

Who should be included in a Just Transition for Scotland?

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Abstract

With accelerating climate break down, the need to transition away from a carbon-based global economy grows ever more urgent. Alongside the move to a carbon neutral economy, attention is focused towards ensuring the transition unfolds in a way that is fair and 'just' to all impacted and involved. At the simplest level, the just transition is a means to support workers within declining carbon intensive industries, but the term is rapidly expanding to include a restructuring of society, reforming past inequalities, and improving social justice. A just transition for Scotland can also be viewed in this context, with various stakeholders adopting differing perspectives. This dissertation finds that for a transition to a low-carbon economy in Scotland to be considered 'just', it must address both distributive justice and procedural participation for workers, communities, and marginalised members of Scotlish society. This includes energy ownership for communities, greater power and resources for local councils, land redistribution, retraining and financial support for fossil fuel workers, communities, and individuals that are dependent on fossil fuel workers spending power. This is not the current approach adopted by the Scottish Government, who are focusing on a business led just transition pathway.

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Abbreviations

CARES Community and Renewable Energy Scheme

CCS Carbon Capture Storage
COP Conference of the Parties
COVID-19 Coronavirus disease 2019

EU European Union

FOES Friends of the Earth Scotland

GDP Gross Domestic Product

ILO International Labour Organisation

IPCC Intergovernmental Panel on Climate Change

IPPC International Plant Protection Convention

JTA Just Transition Alliance

JTC Just Transition Commission

JTRC Just Transition Research Collaborative

JTP Just Transition Partnership

NGO Non-Government Organisation

SNP Scottish National Party

UK United Kingdom
UN United Nations

UBI Universal Basic Income

UNFCCC United Nations Framework Convention on Climate

Change

UNRISD United Nations Research Institute for Social

Development

USA United States of America

XR Extinction Rebellion

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1. Introduction

In 2021, the world faces a series of impending crises. The global pandemic of the coronavirus having killed approximately 2.92m people globally to date (Worldometer, 2021) has unfolded alongside unprecedented wildfires in the United States of America (USA). In 2020 the amount of CO₂ in the global atmosphere reached record highs along with temperatures in Europe. Current predictions estimate that 700 million people worldwide could be displaced by intense water scarcity by 2030 (United Nations, 2021). In 2021 the wealth gap between the rich and the poor is steadily growing with 1% of the world's richest owning 44% of the world's wealth and between 2008 – 2019 the number of billionaires (US Dollars) it took to equal the wealth of the world's poorest 50% fell from 380 to 26 people (Oxfam, 2019). Interlinked with these multiple crises is the increasing demand for social justice. Some research suggests that the recent Black Lives Matter protests taking place across the USA were cumulatively the largest protest movement in American history, with an estimated 25 million (m) people participating (New York Times, 2020). In response to increasing pressures, the concept of a just transition is the amalgamation of both the impending climate crisis and social justice demands.

There are numerous conflicting perspectives on what a just transition represents and who it should include. The country of Scotland is currently the self-proclaimed world leader in climate change policy and the progressive measures aimed at achieving a carbon-neutral economy by 2045 (Scottish Government, 2020) demand fast action to protect workers and communities as economic and social changes take place. With Scotland leading the way in climate change policy it is essential that the process is undertaken in a fair and just manner. The discussion surrounding a just transition often warns that without the safeguarding of workers and communities the growing climate crisis could result in an uptick of right-wing populism, such as was experienced in France with the 'Yellow Vest' (des gilets jaunes) movement where thousands protested the carbon tax on fuel and unaffordable living costs. The movement began with protestors who lived in rural areas and who needed to drive long distances as part of their daily lives. The carbon tax on fuel was enacted by the French Government under President Emmanuel Macron as part of the policy surrounding a transition to a green economy for France (Who Are France's Yellow Vest Protesters, And What Do They Want? 2022).

To ensure the transition from a carbon-based economy to a green and carbon neutral economy in Scotland happens in a fair and efficient manner, it is increasingly important to understand what a just transition means for Scotland and who it should include.

1.1 Aims and Objectives

This dissertation will be an exploration of who should be included in a just transition for Scotland and will be analysed through the lens of both distributive and procedural justice. The first part of this dissertation will examine the literature surrounding a just transition, examining the predominant theories around who and what a just transition should include. This section will also investigate the progress of a just transition in Scotland so far, with focus on historical and contemporary policy as well as relevant literature. The second part of this dissertation will include an interview from a leading expert engaged with the just transition process within Scotland. The purpose of this is to provide a detailed and nuanced understanding of contemporary debate concerning who a just transition should include within a Scottish context. Historically there has been a dichotomy between 'protecting the environment' and 'protecting workers' jobs' and the just transition can be viewed as a bridge between the two polarised goals. The interviews are intended to provide greater detail on how stakeholders for a just transition in Scotland define who should be included in the process. The final part of the document will be a discussion of the literature, policy and interview results, finishing with a recommendation of which stakeholders should be considered for inclusion in the just transition process for Scotland.

The objectives are as follows:

- analyse the literature relevant to 'a just transition' and investigate the variety of definitions applicable to the concept of 'a just transition' and who and what these definitions include:
- 2) analyse the literature and policy documents related to 'a just transition' in Scotland:
- interview an expert engaged with the just transition in Scotland from the NGO
 Friends of the Earth Scotland; and
- 4) understand who the fundamental stakeholders are and how they can be included in a just transition for Scotland.

2. Literature

2.1 Understanding the Just Transition

The origins of the term 'a just transition' are said to be found within a 1970's labour movement (Scottish Government, 2020). A just transition was originally campaigned for by a North American labour rights activist named Tony Mazzocchi. Tony Mazzocchi's campaign was initially named 'a superfund for workers', which aimed to provide financial support for ex-workers previously employed within the hazardous chemicals industry (Eisenberg, 2019). Eventually due to pressure from activists who did not value the connotations of 'superfund', the term is said to have changed to 'a just transition fund'. The concept of 'a just transition' can also be traced back to North American trade unions in the 1980s, with movements not specifically related to climate, but polluting industries, and their impact on local communities and workers. The movements looked at not only how you could close-down these highly polluting industries, but also how the local workforce and communities could also transition to good quality jobs and union jobs. From this perspective, the origins of a just transition began with labour movements campaigning for worker and community justice (Morena, 2021).

Across the 90's and the early 2000's the concept of 'a just transition' was taken up by the International Trade Union movement (ITU). 'A just transition' became one of the core demands of the ITU within the international climate negotiation space (Scottish Government, 2020). As momentum built towards the lead-up of the COP21 (United Nations Climate Change Conference 2015), the ITU lobbied to have the term 'a just transition' included within the Paris Climate Agreement and it is now included within the pre-amble (UNFCCC, 2018). In 2015, the Paris Agreement was reached and is now ratified by 195 countries (UNFCCC, 2020). The Paris Agreement is a legally binding goal of keeping global warming between 1.5 to 2°C limit (European Comission, 2020). For the world to stay below the 2°C limit of warming, scientists predict that 80% of global fossil fuels will have to stay in the ground (McGlade & Ekins, 2015), meaning many jobs from the oil and gas sector and carbon intensive industries will be ultimately lost.

The concept of a just transition is considered by some as an effective tool for building links between the labour movement and the environmental movement. The idea of 'a just transition' has helped to engage environmental groups with unions and build a bridge

between the traditional job's vs environment narrative. Across the climate-change literature, a traditional rift between environmentalists and trade unions is often referred to, with reference to environmentalists believing labour unions do not care about nature, or the planet, but only jobs. The narrative also highlights the parallel suspicions of trade unionists, who are purported to believe that environmentalists do not care about the practical realities of job security, or workers being able to earn a living and provide for their families, but only an objective and externalised 'nature' and 'environment' (The Guardian, 2019). Often this dichotomy is used to highlight class dynamics sometimes apparent between the two ideologies, with environmentalists often viewed as middle-class white intellectuals and trade unionists as working-class pragmatists.

More recently, the term 'a just transition' has gained popularity once again. In 2016, Donald Trump targeted coal workers in his campaign for presidency, promising to reinvigorate the coal industry and increase employment (E&ENews, 2016), and in 2017, Donald Trump announced the US would cease all participation in the Paris Climate Agreement, stating that protecting jobs was of greater importance than environmental or climate related concerns (Schiermeier, 2020). In 2018, the Yellow Vest movement in France erupted, where workers campaigned against rising fuel prices due to the carbon tax and the unattainable cost of living (The New York Times, 2018). In the same year, the COP 24 United Nations (UN) Climate Conference took place in Katowice, Poland (UN Environment Program, 2018). The event was being referred to as 'The Just Transition Conference' in reference to the high numbers of coal jobs at risk in Poland and the re-emergence of the traditional' job's vs the environment' debate (Stockholm Environment Institute, 2018).

As the terminology of 'a just transition' is relatively new, there is much ambiguity around the meaning and polarising debate around what and who a just transition should include (UNRISD, 2018). Across the literature there is considerable emphasis on a worker-lead just transition, with workers of declining sectors at the heart of the movement (McCauley & Heffron, 2018). Support for workers can often mean providing re-training opportunities which could allow workers to capitalise on transferable skills and apply those to work in the renewables industry. Examples of this could include oil and gas workers retraining to become windfarm or solar panel engineers. Some critics of this proposal highlight the necessity for new, green jobs to be made available locally for workers to transfer to and argue that many renewable industries such as wind farm manufacture are outsourced to other countries such as China, which is the concern of many Scottish oil and gas workers

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hoping to transfer to the renewables industry (Friends of the Earth Scotland, Platform, Greenpeace, 2020).

In contrast to a worker-focused movement, much of the just transition literature discusses a wider and more holistic approach, including a broader scope of elements to be included. Some view a just transition as only viable if it also includes the workers of sectors which are dependent on the spending power of oil and gas workers, such as the hospitality sector. This can include service workers who are predominantly women and migrants. In this context, a transition could only be considered 'just' if inequalities that already exist in a fossil fuel economy are not replicated in a carbon-neutral economy (Kirkwood, 2018). As part of the United Nations Research Institute for Social Development (UNRISD) Just Transition Research Collaborative (JTRC) discussions, JTRC founder Edouard Morena argues that "fossil fuel workers are actually a very small part of the big picture" and that there should be a greater focus on "care workers and other types of workers that are more reflective of the multi-racial and gendered class system we inhabit" (JTRC, 2020). As part of a webinar event 'How can we build trust in a just transition?' hosted by the ¹New Economics Foundation, speakers highlighted the need to remember that the richest of society are contributing the most to climate change, by focusing 'a just transition' too specifically on jobs, it becomes a false dichotomy between a group of workers in the global north and a group of workers in the global south (New Economics Foundation, 2021). A report published by the ²Stockholm Environment Institute concludes that many just transition policies focus only on fossil fuel workers, with little focus on the meaning of justice in the context of moving from a carbonbased energy system to a renewable one. The report states that 'no policies contain measures to improve the lives of people currently marginalized in the energy system' and that 'creating just and equitable transition policies requires collecting data on the current distribution of the harms and benefits of the energy system, and mapping out how this will change as fossil fuels become a less-prominent part of the energy mix' (Piggot, et al., 2019). In accordance with a more holistic approach to a just transition, some critics highlight the fundamental flaw in the dual process of avoiding climate break-down and increasing consumption in a growth-based economy (Nicoson, 2021). Some critics are advocating for economic degrowth, and a rapid decline in consumption as a means of targeting the route

¹ The New Economics Foundation is an independent charity with the aim of 'transforming the economy so that it works for people and the planet. The foundation publishes policy guidance, offers consultancy and works towards movement building.

² The Stockholm Environment Institute are a non-profit research and policy organisation aimed at managing environment and development challenges

issue of climate breakdown (Klien, 2014). Many just transition discussions are based on the premise that a transition to a 'green economy' will create many new jobs and enable Gross Domestic Product (GDP) to continue exponentially. Across the just transition literature, continued economic expansion is considered to be a transition that supports the 'status quo' or becomes a 'managerial' transition, rather than one that enables 'structural reform' or a 'transformative' just transition. In a report commissioned and published by the Scottish Government's 'Just Transition Commission' based predominantly on a similar categorisation by the JTRC as well as additional literature, the variety of just transition conceptualisations can be loosely organised into the following themes:

Status quo

A just transition which maintains the *status-quo* is largely based around a green economy and green jobs but does not envision wider or more holistic change to the economic and socio-political system. Focus is placed on how to support workers in declining industries impacted by the energy transition and support may be given in the form of re-training and pension schemes (The Scottish Government, 2020).

Managerial

A managerial just transition focuses more so on social justice than a status quo just transition, but there is no considered economic reform. Organisational design, as well as social discourse between unions and employers, are focused on as essential in reducing carbon emissions and increasing resource productivity (Piggot, 2019).

Structural reform

Structural reform is focused on including both distributive and procedural justice with a bigger emphasis on systematic change. Structural reform includes focus on changing governmental organisation and empowering local communities with increased democratic participation and emphasises a bottom-up transition, placing power with people and their communities (Piggot, 2019).

Transformative

A transformative just transition focuses on a complete change of the existing economic and political system, including the concept of economic degrowth and a circular economy. A transformative just transition includes the dismantling of interlinking forms of oppression such as racism, sexism and classism (UNRISD, 2020).

Across the literature, it is noted that many real-life examples of just transition policies or practices mostly demonstrate either alliance with the status-quo, or managerial transformation (Piggot, 2019). In opposition to this, much of the conversation surrounding a just transition highlights the desire for more transformational change. Annabella Rosenberg stated in the JTRC Webinar Series for 'Power and Politics in a Just Transition' that a just transition should be about the interconnection of all progressive advances for social justice, such as abortion rights for women and workers' rights for fair wages. Societal progress with social justice should be brought in as part of a wider narrative that connects to climate activism, as adversaries are leveraging the despair of people in communities that are not being treated in a just manner, and using it to craft a counter narrative that is a subversion of the just transition narrative, utilising the climate crisis to promote eco-fascism (UNRISD, 2020). The potential for an increase in eco-fascism is increasingly being cited as a reason a just transition is necessary (The Guardian, 2019), with the prospect of disenfranchised workers and communities being swept up by nationalist and right-wing politics, often the Yellow Vest movement is cited as an example of this (Bristow, 2018).

Many academics, policy makers and others who are involved in the just transition dialogue argue that a just transition should include pro-active planning, that addresses systemic inequalities and does not perpetuate problems already faced in the fossil fuel economy. Some argue that a robust just transition should also include both elements of procedural and distributive justice, placing an emphasis on who should be included, who should receive support and what forms of loss should be considered, such as cultural heritage and intangible community practices (Scottish Government, 2020).

Procedural

Procedural justice refers to the consideration of which elements of a just transition are relevant to transition planning and who should be included when planning a just transition. There are a broad range of stakeholders that can be considered for inclusion and there are many arguments for the inclusion of more than those directly affected by employment in the fossil fuel industry, such as associated industries like the hospitality sector which will also be impacted by the closure of the fossil fuel industry, as well as local communities, low-income households, and the nation as a whole (Pinker, 2020).

Distributive

In the context of this dissertation, distributive justice is concerned with how the costs and

benefits of a just transition process will be allocated, such as who will receive support and how should the support be funded. Again, in context, it also considers which fossil fuel reserves should be closed first and who should be compensated for losses, not just financial but also cultural, such as local communities with identities interwoven with historical industry. Considerations are also taken of how to distribute support that does not further entrench pre-existing inequalities (Piggot & Boyland, 2019).

2.1 Literature Review Summary

The concept of a just transition is multifaceted and nuanced. The concept began within the 1970's labour movement and the term has increasingly gained popularity over the last few decades. A just transition can be defined as anything from retraining and financial support for fossil fuel workers to a complete transformation of power dynamics and the economy. A just transition can also be perceived through the lens of both procedural and distributive justice. Procedural justice focusing on how to enable greater democratic participation in decision making, enabling the voice of workers, communities and the marginalised to be heard and help shape the just transition process, and distributive justice, which concerns where the benefits and costs of a just transition will be allocated and who will be included in the process.

2.2 Scotland

Scotland is a small northern country within the United Kingdom, with a population of just over 5 million people. Scotland has a devolved government and unicameral parliament, both in Edinburgh, separate to the equivalent institutions of the United Kingdom (UK), located in London. In 1999 Scottish Parliament was reconvened for the first time in 300 years and received some of the powers previously held by Westminster (Scotland.org, 2021). The devolved powers currently held by the Scottish Government make it possible for Scotland to develop its own climate targets and strategies. The current party in power of the Scottish Government is the Scottish National Party (SNP) who held power as a minority government in 2007 and have been a majority government since 2011 (SNP, 2021). The leader of the SNP is Nicola Sturgeon, Scotland's First Minister. As of the date of this dissertation, the SNP has held power in the Scottish Government for the last 13 years, either forming minority administrations or holding an overall majority of parliamentarians. As of January 2020, Scotland, as part of the UK, left the European Union (EU) (Scottish Government, 2021).

2.2.1 Scottish Climate Policy

The Scottish Government under the SNP is one of the global leaders in climate change policy. Scotland supports some of the most ambitious climate goals in the world, aiming to become a net-zero emissions economy by 2045 (Scottish Government, 2021), five years earlier than the rest of the UK (Scottish Government, 2020). ³The climate legislation includes annual interim targets for the reduction of carbon emissions, which the government must reach in the process of becoming net-zero by 2045. By 2030 the Scottish Government must have achieved a reduction in Scottish emissions by 75% compared to a 1990 baseline (Scottish Government, 2020b).

On 23rd May 2018, a new climate change bill was added to parliament, this is known as 'Climate Change (Emissions Reduction Targets) (Scotland) Act 2019'. The 2019 Act amends the Climate Change (Scotland) Act 2009 and outlines the policy the Climate Change Plan is legally required to contain. The objective of The Climate Change Act 2019 is to 'contribute appropriately' to the global attempt to fulfil the UNFCCC Paris Agreement (Scottish Parliament, 2019) and the Climate Change Plan must set out the policies and actions that the Government will undertake to meet this objective. The Climate Change (Emission Reduction Targets) (Scotland) Act includes a set of just transition principles in the final Act. These principles are:

- (a) supports environmentally and socially sustainable jobs;
- (b) supports low-carbon investment and infrastructure;
- (c) develops and maintains social consensus through engagement with workers, trade unions, communities, non-governmental organisations, representatives of the interests of business and industry and such other persons as the Scottish Ministers consider appropriate;
- (d) creates decent, fair and high-value work in a way which does not negatively affect the current workforce and overall economy; and
- (e) contributes to resource efficient and sustainable economic approaches which help to address inequality and poverty (Scottish Government, 2019).

³ The term net-zero economy refers to the aim of removing all carbon dioxide emissions from the atmosphere either through reducing the release of emissions or capturing them after release by utilising negative emissions technology such as carbon capture storage (CCS).

Due to these strict targets and commitments, Scotland is often referenced as a leading example in climate change debate and the Scottish Government themselves utilise this narrative often, referring to their climate legislation as 'world-leading' on the government website (Scottish Government, 2021). Although Scotland's climate policy is impressive, the Climate Change Plan has received extensive criticism by NGO groups and civil society. Critics have stated that the plan lacks detail around how targets will be reached and highlight the plan's dependence on carbon capture storage technology (CCS) despite there being no CCS plants anywhere in the world that effectively capture and store CO2 at the scale promised (Friends of the Earth Scotland, 2021). Scotland also fell short of its 2020 target to have 100% of electricity powered by renewables but did manage to fulfil 91% (Scottish Government, 2020).

2.2.2 Just Transition Commission

In 2018, the Scottish Government set up the Just Transition Commission (JTC), designed to advise Scottish ministers on how to apply the International Labour Organisation (ILO) Just Transition principles to Scotland (ILO, 2015). There are 12 commissioners in total and members are from a variety of backgrounds including academia, NGOs and the oil and gas industry. The JTC summarises the just transition principles as: 'plan, invest and implement a transition to environmentally and socially sustainable jobs, sectors and economies, building on Scotland's economic and workforce strengths and potential'. The principles further include the need to 'create opportunities to develop resource efficient and sustainable economic approaches, which help address inequality and poverty and design and deliver low carbon investment and infrastructure, making all possible efforts to create decent, fair, and high value work, in a way which does not negatively affect the current workforce and overall economy'. (Scottish Government, 2021).

2.2.3 Just Transition Commission Interim Report

On the 27th of February 2020, the Just Transition Commission published its first interim report. In the introduction, the JTC Chair Professor Jim Skea outlines the commission's ambition to apply a holistic perspective to just transition planning for Scotland, stating that 'committing to a just transition can provide an opportunity to address existing inequalities' and 'the future of employment and skills are central to a just transition, but it has become clear to us that a wider perspective is required' (Scottish Government, 2021). The report also goes on to state that government should be considering a Citizens Assembly for

beginning dialogue around a just transition and what the people of Scotland expect and need. The report states that the commission will consider alternative models for social dialogue, adding 'we discussed the importance of including a variety of voices in the creation of transition plans but understanding society's expectations goes deeper than that. There is a need for on-going and proactive dialogue with all corners of society that will be affected by the transition to net-zero' (Scottish Government, 2021).

2.2.4 Just Transition Commission Green Recovery Report

On the 30th of July 2020, the Just Transition Commission published their 'Advice for a Green Recovery' (Scottish Government, 2020). The report focuses on the impact of Coronavirus virus 2019 (COVID-19) on the people of Scotland as well as the Scottish economy and considers the ways in which the pandemic has impacted on Scotland's pathway to a just transition. Professor Jim Skea the JTC Chair states "with plans for investment and interventions in the economy being drawn up, there is an opportunity to accelerate our transition to a net-zero economy while healing the scars left on our society by the pandemic" (Scottish Government, 2020). The 'Advice for a Green Recovery' report sets forwards a number of specific recommendations for immediate action, which includes boosting investment in warmer homes, buying back the buses, investing in public transport, and maintaining and creating new jobs for oil and gas workers.

2.2.5 The stakeholders of procedural justice in Scotland

Many stakeholders across Scotland including academics, civil society and politicians support alternate proposals for how Scotland can undertake a just transition. Alison Stuart, director of Aberdeen Climate Action advocates the need for a regional joined up approach, stating that currently Aberdeen City Council and Aberdeenshire Council are following two separate approaches, with Aberdeen City council focusing on a "narrow industry energy transition" and Aberdeenshire Council pursing 'Climate Ready Aberdeenshire' "which is focused on adaption rather than mitigation". Stuart outlines the need for "one common voice" and the implementation of a "collaborative regional approach which is holistic, such as a north-east Transition Council" (Aberdeen University, 2020).

Dr David Toke of the Centre for Energy Transition and an expert in energy policy, states that the appointment of BP as advisers to Aberdeen Council in how to achieve a just transition is an arguably disastrous idea. BP are advising Aberdeen Council to pursue the pathway of

adopting Carbon Capture Storage (CCS) as a technological solution (Aberdeen City Council, 2020). Dr Toke outlines his concerns that Aberdeen and the north-east of Scotland will be left stranded with a controversial technology that lacks support from the public and has little evidence of being capable of achieving the scaled-up predictions that governments and councils are hoping for. Dr Toke argues that CCS technology is not suitable for the long-term interests of Aberdeen and the north-east of Scotland, and that it is most heavily being advocated for by wealthy lobbyists belonging to oil and gas companies who wish to continue extracting. Dr Toke instead advocates bottom-up decision making and argues that there should be a citizen's assembly for Aberdeen and the north-east of Scotland, similar to the Climate Assembly held in Westminster (University of Aberdeen, 2020).

As part of a discussion concerning a 'green recovery for Aberdeen and the North East', Dr Thomas Muinzer, a lecturer in Energy Law at 'CEPMLP', the University of Dundee's Centre for Petroleum, Mineral Law and Policy and senior lecturer in Energy Transition Law for Aberdeen University, states that for a successful green recovery for Aberdeen and the North East of Scotland, there has to be engagement with private communities in and around Aberdeen "making sure they have a role and essential stake going forwards", Dr Munizer further states that "this [community participation] is a massive gap that needs to be addressed" (University of Aberdeen, 2020).

Arianne Burgess of the Scottish Green Party and the lead candidate for the Highlands and Islands in the 2021 election, advocates the need to devolve power to the most local levels and highlights the problem with "councillors making decisions about areas they haven't even stepped foot in" (Scottish Young Greens, 2020).

Zarina Ahmad from the 'Council of Ethnic Minority Voluntary Organisations' who works to engage minority and ethnic people in Scotland with environmental issues, highlights the lack of diversity within environmental movements. Ahmad emphasizes the fundamental issue with vulnerable and minority people having either inadequate or no access to political influence, and the urgent need to create capacity for engaging vulnerable and marginalised groups in decision making. Ahmad further states that often the most vulnerable groups contribute the least to climate break-down but are the first to experience the negative impacts of climate change, having less resources, depending on low-paid jobs and limited or no access to technologies and services (Friends of the Earth Scotland, 2020).

2.2.6 Scotland's Climate Assembly

The Scottish Government has organised a 'climate assembly, designed to facilitate procedural democracy and enable the people of Scotland to engage with the just transition process. Scotland's climate assembly is composed of over 100 people from a diverse range of backgrounds, designed to represent a mini-Scotland and represent the country across the demographics of age, ethnicity, household income and gender. On March 24th, 2021, the Climate Assembly published their interim report and included 16 distinct recommendations for the Scottish Government to consider including the empowerment of communities and localised solutions, the reduction of consumption and waste, a circular economy, and the need to develop a new metric for success outside of the current use of GDP. The recommendations produced by the climate assembly are reflective of much of the recommendations discussed throughout the academic literature, focusing on a holistic process with the inclusion of wider Scottish society.

Although the Scottish Climate Assembly can be viewed as a great example of democratic participation, some critics argue that the organisation of the assembly is still constrained by a top-down approach. Critics point out that the Scottish Government hand pick the speakers at the climate assembly, and that the outspoken climate scientist Kevin Anderson who advocates against CCS (Physics World, 2019), was demoted from lead researcher to supplementary advisor. On November 5th, 2020, the grassroots activist group XR Scotland publicly stated that they could no longer endorse Scotland's Climate Assembly stating 'citizens can only make a full assessment when presented with the full spectrum of perspectives. In our view, this spectrum has been actively resisted by the Secretariat, for example by excluding highly regarded academic public intellectuals, including one who is an IPCC lead author, from being evidence leads because of their association with XR' (XR Scotland, 2020). Extinction Rebellion Scotland further stated that 'the secretariat's initial openness to allowing the Assembly to set its own ambition is increasingly overtaken by an insistence that their recommendations have to be actionable by Government'. XR Scotland emphasise the need for the assembly and the public to determine the necessary recommendations, rather than the government defining the framework of the conversation and imposing restrictions based upon the Scottish Governments ability to action the proposals (XR Scotland, 2020).

2.2.7 Scottish Procedural Justice Summary

The literature and discussion surround a just transition in Scotland advocates that the voices of communities should be heard and should help shape the process, along with decentralised government and more power afforded to local authorities. Currently there is a dichotomy between rhetoric and what is happening in reality, with BP the oil and gas company shaping the just transition process in Scotland's oil capital and the climate assembly tightly constrained by the Scottish Government's narrative.

2.2.8 Fuel Poverty in Scotland

Elizabeth Leighton, director of Existing Homes Alliance Scotland highlights the necessity for a Just Transition in Scotland to address fuel poverty (when a household struggles to afford to heat the home) stating that "fuel poverty is wide-spread across Scotland but worst in rural areas and locations where poverty is already highest". Leighton also outlines recent research by the Scottish Government which shows fuel poverty has increased due to the COVID-19 pandemic. "Fuel poverty has increased by an additional 5% (136,000) of households will be living in fuel poverty as a result of increased unemployment, being at home longer, and working from home for longer, meaning it is getting closer to 30% (755,000) of households living in fuel poverty in Scotland now" (Eco-Congregation Scotland, 2020). Jonathon Cape, managing director of Power Circle, a social energy project, outlines recent research by National Energy Action that suggests with no new government subsidies, achieving a Just Transition for the Scottish social housing sector would place between half a million to two and a half million more people into fuel poverty. Cape described this as the basis for an 'unjust transition' (Eco-Congregation Scotland, 2020).

2.2.9 Land Ownership and Redistribution

Molly Scott Cato of the Green Party and member of the European parliament argues that the legal framework around land ownership in the United Kingdom is "really wrong" and although there is not a huge appetite for change in England currently, with Scotland's history of the Highland Clearances only around 250 years ago' a greater awareness exists, and this could be part of a catalyst for change. Cato further highlights the difficulty in buying back land from Scottish lairds, and how this could be made easier with an independent Scotland, although MPs have not pushed for land ownership this session (Scottish Young Greens, 2020). Arianne Burgess of the Scottish Green Party advocates the benefits from community land buybacks and how these can help rural areas in Scotland undertake a just transition.

Burgess states that once communities own the land then they can begin to shape the decisions about how best to use that land such as growing timber to help low carbon house building, which in turn can provide employment for people in the area (Shetland News, 2021). Ownership of local land can also allow for greater community access to production of food, allowing access for small producers and community supported agriculture. Community ownership of land in Scotland could also enable greater access to energy profits and community ownership of renewable energy technology, rather than losing out to multinational companies as is currently happening (Thomson, et al., 2016).

On the 1st of April 2017, the Scottish Land Commission were set up by the Land Reform (Scotland) Act 2016 and are completely funded by the Scottish Government (Scottish Land Commission, 2021). On the 20th of March 2019, the Scottish Land Commission published a report investigating the unfair share of land ownership in Scotland (Glenn, 2019). The report found that (in sum) about 1,125 owners, including Highland lairds and major public bodies such as Forest Enterprise and the National Trust for Scotland, own 70% of Scotland's rural land, covering more than 4.1m hectares (10m acres) of countryside (Guardian, 2019).

2.2.10 Scottish Community Energy Ownership

Many discussions around a just transition in Scotland reference community ownership of energy. Alison Stuart of Climate Action Aberdeen advocates community distributive power and Ariane Burgess of the Scottish Green Party highlights that due to restrictions over devolved power, the Scottish Government does not have a great deal of say over energy policy. Burgess advocates for an independent Scotland so that greater control can be awarded to landowners enabling a far greater control over energy ownership and the profits from wind turbines.

In January 2021, the Scottish Government published a local energy policy statement which includes a set of key principles and underlines the values the Scottish Government would like to see undertaken in this area. The key principles include the establishment of an 'Energy Consumer Commission for Scotland', a fund, and greater reform of the UK energy market. The government has also set the target for 2GW of renewable energy to be locally or community owned by 2030 (Scottish Government, 2021). In March 2021 the consortium Local Energy Scotland were awarded the contract to manage the Scottish Government's Community and Renewable Energy Scheme (CARES) until the end of March 2025 (Local Energy Scotland, 2021). CARES is a Scottish Government fund which is designed to help

support communities and businesses to 'develop, own or take a stake in renewable energy projects across Scotland'. The Local Energy Scotland website currently states that 648.86 MW of energy in Scotland are from locally owned projects and 81.79 MW from community owned projects. Although the Scottish government set a target for 1 GW of energy to be locally or community owned by 2020, it appears it has not been reached (Local Energy Scotland, 2020).

2.2.11 Proposed Universal Basic Income in Scotland

Ariane Burgess of the Scottish Green Party and the lead candidate for the Highlands and Islands, advocates that there should be a Universal Basic Income (UBI) for the whole of Scotland but concedes this "could be difficult because we do not have the mechanisms for some fiscal and taxation powers" due to Scotland's status as a devolved nation. In 2020 the SNP set up the 'Social Justice and Fairness Commission' to investigate a 'basic income' for Scotland and to 'deliver a route map to the real prize of independence - becoming a truly rich society, where we ensure that no one has to rely on a food bank to eat' (Social Justice and Fairness Commission, 2020). The concept of UBI has wide ranging proponents, from those on the left side of politics, to the right. From those advocating for holistic system change, to neoliberal free market advocators and Silicon Valley. UBI is broadly defined as providing an in-cash income, that is not means tested, to all the people in a population, so that they can achieve a basic living standard (Nature, 2020). Viewing the just transition in Scotland through a holistic and transformative lens effectively means the whole population of Scotland should benefit from a just transition and a UBI, but some argue that a UBI program may benefit the middle class more than those in direct poverty. Some pilots have seen the middle class benefit more from the extra cash, while those in dire need do not benefit as well (The Guardian, 2019).

2.2.12 Distributive Justice Summary

The literature and discussion surrounding distributive justice in a just transition for Scotland advocates a holistic and transformative approach that is inclusive of wider Scottish society. Advocates call for land reform, community energy ownership and the introduction of a Scottish UBI to help ensure a just transition for Scotland. Currently the Scottish government is researching these concerns through a variety of commissions although action is yet to be undertaken in a meaningful way.

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3. Methodology

This dissertation will use a mixed methods approach including a systematic review of the literature, an interview with one of Scotland's leading experts in a just transition and an analysis of historical and contemporary policy surrounding the just transition process within Scotland.

3.1 Literature Review Methodology

A review of the relevant literature was undertaken so that a greater understanding could be developed of what a just transition is considered to be, and importantly, who a just transition is considered to include from both a global and Scottish context. In order to understand what the historical and contemporary thought is on the concept of a just transition, the first research phase was a semi systematic review of the literature to understand the question 'what is a just transition', this identified key themes in academic and organisational texts that should be further focused upon. Due to the nature of COVID-19, many important and topical discussions have been held virtually and recorded for publication to channels such as YouTube, and these along with live webinars have also been reviewed, to provide an in depth understanding of the contemporary debate surrounding the just transition both globally and within a Scottish context.

3.2 Literature Review Methodology

Policy documents from both a global and Scottish context were analysed to provide further understanding of the just transition concept and how it is being undertaken in real – world scenarios.

3.3 Interview Methodology

An interview with a key expert engaged with the just transition process within Scotland was undertaken so that a greater understanding of the complexities of who should be included in the process could be understood. Although a rich source of information is available online through literature and recorded interviews, the ability to engage in a one-to-one dialogue with a just transition expert engaged in the Scottish process, allowed for a deeper understanding of the key consideration of who should be included.

3.3.1 Recruitment

No previous relationship existed with the participant before the interview process. The interview participant was invited to take part through a direct email. The participant is a Just Transition Campaigner for the NGO Friends of the Earth Scotland and a member of the Just Transition Partnership. The interview was conducted online via the platform Zoom due to social distancing requirements. The interview was recorded using the built-in functionality of the software and then transcribed by that author. Originally three independent participants were approached, but only one agreed to participate. UNISON Scotland, a trade union, did not respond, and the Just Transmission Commission for Scotland sent forward some alternative links to documents and policy instead.

3.3.2 Interview Schedule Design

The interview was quasi-structured with a set of 5 predetermined questions, detailed below, which were designed to allow for deeper understanding of the research question. These questions were informed by the literature review of academic texts, policy, and contemporary conversation. The questions were designed to begin in a broad manner allowing a gentle warm-up to the process, before becoming more detailed towards the end. The questions were designed to be open-ended and non-leading so that the most robust and insightful data could be obtained from the interaction. The questions were as follows:

- 1. what does a Just Transition for Scotland mean to you?;
- 2. who do you feel should be included within a Just Transition for Scotland?;
- 3. Scotland has ambitious targets for achieving a Just Transition, what do you think the barriers, challenges and opportunities may be in achieving it?; and
- 4. how can communities be engaged with effectively so that their voices can be heard when it comes to planning a Just Transition?

3.3.3 Ethics and Risk

The participant was considered a professional in their specialist field and accordingly was considered to have the capacity to make their own decisions and understand the risks, due to the subject matter of the research the risks are considered reputational and therefore this risk was minimised by referring to the participant in the dissertation by use of a pseudonym. The research undertaken in this dissertation was awarded ethical clearance by the University of Dundee (Application No. UoD-SoSS-PET-TPG-2021-75), the participant was informed fully of the risks and was given an information sheet as well as a consent form

which was completed before the interview. The participant was informed that they could withdraw from the research process at any time and data was stored securely and anonymously.

Due to the small sample size, the relatively niche network of Scottish professionals engaged within the research topic and the naming of Friends of the Earth Scotland as the participants place of work, there is the potential risk of the participant being identified under closer scrutiny of detail. This was explained to the participant before the request for consent or interview process.

3.3.4 Interview Analysis

The data collected from interview was analysed and used to inform a deeper understanding of the literature and policy.

4. Interview Response

The participant is a Just Transition Campaigner for the NGO Friends of the Earth Scotland and is also a member of the Just Transition Partnership, formed by FOES and the Scottish Trade Unions Congress (STUC)⁴. The participant was chosen for their expertise and insight on the empirical progress of a 'just transition to a low carbon economy' in Scotland.

4.1 Question 1

The first question addressed the definition of a just transition in a Scottish context and was designed to provide insight into the participants view of the just transition process in Scotland, and what should be included.

1. Question: "What does a Just Transition for Scotland mean to you?"

In accordance with much of the literature, the participant described the holistic nature of a just transition, with environmental justice and social justice both fundamental to the process. Although just transition literature and discussion often highlight the fundamental dichotomy between environmental justice and social justice, such as the historical 'jobs v's environment' narrative (Arronoff, 2016), the participant instead described the climate crisis as a framework, setting the parameters and time constraints from within which a just transition will have to be achieved. The participant also emphasised the inherent duality in the just transition process, with the ongoing climate crisis the fundamental catalyst for achieving a range of social justice measures but also that the root cause of many social inequalities is also the root cause of the climate crisis.

"So what a Just Transition means to me, obviously I work for a climate organisation, so there is a certain parameter to it, — essentially you know we are looking at a pretty rapid transition to avoid the worst impacts of the climate crisis, and that's very much the frame, but I think there's a dimension to it in that — in moving away from fossil fuels there are a lot of other negative consequences in the context of how the economy is currently shaped, who it serves and who it is designed by and controlled by, that I think, not only is a transition away from

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⁴ The STUC represents over 540,000 trade unionists, the members of 39 affiliated trade unions and 20 Trades Union Councils. The aim of the STUC is to co-ordinate, develop and articulate the views and policies of the trade union movement in Scotland and to promote trade unionism; equality and social justice; the creation and maintenance of high-quality jobs; and the public sector delivery of services.

fossil fuels a means of addressing those issues, but I actually think it's essential to address those issues"

The participant also referred to the two fundamental elements of a just transition as both 'outcome' and procedure' in accordance with 'distributive' and 'procedural' justice, advocating the necessity of improving democratic participation as part of a just transition whilst also providing a beneficial outcome for workers and communities.

"So, a just transition is a transition of outcome, in the sense that it should protect people who are currently in fossil fuel jobs or dependent communities as well as sharing risks better in a future economy, but it's also about the process, which is tackling a lack of democracy within the economy itself and empowering the workers and communities who actually depend on the fossil fuel industries around them to have far more control over what their future looks like and how they are managed"

The participant additionally outlined some of the environmental and social justice elements of a just transition, such as tackling air pollution whilst also addressing fuel poverty.

"We're also very conscious of the things that are happening on a domestic scale such as air pollution. If you live in an urban city centre or if you are someone who has to travel to work down some of the busiest routes in Scotland, then you are likely coming into contact with some incredibly high levels of air pollution and that's another environmental injustice that shifting away from fossil fuels can tackle. Similarly, with fuel poverty, which is very high in Scotland, there's a whole bunch of issues that we need to focus on that go a bit beyond jobs and a bit into other aspects of inequality which a change in our main energy source gives us a chance to fix if you want to bring other people's priorities into that."

The participant concluded their answer by emphasising that for a rapid transition from fossil fuels to take place, there also needs to be a rapid transformation away from social inequality.

"I don't think we should make a rapid transition away from fossil fuels without tackling those social issues, so it's partly recognising that a rapid transition only happens with a mix of popular support and also by tackling certain power dynamics within our economy and that's a small percentage of people from the population who are incredibly wealthy and powerful through the fossil fuel lobby or other major industries who able to prevent progress in some of these areas"

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4.2 Question 2

The second question addressed the procedural and distributive stakeholders of a just transition in Scotland.

2. Question: "Who do you feel should be included within a Just Transition for Scotland?"

The participant outlined three different perspectives on who a Just Transition in Scotland should include, with the Just Transition Partnership, the Just Transition Commission, and the Scottish government each taking a different approach.

"So, it's an interesting one because with the Just Transition Partnership we've done a bit of this work narrowing the definition down and considering who 'just' applies to and who do we think should have a say also who do we think should receive the benefits of a just transition and we took a different definition to what the Just Transition Commission has taken. Similarly, the Scottish Government I would say, has taken a whole different interpretation with one that prioritises businesses to secure a Just Transition."

In alliance with a broad and holistic view of a just transition, the participant described their view of a Just Transition as the consideration of three essential stakeholders, workers, communities, and the environment, emphasising the time constraints of the climate crisis.

"For me, when we're talking about outcomes and process, we're really talking about the three same stakeholders; workers, communities, and the environment. The environment as a stakeholder sounds a little tricky and amorphous, but it's essentially trying not to lose sight of the fact that there is a pace to be demanded of within the just transition, we can't just amble along, the context and the speed at which we need to do things is demanded by the climate crisis, and the climate science".

Aligned with much of the literature that advocates the need to address climate break down in a manner which does not rely upon the free market to provide the solution, the participant states that the private sector should not be the defining voice of a just transition in Scotland.

"I think there is a role for the private sector, but I just don't see them as a stakeholder. I am not looking for a JT to serve positive outcomes for business, its positive outcomes for workers, communities, and the climate and that probably means making sure there is a business environment that works for job creation and some industry in some instances. I

think industry are a group who should be giving evidence, sharing their thoughts. But not a group around the table deciding how to move forward, and I think that's the distinction I would draw."

The participant highlights the over representation of industry within the Just Transition Commission, arguing that the imbalance impacted the outcome of the commission's recommendations.

"If you look at the JTC it had four industry representatives on it, two trade unionists, one environmentalist, I think the balance there of saying you need the biggest single group to be industry was just completely flawed. I would much rather seen them on the other side giving their evidence to trade unions, community representatives and environmentalists but instead they were actively shaping the process and that's the distinction I would like to see."

4.3 Question 3

Question 3 was concerned with understanding the complexities and obstacles that could obstruct the just transition process in Scotland as well as the potential benefits of the process.

3. Question: "Scotland has ambitious targets for achieving a Just Transition, what do you think the barriers, challenges and opportunities may be in achieving it?"

The participant outlined the lack of measurable just transition goals in Scotland and the lack of quantifiable projections concerning the impact of just transition policies in Scotland.

"I actually think one of the barriers is in the first part of that question in respect of the targets, we have relatively ambitious climate targets for emissions reductions, but we actually don't have targets for a just transition."

"Within the partnership we had pushed for an added provision in the climate change act, that states that in future climate change plans – the Scottish government has to quantify and demonstrate the impact on jobs, the regions, and the economy, for each of their measures, and the other measures they were going to use to combat any negative consequences and make sure we captured the good, basically asking them to quantify the just transition. So we got that in, which was really positive, but the Scottish Government has just done a climate change plan update and they haven't done that work, because they have said it is an update and not a new plan"

"So we're at the point now where we're a year in to that crucial decade, by 2030 our emissions reduction target is for 75% which is massive, it's a lot of work to do now, and we don't currently have any idea what the transition consequences are for the policies being introduced."

"I think that the first challenge and barrier I'm seeing right now is a complete unwillingness to properly manage the process, to understand the impacts, to understand what is happening and then to develop a coherent pathway where the government states 'we are investing this much money, we are going to focus on these sectors, we are going to bring you on board to work out how we do it, and then you're going to be involved in the process of monitoring it, keeping us right as we go, because it's not necessarily easy, and that for me is probably the biggest barrier"

The Scottish Government's focus on the private sector as the mechanism for a just transition was highlighted by the participant as a concern as was the government's disinclination to take a greater role in shaping the just transition process.

"I just don't think Scottish Government has fully grasped what is needed to make an industrial transformation like that happen. It comes back to believing that creating a business environment that works for the private sector will lead to positive social outcomes when all evidence of the last couple of decades is the opposite, climate policy has been quite regressive, it's been expensive for people, jobs are stagnant in green industries, trying to understand how that process will suddenly produce new results is really difficult and we are battling to get the government to take the reins of it and to say no, we need to shape this much more."

The participant stressed the importance of meeting climate targets, with the potential for emissions reductions to snowball and impact a managed and smoothly phased out just transition process in Scotland.

"From a climate perspective, we have missed our last two climate targets, I think this is something that a JTC didn't pick up on, which I found frustrating, which is, if we're going to have a just transition it needs to be managed well. Not only is that the contents of the plan and working out where you are going to invest money and working out who is going to be involved in shaping it, its meeting your climate target as you go, every climate target we missed means we needed to do more the next year. That makes it harder to reach the next target and creates a backload of work, if we get to 2028 and we've missed a few more

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targets that leaves us with quite a back log of emissions to try and catch up on. It's not then this seamless, managed, phase out of things it's going to become much more haphazard and a lot more piecemeal."

"I think there is a bit of a relaxed attitude to climate targets because of progress so far, but that progress has largely been because of closing down places like Longannet which isn't an example of a just transition, it wasn't well managed. I think I am quite anxious about Scotland missing climate targets, because I think it puts a well-managed transition at quite a severe risk, because it implies that things are not being managed well."

The participant voiced frustration at the Just Transition Commission's reluctance to hold the Scottish Government accountable for ignoring the commission's recommendations and described their initial hopes for how the JTC would be structured and operate.

"We were very frustrated – the commission had produced an interim report and in their report it said to the government – you need to get on with this, don't wait for our final report, these recommendations are deliverable now, go ahead with them and the Scottish government just didn't, and there was no consequence to it. If the JTC is going to say the government needs to do something, it must be prepared to follow up and say, 'you've not done this, and we've asked you to'. And they did not, and I think it's a shame that the commission was quite reluctant to publicly criticise, and to step in."

"I think when we first called for a commission, we wanted it to be set up for the duration of our climate targets, so for as long as we have climate emission reduction targets there will be a commission to provide recommendations but also to provide an ongoing monitoring system, where they could flag this is an industry that's struggling, the policies you have put in place are not quite working, or to say 'that massive new trunk road you're planning on building, that's not going to work, that's not progress to a just transition, that's hindering it'. Instead, we got something for two years, to cover the whole economy, and that's just too much work to do in too little a time."

Outlining their perspective on what the opportunities are in a just transition for Scotland, the participant described the ideal outcome as one that enabled meaningful, consistent, and fairly paid work made possible by good management and the right policies.

"I didn't really answer the opportunities of achieving it, but I think it's somewhat answered by what I think a just transition means to me, but I think if its managed well there is a chance to meaningfully empower people in their daily lives of work and of their local economy and

of energy, and at the same time create sustainable and decent work in industries that are not going to throw up huge insecurity and precarious contracts or force people in to things like fuel poverty and cause air pollution. I think that's the opportunity there, but it's a very optimistic one and isn't currently happening, so its about the right policies more than anything."

Emphasising the connection between the unsustainable service economy and the impacts of the fossil fuel industry, the participant describes the solution to both problems as one and the same. Helping empower communities to organise against the negative impacts of fossil fuels also helps to create decent and secure work in green industries.

"I think the gig economy and the dominance of the service industry in our economy are consequences of the same structures and system that enables the fossil fuel industry to be as polluting as it is, I think they are utterly connected and so building power amongst workers in communities to tackle fossil fuels to create green industries I think simultaneously tackles insecure work and poverty pay. If you are organising those groups of people into a select set of demands, then what you are organising for is secure work, decent work. It's the power dynamics there which are stopping those two things from happening.

The participant underlines the importance of providing support for fossil fuel workers as a fundamental element of a just transition, concluding that failure to successfully transition the workers means a wider failure by definition. The participant goes on to describe the perceived failure of the JTC with after two years in operation only 9% of North Sea oil and gas workers having heard of a just transition.

We definitely as an organisation think of a just transition in a holistic way. It's more than just polluting job into green job its very much social inequality and the structure of democracy within our economy. But I think it's a pretty fundamental cog of it, that people who are in polluting industries are supported into new work, it's probably the most tangible element and the easiest to spot, at a very primary level for a just transition to be successful, or to be seen as being successful, workers in high carbon industries need to be guaranteed new training and guaranteed redeployment if they want it, into green industries, because if we don't do that I think it fails on a wider basis because you will lose people, in a way that we have seen before."

"Our offshore repot with platform and Greenpeace, we have kept that work on so we are still organising with those workers and doing specific policy demands together and it was

something we took to the JTC and I think it should be quite embarrassing for them. We had a meeting with the JTC and several of the workers and we introduced the report and said the guys want to tell you what they think, on you go. But yeah, I think... given its Scotland, given we have the North Sea, to have a JTC that wasn't very focused on oil and gas and that didn't do a lot of outreach is just... it seems that they were taking a holistic view which is fine, but for us to tell them that 91% of oil and gas workers have not heard of a Just Transition, does just seem like a fundamental failure."

4.4. Question 4

Question 4 was focused on providing greater insight into how participatory democracy can be improved in Scotland as part of the procedural justice element of a just transition.

4. Question: "How can communities be engaged with effectively so that their voices can be heard when it comes to planning a Just Transition?"

The participant details the need for further dialogue around engaging with communities and facilitating participatory democracy.

"I think this is maybe an area where we haven't fully developed our thoughts as much as we could. I think there's a general understanding of what's wrong democratically, but we have not fully mapped out what democratic community engagement in Scotland looks like."

Although there is further research to be undertaken concerning participatory democracy in Scotland, the participant went on to detail some of the elements that they consider important, beginning with the prospect of decentralising governmental power and equipping local councils whilst retaining the benefits of the Scottish Government's authority and investment power.

"I think at a very base level just creating more decision-making spaces at a lower level. We already have some structures in place for this, we have community councils we have local authorities, it's a question of can we give them more resources and more power to make decisions and have that be a much more collaborative process. Does every decision need to be made within the Scottish Government? Can we pass some of that power down?"

"I think the Scottish government is very bad for centralising power rather than giving it out and I think that's something which... like a big national government directing a just transition, you need that infrastructure and that investment, but you do also need that much lower and

deeper ground level of decision-making space. So, the citizens assembly is great, because it does some of that work at a national level but I think when it comes to regional and local authority issues, there needs to be some sort of structure set up, that creates space for people to come together and make those decisions and to be informed about things, I don't think we are well set up for that, community councils are in existence not as necessarily well-resourced as they should be and it ultimately will be about giving resource to these things"

The participant describes increasing union density as a method of increasing participatory democracy as well as improving energy democracy by moving away from the big six (retail) suppliers that dominate the UK energy market.

"Getting communities and people engaged effectively to be heard, a big part of that is increasing union density across Scotland, it's a pretty core element to ensure that people are actively participating in decisions, and which affect them, increasing the amount of unionised people but also unionised workplaces.

"I also think there's pockets to that question, where you can improve participation, so things like energy democracy where we move away from a really top down big 6 supplier system to one where there is a publicly owned energy company at a national level is providing the infrastructure, investment and guidance to community groups who want to build community energy projects and facilitating that to take place. That's a way of giving people a much greater say in what they want in their area because they would be in control of the energy projects."

The participant finishes the interview by referencing the process of participatory budgeting as a potential democratic resource and reaffirming their view of decentralised power being a fundamental mechanism for ensuring a just transition in Scotland.

"There are also models with participatory budgeting with local councils, that's a perfect example of something that could be done. It's just asking politicians to give up lots of their power"

"It's probably incredibly idealistic but I don't think it would be as much as a struggle to get Scotland moving quicker to meet the climate crisis if power was less centralised."

5. Discussion

5.1 Who are the stakeholders in a Just Transition for Scotland?

As much of the literature explores, the concept of a just transition is currently subjective and nuanced, with the definition subject to change dependent on the perspective of the stakeholder involved. The origins of a just transition began with a worker's movement and are rooted in the history of unions and workers' rights (Labour Network for Sustainability, 2020). In current times a just transition has been adopted by academics, policy makers and government. Some critics are concerned that the term has been co-opted and taken out of the people's hands (Stevis, 2018). Others worry that the term is being used to forestall action against climate break-down, with oil and gas companies employing the rhetoric to justify inaction and the pursuit of further extraction (Müller, 2018). Even without the deliberate misuse or subversion of the term, the debate concerning the just transition is so vast, that it can create an impediment to action. This is evidenced in the unfortunate results of the platform report which found that 91% of the Scottish oil and gas workers surveyed had never heard of a just transition (Friends of the Earth Scotland, Platform, Greenpeace, 2020), despite the Just Transition Commission in Scotland running for two years and publishing two reports that explored in detail the academic debate surrounding a just transition, highlighting the need for transformational change and a holistic approach. The Scottish Government and the Just Transition Commission have published reports and recommendations that support progressive measures and ambitious goals, but the just transition plans for Scotland have no measurable outcomes or targets to be reached. Although a holistic and equitable just transition must be the only transition that is undertaken, the upstream petroleum workers and their families are essential to the process and should not be forgotten in the pursuit of politically correct rhetoric. In accordance with the literature and discussion surrounding a just transition that promotes a holistic and transformative approach and aligned with the views of the interviewee who underlined the importance of maintaining focus on the security of oil and gas workers in Scotland, this discussion considers the stakeholders in a just transition in Scotland to be, fossil fuel workers, communities, and the environment.

5.2 Procedural Justice in a Just Transition for Scotland

5.2.1 Fossil Fuel Workers

A just transition for Scotland must include quality engagement with fossil fuel workers, allowing workers to actively contribute to the shaping the process and have their voices heard. As referenced in the interview, a recent report found that 91% of North Sea oil and gas workers have not heard of a just transition (Friends of the Earth Scotland, Platform, Greenpeace, 2020). Oil and gas companies should not be the loudest voice shaping a just transition for Scotland as they currently are in the city of Aberdeen, the oil capital of Scotland, where the just transition process is currently being led by the large energy company, BP, whose business remains centred on petroleum exploration, production, and retail. Critics have voiced their opposition, concerned that Aberdeen and the north-east of Scotland will suffer, as under the advice of BP they pursue the unproven technology of Carbon Capture Storage (CCS) as a means to transition, with the belief the technology will provide a viable new industry for the fossil fuel workers who will be left behind by the declining oil and gas industry (BBC, 2020). Worryingly, there are concerns that CCS jobs may never materialise leaving Aberdeen in an economically unfavourable position. Centring the voices fossil fuel workers in the process of developing just transition policy will enable those with the greatest understanding of the industry to shape processes that realistically account for worker's needs, such as which skills will be needed to transition working in the renewables industry.

5.2.2. Communities

Many communities are directly dependent on the spending power of fossil fuel workers such as Aberdeen (The Guardian, 2016). Many industry sectors are also dependent on oil and gas workers spending power, mostly the service industry including hospitality, ride services and increasingly through lock-down, food delivery services. These services are mostly staffed by marginalised members of society such as women and migrants (Director-General Economy, 2020) and they will also be impacted by a loss in oil and gas jobs (Energy Voice, 2016). Communities also represent individuals, and the individuals of Scotland are also due to be impacted by climate policy. A citizen's assembly that accurately communicates the needs and opinions of Scottish society is essential to ensuring a just transition. The Climate Assembly that recently commenced was criticised for a strong Scottish government influence in shaping the narrative, setting the limits as defined by what the Scottish government considers achievable, rather than by what should be happening. Instead, the reverse should be happening, with the Scottish government responding to the priorities set

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by the Scottish people and the parameters of what is possible defined by the demands of the climate crisis and the negative impacts it will impose on Scottish people.

Communities are also served by local council and by affording local councils' greater powers and improved resources, procedural justice in a just transition for Scotland can be strengthened. MSP's and government representatives, should have a greater focus on ensuring they are familiar with their constituencies, as highlighted by Scottish Green MP Arianne Burgess who states "MSPs should not be making significant decisions about communities, they have little understanding of or experience with" (Scottish Young Greens, 2020).

5.2.3 Environment

The environment should set the parameters for the time constraints of a just transition in Scotland. Scotlish climate policy is progressive but there is a widening gap between rhetoric and action. As explored in the literature, some critics are concerned that just transition rhetoric could serve to obstruct climate policy progress. In a similar manner, advancing dialogue around the just transition narrative in Scotland cannot take precedence over meeting climate policy and carbon emission reduction targets.

While not actively involved in the decision making around a just transition for Scotland the changing climate and its effect on the environment may change the parameters of what a just transition for Scotland looks like. Changing climate may lead to further industry sectors requiring a just transition to sustainable alternatives such as the agriculture and forestry industries. These considerations may not be required, however by setting up a transformative just transition for Scotland from the outset, with robust public engagement, a piecemeal approach of adapting industries only when unavoidable in a managerial way could be prevented.

5.3 Distributive Justice in a Just Transition for Scotland

5.3.1 Fossil Fuel Workers

The Oil and Gas workers report highlights the failure of the Scottish government to help workers transfer into greener industries, citing the Transition Training Fund in Scotland as a 'short-term buffer to unemployment, returning workers straight back into oil and gas at the first chance of rehiring' (Friends of the Earth Scotland, Platform, Greenpeace, 2020). As

highlighted in the interview, a just transition for Scotland that fails to provide security for fossil fuel workers who are at the heart of the transition, would be a failure. Due to Scotland's devolved status (i.e. autonomous 'home rule') within the UK, some powers are outside of the scope of the Scottish government. The UK has been generous in the subsidies and tax concessions it has granted to the upstream petroleum industry. In the years 2015-2017 the treasury gave more money to oil companies than it took from them in taxes (Friends of the Earth Scotland, Oil Change, Platform, 2019). This funding for oil and gas could be transferred to supporting a just transition for workers with the inclusion of a fund that offered a basic income for workers without employment due to the decline of the fossil fuel industries. A UBI could be implemented nationwide, with initial steps directed towards regional pilot schemes, targeting localities where communities are set to be most directly impacted by industry closures, such as Aberdeen.

5.3.2 Communities

In accordance with much of the literature, a just transition for Scotland must include distributive justice for the oil and gas workers in Scotland, but it must also include distributive justice for wider Scottish society. This includes the families and communities of fossil fuel workers and the sectors dependent on oil and gas worker's spending power. Sectors dependent on oil and gas spending are often industries such as hospitality which are largely staffed by women and migrants.

A just transition in Scotland should also include the vulnerable and marginalised, this includes women, the disabled, Black women and men and People of Colour in Scotland. In 2018, the fuel poverty rate in Scotland was 25% (619,000 households) and in 2019, 311,000 of these households were in extreme fuel poverty, an increase from 279,000 the previous year. The rates of fuel poverty have a strong relationship with income inequality, with 96% of those in the lowest income bracket experiencing fuel poverty (Energy Action Scotland, 2021) and rates of fuel poverty increasing as rates of income decrease (Scottish Government, 2020). A recent report found that the rates of relative poverty in Scotland are almost double for BME households compared to white households (Cabinet Secretary for Communities and Local Government, 2020).

Another example of transformative distributive justice for communities is allowing community renewable energy ownership, which is currently happening in places such as in the Isle of Gigha, where community owned wind turbines have been generating power and money for

the community successfully for over a decade (Scottish Energy News, 2021). Renewable energy sources owned by local communities can also help to alleviate fuel poverty (Local Energy Scotland, 2021) and therefore help to alleviate further elements of social injustice such as income poverty which disproportionately impacts vulnerable individuals in Scotland (Housing and Social Justice Dictorate, 2017).

A just transition for Scotland should include land reform and increased community land ownership. Approximately half of all Scotlish land is currently owned by just 423 private owners and only 16 people own 10% of Scotland (Community Land Scotland, 2021). The Isle of Eigg is a successful example of a community who own their own land through a cooperative, after years of private ownership by a succession of wealthy men who sought to impose their own rule on the island (The Guardian, 2017). The community own their own energy grid, formed their own energy company named Eigg Electric and the island is run from almost entirely renewable energy sources (TaylorHopkinson, 2018). Community land ownership in Scotland can help to facilitate community energy ownership and give communities greater control over profits which can be redirected into the community.

5.3.3.Environment

A referenced in the interview, the environment is an essential but often overlooked stakeholder in the just transition. Without action to reduce carbon emissions, the impacts of increasing temperatures and climate break-down will continue to have an increasingly negative impact on the environment. The International Plant Protection Convention (IPPC) predicts that with a 1.5°C rise in temperature, 20-30% of global species may be at risk of extinction and coral reefs may decline by 70-90% (Hoegh-Guldberg, 2018). The negative impact of climate break-down on the environment is devastating for biodiversity and as part of this, devastating for human beings. Environmental degradation also impacts on people, with half a billion people dependent on the fish from coral reefs as their main source of protein (WWF, 2021). Rivers and lakes are vital for providing people with fresh water sources for drinking as well as essential for rearing livestock and growing crops. Climate change is also impacting on water systems and inducing flooding and droughts which destroy crops and livelihoods leading to unrest, conflict, and mass migrations.

Air pollution causes over 2,500 early deaths in Scotland every year and there are 38 zones across Scotland where air pollution limits are being continually breached (Friends of the Earth Scotland, 2021). As traffic is one of the most prominent causes of air pollution in

Scotland, part of a just transition should mean greater funding towards facilitating public transport and cycling routes.

6. Conclusion, Reccomendations

Discussion of a just transition has grown increasingly popular as the climate crisis has continuously worsened. Consideration of how to address the social impacts of climate policy as well as how social injustices perpetuate and exacerbate the climate crisis has never been more relevant. The definition of a just transition is broad and encompassing and currently the topic of diverse academic, civil, and political debate. Many define a just transition as one that is inclusive of broader society and transformational in scope, comparatively most real-world examples of just transition policies are worker-focused, managerial. and support the status – quo. In Scotland, the dialogue surrounding a just transition is ambitious and progressive, but there has been little tangible action taken in practice. There are currently no existent measurable just transition targets such as there are with climate policy, and 91% of North Sea oil and gas workers have not heard of a just transition. The foundations for a successful just transition in Scotland should include fossil fuel workers in both the decision making surrounding just transition policy and the benefits of the outcomes. Ensuring the security of upstream petroleum workers should be at minimum requisite for any claim of a successful just transition process in Scotland to be legitimate. In addition, the literature published by the Scottish government concerning a just transition in Scotland should accurately reflect what is happening, with measurable and tangible goals to ensure real-world action rather than a focus on politically progressive rhetoric.

The fundamental stakeholders of a just transition in Scotland can be considered as follows: workers; Scottish communities; and the environment. These stakeholders should be the forces that shape just transition policy as well as the recipients of the benefits of the process. The fossil fuel workers of Scotland should be provided financial and social security as the country moves from a carbon-based economy to a carbon neutral economy and the workers should be consulted directly for their industry expertise, experience and hopes for the outcome of the transition process. A just transition for Scotland should include the empowerment of Scottish communities, enabling the people of Scotland to have real power in shaping the just transition process and receive real benefits, so that the inequalities wrought by a fossil fuel economy are not perpetuated in a carbon-neutral economy. Land reform, community renewable energy ownership, UBI and tackling fuel poverty are means of addressing distributive justice. A citizens' assembly with the constraints of what is possible set by the needs of the people and the demands of the

climate emergency along with decentralised power and increased resources for local councils are mechanisms for procedural justice. Lastly, the environment is a fundamental stakeholder in the just transition process. The just transition is a nuanced debate and the inclusion of wider society and upstream petroleum workers is essential to the process, but the environment should also be of equal consideration, as it too is impacted by climate break-down, and ultimately will impact negatively on the people in its deterioration. In this context, the demands of the environment and the climate crisis should set the parameters and time constraints for a just transition in Scotland.

7. Future Work

As the topic of a just transition is so nuanced and multifaceted, there are numerous opportunities for further research within a Scottish context. After extensive consideration of the literature, evidently should be greater focus towards understanding the mechanisms for enabling participatory democracy as a form of procedural justice in Scotland. The lack of detail concerning this was also highlighted in the interview process. Research concerning the rhetoric of just transition policy in comparison to tangible actions taken within a Scottish context also warrants further exploration. Additionally, a far greater understanding of the impacts of just transition policy in Scotland is needed, with predictions for how workers, communities, the environment, and the economy will be impacted. Further research is also necessary for understanding who should pay the costs of a just transition in Scotland. Finally, after investigation into which stakeholders should be involved in a just transition for Scotland, the natural progression of this research would likely focus in greater detail on how the essential stakeholders in a just transition for Scotland can be engaged and compensated.

8. References

Aberdeen City Council, 2020. *bp and Aberdeen join forces in drive for net zero.* [Online] Available at: https://news.aberdeencity.gov.uk/bp-and-aberdeen-join-forces-in-drive-for-net-zero/

[Accessed 13 01 2021].

Aberdeen University, 2020. Festival of Social Sciences: Green Recovery in the North East of Scotland – A Just Transition?, Aberdeen: s.n.

Arronoff, K., 2016. Can the climate movement break free from the 'jobs vs. environment' debate?. [Online]

Available at: https://wagingnonviolence.org/2016/04/can-the-climate-movement-break-free-from-the-jobs-vs-environment-debate/

[Accessed 04 03 2021].

BBC , 2020. Criticism over BP bid to help Aberdeen City Council cut emissions. [Online]

Available at: https://www.bbc.co.uk/news/uk-scotland-54062239
[Accessed 03 04 2021].

Bristow, G., 2018. *Yellow Jackets in Movement: Understanding the Gilets Jaunes.* [Online] Available at: https://novaramedia.com/2018/12/05/yellow-jackets-in-movement-understanding-the-gilets-jaunes/

[Accessed 08 04 2021].

Cabinet Secretary for Communities and Local Government, 2020. *Poverty and Income Inequality in Scotland 2016-19*, Edinburgh: Scottish Government.

Committee on Climate Change, 2019. *Net Zero - The UK's contribution to stopping global warming*, London: Committee on Climate Change.

Community Land Scotland, 2021. *Community Land Scotland*. [Online] Available at: https://www.communitylandscotland.org.uk/ [Accessed 12 04 2021].

Director-General Economy, 2020. *Non-agricultural seasonal and temporary migrant workers in urban and rural Scotland: report*, Edinburgh: Scottish Government.

E&ENews, 2016. CAMPAIGN 2016 Trump promises he will reopen coal mines. He probably can't. [Online]

Available

at:

[Accessed 05 04 2021].

Eco-Congregation Scotland, 2020. A Just Transition for Scotland's Housing, Stirling: YouTube.

Eisenberg, A. M., 2019. Just Transitions,. *Southern California Law Review*, Volume 92, p. 273.

Energy Action Scotland, 2021. *Fuel Poverty Overview.* [Online] Available at: https://www.eas.org.uk/en/fuel-poverty-overview_50439/ [Accessed 05 04 2021].

Energy Voice, 2016. *Oil slump continues to hit Aberdeen hotel trade.* [Online] Available at: https://www.energyvoice.com/other-news/104909/oil-slump-continues-hit-aberdeen-hotel-sector/

[Accessed 04 13 2021].

European Comission, 2020. *Paris Agreement*. [Online] Available at: https://ec.europa.eu/clima/policies/international/negotiations/paris_en [Accessed 04 January 2021].

Friends of the Earth Scotland, 2021. https://foe.scot/campaign/carbon-capture-storage-hydrogen-beccs/. [Online]

Available at: https://foe.scot/campaign/carbon-capture-storage-hydrogen-beccs/
[Accessed 16 03 2021].

Friends of the Earth Scotland, Oil Change, Platform, 2019. SEA CHANGE: Climate Emergency, Jobs and Managing the Phase-Out of UK Oil and Gas Extraction, London: Friends of the Earth Scotland, Oil Change, Platform.

Friends of the Earth Scotland, Platform, Greenpeace, 2020. *OFFSHORE: Oil and gas workers views on industry conditions and the energy transition,* London: Greenpeace.

Friends of the Earth Scotland, 2020. Green Recovery Webinar, Edinburgh: s.n.

Friends of the Earth Scotland, 2021. *Air Pollution*. [Online]

Available at: https://foe.scot/campaign/air-pollution/
[Accessed 12 04 2021].

Glenn, S. M.-L. J. P. K. G. J. a. M. R., 2019. *Investigation into the Issues Associated with Large scale and Concentrated,* Inverness: Scottish Land Commission.

Guardian, 2019. Report calls for reform of 'unhealthy' land ownership in Scotland. [Online] Available at: https://www.theguardian.com/uk-news/2019/mar/20/report-calls-for-reform-of-unhealthy-land-ownership-in-scotland

[Accessed 02 04 2021].

Guardian, 2016. *Aberdeen: once-rich oil city now relying on food banks.* [Online] Available at: https://www.theguardian.com/uk-news/2016/jan/23/aberdeen-once-rich-oil-city-now-relying-on-food-banks

[Accessed 12 04 2021].

Guardian, 2017. *This island is not for sale: how Eigg fought back.* [Online] Available at: https://www.theguardian.com/uk-news/2017/sep/26/this-island-is-not-for-sale-how-eigg-fought-back

[Accessed 12 04 2021].

Guardian, 2019. Eco-fascists and the ugly fight for 'our way of life' as the environment disintegrates. [Online]

Available at: https://www.theguardian.com/environment/2019/nov/30/eco-fascists-and-the-ugly-fight-for-our-way-of-life-as-the-environment-disintegrates

[Accessed 08 04 2021].

Guardian, 2019. The environment vs jobs? We have been in this fight before. [Online] Available at: https://www.theguardian.com/commentisfree/2019/may/28/the-environment-vs-jobs-we-have-been-in-this-fight-before

[Accessed 05 04 2021].

Guardian, 2019. *Universal basic income doesn't work. Let's boost the public realm instead.* [Online]

Available at: https://www.theguardian.com/commentisfree/2019/may/06/universal-basic- income-public-realm-poverty-inequality

[Accessed 13 04 2021].

Hoegh-Guldberg, O. D. J. M. T. M. B. S. B. I. C. A. D. R. D. K. E. F. E. J. G. Y. H. S. M. A. P. S. S. A. T. R. W. a. G. Z., 2018. *Impacts of 1.5°C Global Warming on Natural and Human Systems. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of, s.l.: IPCC.*

Housing and Social Justice Dictorate, 2017. *Chapter 3 Fuel poverty and vulnerability,* Edinburgh: Scottish Government.

JTRC, 2020. Framings and Design Politics of Just Transitions, Online: United Nations Research Institute for Social Development.

Kirkwood, H., 2018. Who Deserves a Just Transition. *Just Transition Research Collaborative*, 13 04.

Klien, N., 2014. This Changes Everything: Capitalism vs the Climate. s.l.:Simon & Schuster.

Labour Network for Sustainability, 2020. "Just Transition" – Just What Is It?, Maryland: Labour Network for Sustainability.

Local Energy Scotland, 2020. Search for Community and Locally Owned Projects. [Online] Available at: https://www.localenergy.scot/projects-and-case-studies/searchable-map-of-local-energy-projects/

[Accessed 05 04 2021].

Local Energy Scotland, 2021. Local Energy Scotland awarded contract to manage Scottish Government's Community and Renewable Energy Scheme (CARES). [Online] Available at: https://www.localenergy.scot/news-and-events/2021/march-2021/local-energy-scotland-awarded-contract-to-manage-scottish-government-s-community-and-renewable-energy-scheme-cares/

[Accessed 05 04 2021].

Local Energy Scotland, 2021. What is local energy. [Online]

Available at: https://www.localenergy.scot/what-is-local-energy/
[Accessed 12 04 2021].

McCauley, D. & Heffron, R., 2018. Just transition: Integrating climate, energy and environmental justice. *Energy Policy*, Volume 119, pp. 1-7.

McGlade, C. & Ekins, P., 2015. The geographical distribution of fossil fuels unused when limiting global warming to 2 °C. *Nature*, Issue 517, pp. 187-190.

Morena, E., 2021. S2: Ep1: Just Transition: Use and misuse of language by the climate elite [Interview] (04 January 2021).

Müller, T., 2018. As Time Goes By...": The Hidden Pitfalls of the Just Transition Narrative. [Online]

Available at:

https://www.unrisd.org/UNRISD/website/newsview.nsf/(httpNews)/F5E2A66107D6F7EDC 12582AC0046457A?OpenDocument

[Accessed 12 04 2021].

Nature, 2020. Pandemic speeds largest test yet of universal basic income. [Online]

Available at: https://www.nature.com/articles/d41586-020-01993-3
[Accessed 13 04 2021].

New Economics Foundation, 2021. *HOW CAN WE BUILD TRUST IN A JUST TRANSITION?.* [Online]

Available at: https://neweconomics.org/2021/02/how-can-we-build-trust-in-a-just-transition [Accessed 25 02 2021].

New York Times, 2018. 'Yellow Vest' Protests Shake France. Here's the Lesson for Climate Change.. *The New York Times*, 06 12.

New York Times, 2020. Black Lives Matter May Be the Largest Movement in U.S. History. [Online]

Available at: https://www.nytimes.com/interactive/2020/07/03/us/george-floyd-protests-crowd-size.html

[Accessed 11 04 2021].

Nicoson, C., 2021. Towards climate resilient peace: an intersectional and degrowth approach.. *Sustainable Science*.

Oxfam, 2019. Public Good or Private Wealth, Oxford: Oxfam.

Physics World, 2019. *Climate scientist or climate activist – where's the line?*. [Online] Available at: https://physicsworld.com/a/climate-scientist-or-climate-activist-wheres-the-line/

[Accessed 24 03 2021].

Piggot, G., 2019. Realizing a just and equitable transition away from fossil fuels. [Online]

Available at: https://www.sei.org/publications/just-and-equitable-transition-fossil-fuels/
[Accessed 26 Janauary 2021].

Piggot, G., Boyland, M., Down, A. & Torre, A., 2019. *Realizing a just and equitable transition away from fossil fuels*, Seattle: SEI.

Schiermeier, Q., 2020. The US has left the Paris climate deal — what's next? *Nature*, 04 11.

Scotland.org, 2021. *History of Scotland.* [Online]
Available at: https://www.scotland.org/about-scotland/history-timeline
[Accessed 13 04 2021].

Scottish Energy News, 2021. *God's Isle celebrates 10 profitable years of community-owned wind farms with Harmony on Gigha.* [Online] Available at: http://www.scottishenergynews.com/gods-isle-celebrates-10-profitable-years-of-community-owned-wind-farms-with-harmony-on-gigha/
[Accessed 12 04 2021].

Scottish Government, 2019. Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. [Online]

Available at: https://www.legislation.gov.uk/asp/2019/15/part/3/crossheading/climate-change-plan/enacted

[Accessed 03 04 2021].

Scottish Government, 2020. Advice for a Green Recovery., Edinburgh: Scottish Government.

Scottish Government, 2020. *Annual energy statement: 2020.* [Online] Available at: https://www.gov.scot/publications/annual-energy-statement-2020/pages/3/ [Accessed 18 03 2021].

Scottish Government, 2020b. *Climate Change*. [Online]

Available at: https://www.gov.scot/policies/climate-change/
[Accessed 07/06/2020 July 2020].

Scottish Government, 2020c. *Climate Change Plan update*. [Online] Available at: https://www.gov.scot/news/climate-change-plan-update/ [Accessed 1 June 2020].

Scottish Government, 2020. *Climate Change*. [Online]

Available at: https://www.gov.scot/policies/climate-change/
[Accessed 16 03 2021].

Scottish Government, 2020. *Just Transitions: a comparative perspective.* [Online]

Available at: https://www.gov.scot/publications/transitions-comparative-perspective/pages/4/

[Accessed 01 March 2021].

Scottish Government, 2020. *Scottish house condition survey: 2019 key findings,* Edinburgh: Scottish Government.

Scottish Government, 2021. Brexit, Edinburgh: Scottish Government.

Scottish Government, 2021. *Climate Change*. [Online]

Available at: https://www.gov.scot/policies/climate-change/
[Accessed 16 03 2021].

Scottish Government, 2021. https://www.gov.scot/policies/climate-change/. [Online]

Available at: https://www.gov.scot/policies/climate-change/
[Accessed 16 03 2021].

Scottish Government, 2021. *Just Transition Commission call for evidence: analysis report.* [Online]

Available at: https://www.gov.scot/publications/transition-commission-call-evidence-analysis-report/pages/2/

[Accessed 19 03 2021].

Scottish Government, 2021. *Local energy policy statement.* [Online] Available at: https://www.gov.scot/publications/local-energy-policy-statement/pages/4/ [Accessed 05 04 2021].

Scottish Government, 2020. *Just Transitions: A Comparitive Perspective,* Edinburgh: The Scottish Government.

Scottish Land Commission, 2021. Scottish Land Commission. [Online]

Available at: https://www.landcommission.gov.scot/
[Accessed 02 04 2021].

Scottish Parliament, 2019. *Acts of the Scottish Parliament*. [Online] Available at: http://www.legislation.gov.uk/asp/2019/15/contents/enacted [Accessed 16 03 2021].

Scottish Young Greens, 2020. A Just Transition for our rural areas in England, Wales and Scotland Webinar, s.l.: s.n.

Shetland News, 2021. *Election 2021 / Ariane Burgess.* [Online] Available at: https://www.shetnews.co.uk/2021/03/26/election-2021-ariane-burgess-

scottish-greens/

[Accessed 13 04 2021].

SNP, 2021. SNP. [Online]

Available at: https://www.snp.org/

[Accessed 13 04 2021].

Social Justice and Fairness Commission, 2020. Social Justice and Fairness Commission.

[Online]

Available at: https://www.socialjustice.scot/

[Accessed 05 04 2021].

Stevis, D., 2018. (Re)claiming Just Transition. [Online]

Available at:

https://www.unrisd.org/unrisd/website/newsview.nsf/(httpNews)/B3BF9D082D992D04C12 5826D004540BB?OpenDocument

[Accessed 12 04 2021].

Stockholm Environment Institute, 2018. Just transitions: what you need to know for COP24.

[Online]

Available at: https://www.sei.org/featured/just-transitions-at-cop24/

[Accessed 05 04 2021].

TaylorHopkinson, 2018. *Ten Years of Energy Independence – The Eigg Story.* [Online] Available at: https://www.taylorhopkinson.com/eigg-ten-years-energy-independence/ [Accessed 12 04 2021].

Thomson, S., Moxey, A., Wightman, A. & McKee, A., 2016. *The impact of diversity of ownership scale on social, economic and environmental outcomes,* Edinburgh: Scottish Government.

UN Environment Program, 2018. 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24). [Online] Available at: https://www.unep.org/events/conference/24th-conference-parties-united-nations-framework-convention-climate-change-cop24

[Accessed 05 04 2021].

UNFCCC, 2018. *I. Preamble - UNFCCC.* [Online] Available

https://unfccc.int/sites/default/files/resource/SB49.DT_.SBI_.i17b_SBSTA.i9b.1.pdf [Accessed 13 04 2021].

UNFCCC, 2020. *The Paris Agreement.* [Online] Available at: <a href="https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreeme

[Accessed 18 January 2021].

United Nations, 2021. *UN Water.* [Online]
Available at: https://www.unwater.org/water-facts/scarcity/
[Accessed 11 04 2021].

University of Aberdeen, 2020. *Green Recovery in the North East of Scotland – A Just Transition?*, Aberdeen: University of Aberdeen.

UNRISD, 2018. Just Transition Research Collaborative (Phase I): Mapping Just Transition(s) to a Low-Carbon World. [Online]

Available

[Accessed 05 04 2021].

UNRISD, 2020. Just Transition Research Collaborative (Phase III): Working Towards

Transformative Change and Climate Justice for All. [Online]

Available at: https://www.unrisd.org/jtrc-2020
[Accessed 26 Janauary 2021].

UNRISD, 2020. Power and Politics in a Just Transition, s.l.: UNRISD.

Worldometer, 2021. *Coronavirus*. [Online]
Available at: https://www.worldometers.info/coronavirus/
[Accessed 11 04 2021].

WWF, 2021. THE EFFECTS OF CLIMATE CHANGE. [Online]
Available at: https://www.wwf.org.uk/learn/effects-of/climate-change
[Accessed 12 04 2021].

XR Scotland, 2020. XR Scotland can no longer endorse Scotland's Climate Citizens
Assembly.

[Online]
Available at: https://xrscotland.org/2020/11/xr-scotland-can-no-longer-endorse-scotlands-

·· 51

climate-citizens-assembly

[Accessed 24 03 2021].



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