industrial decay, *Energy Res. Soc. Sci.* 42 (2018) 34–43, <https://doi.org/10.1016/j.erss.2018.03.004>.
- [17] M. Jakob, J. Steckel, F. Jotzo, B. Sovacool, L. Cornelsen, R. Chandra, O. Edenhofer, C. Holden, A. Löschel, T. Nace, N. Robins, The future of coal in a carbon-constrained climate, *Nat. Clim. Chang.* 10 (8) (2020) 704–707, <https://doi.org/10.1038/s41558-020-0866-1>.
- [18] J. Haggerty, M. Haggerty, K. Roemer, J. Rose, Planning for the local impacts of coal facility closure: emerging strategies in the US west, *Resour. Policy* 57 (2018) 69–80, <https://doi.org/10.1016/j.resourpol.2018.01.010>.
- [19] X. Wang, K. Lo, Just transition: a conceptual review, *Energy Res. Soc. Sci.* 82 (2021), 102291, <https://doi.org/10.1016/j.erss.2021.102291>.
- [20] J. Agyeman, R. Bullard, B. Evans, Exploring the nexus: bringing together sustainability, environmental justice and equity, *Space Polity* 6 (1) (2002) 77–90. <https://doi-org.ucid.idm.oclc.org/10.1080/13562570220137907>.
- [21] D. Schlosberg, Reconciling environmental justice: global movements and political theories, *Env. Polit.* 13 (3) (2004) 517–540, <https://doi.org/10.1080/0964401042000229025>.
- [22] R. Heffron, D. McCauley, What is the 'just transition'? *Geoforum* 88 (2018) 74–77, <https://doi.org/10.1016/j.geoforum.2017.11.016>.
- [23] B. Sovacool, M. Martiskainen, A. Hook, L. Baker, Decarbonization and its discontents: a critical energy justice perspective on four low-carbon transitions, *Clim. Chang.* 155 (4) (2019) 581–619. <https://doi-org.ucid.idm.oclc.org/10.1007/s10584-019-02521-7>.
- [24] D. McCauley, R. Heffron, Just transition: integrating climate, energy and environmental justice, *Energy Policy* 119 (2018) 1–7, <https://doi.org/10.1016/j.enpol.2018.04.014>.
- [25] H. Winkler, Towards a theory of just transition: a neo-gramscian understanding of how to shift development pathways to zero poverty and zero carbon, *Energy Res. Soc. Sci.* 70 (2020), 101789, <https://doi.org/10.1016/j.erss.2020.101789>.
- [26] J. Cock, Resistance to coal inequalities and the possibilities of a just transition in South Africa, *Dev. South. Afri.* 36 (6) (2019) 860–873, <https://doi.org/10.1080/0376835X.2019.1660859>.
- [27] C. Strambo, J. Burton, A. Atteridge, *The End of Coal? Planning a "Just Transition" in South Africa*, Stockholm Environment Institute, Stockholm, 2019.
- [28] D. McCauley, V. Ramasar, R. Heffron, B. Sovacool, D. Mebratu, L. Mundaca, Energy justice in the transition to low carbon energy systems: exploring key themes in interdisciplinary research, *Appl. Energy* 233 (2019) 916–921, <https://doi.org/10.1016/j.apenergy.2018.10.005>.
- [29] C. Farrell, A just transition: lessons learned from the environmental justice movement, *Duke FL & Soc. Change* 4 (2012) 45. <https://heinonline.org/HOL/P?h=hein.journals/dukef4&i=44>.
- [30] J. Cha, A just transition for whom? Politics, contestation, and social identity in the disruption of coal in the Powder River Basin, *Energy Res. Soc. Sci.* 69 (2020), 101657, <https://doi.org/10.1016/j.erss.2020.101657>.
- [31] K. Svobodova, J. Owen, J. Harris, The global energy transition and place attachment in coal mining communities: implications for heavily industrialized landscapes, *Energy Res. Soc. Sci.* 71 (2021), 101831, <https://doi.org/10.1016/j.erss.2020.101831>.
- [32] A. Mayer, More than just jobs: understanding what drives support for a declining coal industry, *Extr. Ind. Soc.* (2021), 101038, <https://doi.org/10.1016/j.exis.2021.101038>.
- [33] B. Sovacool, M. Dworkin, *Global Energy Justice*, Cambridge University Press, Cambridge, UK, 2014.
- [34] T. Tyler, E. Lind, Procedural justice, in: J. Sanders, V. Lee-Hamilton (Eds.), *Handbook of Justice Research in Law*, Springer, Boston, MA, 2002, pp. 65–92.
- [35] B. Terwel, F. Harinck, N. Ellemers, D. Daamen, Voice in political decision-making: the effect of group voice on perceived trustworthiness of decision makers and subsequent acceptance of decisions, *J. Exp. Psychol.* 16 (2) (2010) 173–186, <https://doi.org/10.1037/a0019977>.
- [36] K. Pranis, Restorative values, in: G. Johnstone, D. Van Ness (Eds.), *Handbook of Restorative Justice*, Routledge, Cullompton, 2007, pp. 59–74.
- [37] D. Dyck, Reaching toward a structurally responsive training and practice of restorative justice, in: D. Sullivan, L. Tift (Eds.), *Handbook of Restorative Justice: A Global Perspective*, Routledge, London, UK, 2006, pp. 527–545.
- [38] E. Judah, M. Bryant, Rethinking criminal justice: retribution vs. restoration, *J. Relig. Spiritual. Soc.* 23 (1–2) (2004) 1–6, [https://doi.org/10.1300/J377v23n01\\_01](https://doi.org/10.1300/J377v23n01_01).
- [39] J. Braithwaite, Setting standards for restorative justice, *Br. J. Criminol.* 42 (3) (2002) 563–577, <https://doi.org/10.1093/bjc/42.3.563>.
- [40] M. O'Connor, B. Gearey, 'Black butter melting and opening underfoot': the 'peat harvest' in Irish literature and culture, *Green Lett.* 24 (4) (2020) 381–390, <https://doi.org/10.1080/14688417.2021.1878049>.
- [41] T. Scully, Ireland's first peat-electric station, *Ir. Mon.* 77 (909) (1949) 135–139.
- [42] S. Misteil, M. Lawlor, From workers to business partners: response to a crisis in Bord na Móna, in: *Human Competence and Business Development*, Springer, London, 1997, pp. 78–95.
- [43] S. Häyrynen, C. Devery, A. Banerjee, Contested bogs in Ireland: a viewpoint on climate change responsiveness in local culture, in: G. Martinez (Ed.), *Culture and Climate Resilience*, Palgrave Macmillan, Cambridge, 2021, pp. 69–95.
- [44] Climate Action Plan. <https://assets.gov.ie/25419/c97cdecdf8c49ab976e773d4e11e515.pdf>, 2019 (accessed 1 Jan 2022).
- [45] National Just Transition Fund. <https://www.gov.ie/en/publication/ed10d-just-transition-fund/> (accessed 1 Jan 2022).
- [46] Minister announces launch of public consultation on Ireland's Territorial Just Transition Plan. <https://www.gov.ie/en/press-release/81d6f-minister-announces-launch-of-public-consultation-on-irelands-territorial-just-transition-plan/> (accessed 1 Jan 2022).
- [47] S. Dharamsi, G. Charles, Ethnography: traditional and criticalist conceptions of a qualitative research method, *Can. Fam. Physician* 57 (3) (2011) 378–379.
- [48] N. Mack, *Qualitative Research Methods: A Data Collector's Field Guide*, Family Health International, Research Triangle Park, NC, 2005.
- [49] R. Miller, J. Brewer (Eds.), *The AZ of Social Research: A Dictionary of Key Social Science Research Concepts*, Sage, London, UK, 2003.
- [50] A. Fontana, J. Frey, The interview: from structured questions to negotiated text, in: Y. Lincoln, N. Denzin, Y. Lincoln (Eds.), *Handbook of Qualitative Research*, Sage, Thousand Oaks, CA, 2003, pp. 645–672.
- [51] H. Rubin, I. Rubin, *Qualitative Interviewing: The Art of Hearing Data*, Sage, Thousand Oaks, 2011.
- [52] M. Patton, *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*, Sage, Thousand Oaks, 2015.
- [53] O. Robinson, Sampling in interview-based qualitative research: a theoretical and practical guide, *Qual. Res. Psychol.* 11 (1) (2014) 25–41, <https://doi.org/10.1080/14780887.2013.801543>.
- [54] P. Biernacki, D. Waldorf, Snowball sampling: problems and techniques of chain referral sampling, *Sociol. Methods Res.* 10 (2) (1981) 141–163, <https://doi.org/10.1177/004912418101000205>.
- [55] V. Braun, V. Clarke, Thematic analysis, in: H. Cooper (Ed.), *APA Handbook of Research Methods in Psychology 2*, APA books, Washington DC, 2012, pp. 57–71. *Research Designs*.
- [56] B.N.M.collab <collab>Bord na Móna, Bord na Móna announce formal end to all peat harvesting on its lands. <https://www.bordnamona.ie/company/news/articles/bord-na-mona-announce-formal-end-to-all-peat-harvesting-on-its-lands/>, 2021. (Accessed 16 March 2021).

- [57] A. Mayer, A just transition for coal miners? Community identity and support from local policy actors, *Environ. InnovSoc. Transit.* 28 (2018) 1–13, <https://doi.org/10.1016/j.eist.2018.03.006>.
- [58] R. Pollin, B. Callaci, The economics of just transition: a framework for supporting fossil fuel-dependent workers and communities in the United States, *Labor Stud. J.* 44 (2) (2019) 93–138, <https://doi.org/10.1177/0160449X18787051>.
- [59] M. Wolsink, Wind power and the NIMBY-myth: institutional capacity and the limited significance of public support, *Renew. Energ.* 21 (1) (2000) 49–64, [https://doi.org/10.1016/S0960-1481\(99\)00130-5](https://doi.org/10.1016/S0960-1481(99)00130-5).
- [60] B.N.M.collab <collab>Bord na Móna, Bord na Móna Annual Report. [https://www.bordnamona.ie/wp-content/uploads/2019/07/Bord-na-M%C3%B3na-Annua-l-Report-2019\\_FINAL.pdf](https://www.bordnamona.ie/wp-content/uploads/2019/07/Bord-na-M%C3%B3na-Annua-l-Report-2019_FINAL.pdf), 2019. (Accessed 3 October 2020).
- [61] A. Banerjee, G. Schuitema, Spatial justice as a prerequisite for a just transition in rural areas? The case study from the Irish peatlands. Unpublished. University College Dublin, Ireland.
- [62] M. Bazilian, S. Carley, D. Konisky, H. Zerriffi, S. Pai, B. Handler, Expanding the scope of just transitions: towards localized solutions and community-level dynamics, *Energy Res. Soc. Sci.* 80 (2021), 102245, <https://doi.org/10.1016/j.erss.2021.102245>.
- [63] M. McQuarrie, The revolt of the Rust Belt: place and politics in the age of anger, *Br. J. Sociol.* 68 (2017) S120–S152, <https://doi.org/10.1111/1468-4446.12328>.
- [64] M. Wei, S. Patadia, D. Kammen, Putting renewables and energy efficiency to work: how many jobs can the clean energy industry generate in the US? *Energy Policy* 38 (2) (2010) 919–931, <https://doi.org/10.1016/j.enpol.2009.10.044>.
- [65] L. Lobao, M. Zhou, M. Partridge, M. Betz, Poverty, place, and coal employment across Appalachia and the United States in a new economic era, *Rural Sociol.* 81 (3) (2016) 343–386, <https://doi.org/10.1111/ruso.12098>.
- [66] L. Prinz, A. Pegels, The role of labour power in sustainability transitions: insights from comparative political economy on Germany's electricity transition, *Energy Res. Soc. Sci.* 41 (2018) 210–219, <https://doi.org/10.1016/j.erss.2018.04.010>.
- [67] B. Snyder, Vulnerability to decarbonization in hydrocarbon-intensive counties in the United States: a just transition to avoid post-industrial decay, *Energy Res. Soc. Sci.* 42 (2018) 34–43, <https://doi.org/10.1016/j.erss.2018.03.004>.
- [68] S. Olson-Hazboun, P. Howe, A. Leiserowitz, The influence of extractive activities on public support for renewable energy policy, *Energy Policy* 123 (2018) 117–126, <https://doi.org/10.1016/j.enpol.2018.08.044>.
- [69] Climate Action Plan. <https://www.gov.ie/en/campaigns/2f87c-climate-action-plan-2021/?referrer=http://www.gov.ie/climateaction/>, 2021. (Accessed 16 March 2021).
- [70] Our Rural Future: Rural Development Policy 2021-2025. <https://www.gov.ie/en/publication/4c236-our-rural-future-vision-and-policy-context/> (accessed 16 March 2021).
- [71] Future employment and skills in the Irish Midlands. [https://ec.europa.eu/energy/sites/default/files/documents/future\\_employment\\_and\\_skills\\_in\\_the\\_irish\\_midlands.pdf](https://ec.europa.eu/energy/sites/default/files/documents/future_employment_and_skills_in_the_irish_midlands.pdf) (accessed 16 March 2021).
- [72] Ireland has not yet submitted plan for funding to get 84.5 M Euros from the EU Just Transition Fund. <https://gripi.ie/ireland-has-not-yet-submitted-plan-for-funding-to-get-e84-5m-from-eu-just-transition-fund/> (accessed 1 January 2022).