



Delivering a just transition to net zero: Whose role is it anyway?

Briefing paper prepared by Rachel Bray and Rebecca Ford

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- **Simone Abram** | Professor of Anthropology and co-director of the Durham Energy Institute, Durham University
- **Shalanda H Baker** | Professor of Law, Public Policy & Urban Affairs, Northeastern University, Boston, USA
- **Dr Marie Claire Brisbois** | Lecturer in Energy Policy, SPRU, University of Sussex Business School
- **J Mijin Cha** | Assistant Professor, Urban and Environmental Policy, Occidental College, Los Angeles, USA
- **Megan Farrelly** | Associate Professor, Human Geography, Monash University, Australia
- **Raphael Heffron** | Professor in Global Energy Law & Sustainability & Jean Monnet Professor in the Just Transition to a Low-Carbon Economy, University of Dundee
- **Dr Kirsten E H Jenkins** | Lecturer in Energy, Environment and Society, School of Social and Political Science, University of Edinburgh
- **Dr Max Lacey-Barnacle** | Research Fellow in Just Transitions, SPRU, University of Sussex Business School
- **Tavis Potts** | Professor of Sustainable Development and interim Director of the Centre for Energy Transition, University of Aberdeen
- **Benjamin K. Sovacool** | Professor of Energy Policy, SPRU, University of Sussex Business School
- **Kacper Szulecki** | Assistant Professor, Department of Political Science, University of Oslo, Norway
- **Dr Iain Todd** | Erasmus University Rotterdam



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“Usually, energy discussions are relegated to discussions of technology and economics... I think energy justice is about humanising the discussion, it’s not just about kilowatts, technology and prices, it’s about people.”

Benjamin Sovacool

Introduction

The transition to a net zero energy system provides society with an opportunity to embed energy justice principles and practices across the energy sector in order to achieve a transition which is not just ‘green’ but also ‘just’. The past decade has seen a surge of activity around the topics of energy justice and just transitions in both academic literature and policy priorities^{1,2}. While these investigations and activities have advanced our understanding of both concepts³⁻⁸ and unearthed potential mechanisms for applying these to policy making^{9,10} a number of key questions remain:

- What do we mean when we talk about delivering a just transition to net zero or embedding energy justice within the energy system?
- Who is responsible for operationalising this and ensuring energy justice is embedded in the transition to net zero?
- Do different stakeholders have different capacities to act? How can those with real power be motivated to create change and held accountable for their actions?

This report attempts to address these questions, drawing on a series of 12 in-depth interviews with experts in the topic of energy justice and just transitions (see Appendix 1). The experts are based in academic institutions across the UK, the European Union, the USA, Australia and Norway – with their research spanning their countries of residence as well as Central America and Africa.

This report is structured as follows:

- **What is energy justice and a just transition?** – setting the context of the paper and defining what the experts mean by these terms
- **Who is responsible for operationalising energy justice?** – looking at the range of stakeholders who need to be involved to deliver energy justice and a just transition
- **Capacity to act, motivations and accountability mechanisms** – looking at the capacity, motivation and accountability of stakeholders to deliver energy justice and a just transition, as well as how these factors can be driven or blocked by different stakeholders
- **Implications and next steps** – looking at the challenges of delivering energy justice and a just transition

What is energy justice and a just transition?

Despite the significant body of work delving into the concepts of energy justice and just transitions, there remains a lack of clarity about what each of these concepts means in practice, and how they relate to one another.

Energy justice

The term energy justice is typically used to broaden discussions about net-zero energy transitions beyond economic and technical aspects by incorporating issues related to politics, democracy, society, labour, gender and race. It is a relatively new concept, with roots in environmental justice, climate justice and Rawls theory of social justice¹¹.

Energy justice recognises that the energy system transition needed to combat climate change is going to impact people and societies in many different ways and that without taking moral considerations into account this could disproportionately affect poor and marginalised communities. Energy justice also recognises that the global energy system is currently 'unjust' but that transition to net zero brings an opportunity for countries to recreate their economies in ways that are more equitable instead of replicating these unjust policies and processes.

“ Energy justice reveals to you the people who suffer, sometimes with their lives, often with their livelihoods, often with economic resources or jobs or other aspects and so it is also about choosing energy pathways that have the least suffering.”

Benjamin Sovacool

“ There are people who are suffering quite badly with energy vulnerabilities and that seems extremely unfair. Through no fault of their own, they're living with the fallout of other people's actions and that doesn't seem just, so it's a simple, moral equation, 'it's not fair, let's do something about it.'”

Simone Abram

“ The most marginalised and vulnerable people in this system are actually centred as we move forward in the creation of energy policy, so they then become the architects and the drivers of the new system.”

Shalanda Baker

Energy justice can also be used as an evaluative framework, with examples provided by interviewees of exploring the diversity of community participation in new energy developments in Scotland; ethical considerations regarding the offshoring of e-waste in Ghana; and the cultural implications of siting largescale wind energy developments in Mexico.

While there may be differences in how the concept of energy justice is used to evaluate or guide energy sector action, and in the breadth of topics covered by energy justice (for instance^{3,4,6,8,12}), there is general agreement that embedding energy justice means reshaping energy policies and organisational practices to empower citizens and communities in the energy system transition. This is particularly true for those who have been previously impacted or marginalised so that more inclusive, transparent and legitimate forms of participation are provided, and the benefits and burdens are appropriately distributed across society.

Just transition

The concept of a just transition was born out of international trade union movements seeking to protect workers unfairly affected by the move from fossil-fuel based energy systems to clean energy systems^{5,13}. A just transition takes into account the rights of the workforce and, encourages the creation of decent work and quality jobs in sustainable economic sectors in accordance with nationally defined development priorities. It maintains that the burden of climate action should not be borne unequally by one set of workers or communities or any one country^{10,14}.

“ Just transition is oriented towards labour unions and fossil fuel workers and a really specific set of concerns for getting that particular community the protection that they need, or the upskilling that they need, in order to be part of a transition.”

Kirsten Jenkins

However, for many scholars the concept of a just transition today is much broader than its labour and workforce focussed roots; it encompasses the transition of the whole of society over time from one that is inherently extractive and unsustainable to one that is regenerative and more sustainable.

“ Just transition is really about ensuring that all elements of our society and economy are transitioned away from one that is fundamentally extractive to one that is generative in all ways.”

Shalanda Baker

“ When I think of a just transition I think of things changing – a society that is changing, so it’s moving in time, it’s not static, it’s dynamic.”

Iain Todd

This diversity of perspectives around what a just transition to net zero includes leads to challenges in how it is understood relative to energy justice. Six interviewees viewed energy justice as the broader concept, encompassing every aspect of the energy system, with just transition as a subset concerned primarily with labour, workforce skills and employment provision within the energy industry.

Conversely, five interviewees saw just transition as the broader concept, with energy justice as a single component within it. They maintained that a just transition encompasses the whole societal transition needed to move away from an unsustainable way of living and towards a more sustainable one. As such, they saw the subject of energy as just one component within that wider transition to a sustainable society.

“ The micro of transitioning fossil fuel communities and workers is part of the macro of moving from extraction to regeneration, and this broader project of moving from extraction that includes extraction of people, extraction of resources, extraction of wealth... and so as we move from extraction to regeneration, it expands beyond the energy system.”

Mijin Cha

“ I immediately come back to the distinction between the different kinds of transition that is necessary, both **away from** and **towards** something new.”

Megan Farrelly

Four interviewees also took the position that if there isn't a 'just' transition, there won't be any transition due to the scale of change needed across the whole of society. These interviewees stressed the importance of including people in decision-making; otherwise authorities could face public backlash from those having transition imposed on them.

“ If we don't have a 'just' transition, I don't think we will have a transition because an energy transition requires so much of so many people, that you can't just do it from the top down anymore, you need people to be on board.”

Marie Claire Brisbois

“ If we don't have a 'just' transition, we won't have any transition, it won't work because we'll create conflict... It's a real issue for people, both in terms of how we change and the process of change, but also how that change impacts particularly deprived and disenfranchised communities.”

Tavis Potts

This work draws on the broader framing of a just transition, given that the energy system is becoming increasingly decentralised, with more local energy planning, more community and citizen-led ownership of assets, and more civic engagement and political advocacy in this space^{4,5}. We use this to focus our attention on the move away from today's extractive, unsustainable and unjust systems, and toward a system that is sustainable, regenerative and inclusive for workers and communities, that redresses past damage, and creates new relationships and democratic forms of governance and more equitable and transparent power structures.

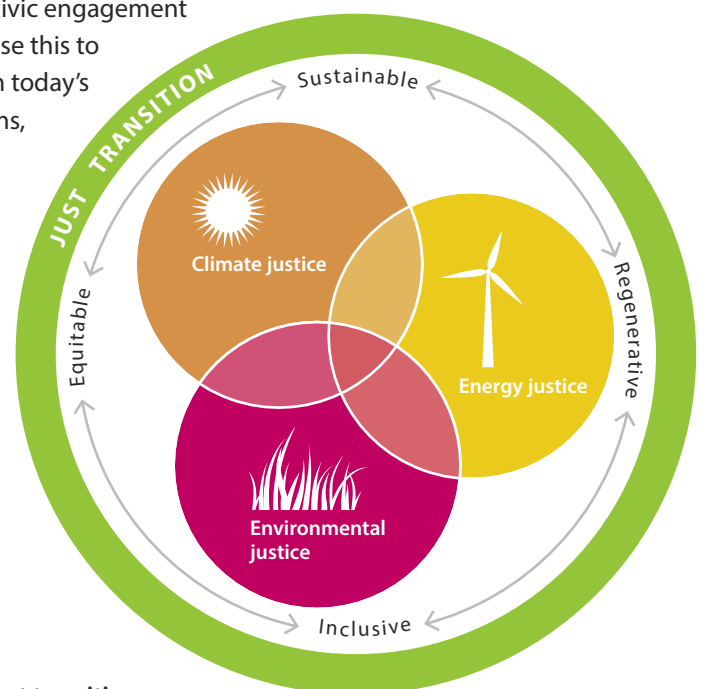


Figure 1: Positioning of energy justice and a just transition, adapted from [Initiative for Energy Justice workbook](#).

Who is responsible for operationalising energy justice?

The interviewees had differing perspectives on who was responsible for embedding energy justice into policies, strategies and delivery mechanisms. Some considered that energy justice could only be delivered by a 'top down' approach: that energy justice had to be embedded in legislation and national policy in order to effect change. Others saw it as a 'bottom-up' issue: that decision-makers would only legislate for energy justice if communities demanded that change.

The majority of interviewees saw it as an issue that reached across all scales of decision-making: with every actor in the system taking their part in advocating for and pursuing energy justice within their own remit of influence. This included consideration that different actors would each have different capacities in which they could act, but that all actors were responsible for delivering it. The identified actor groups included:

- International community
- National / devolved government
- Local government
- Business and industry
- Trade unions
- Finance institutions
- Local communities
- Citizens / everyone

“ I think, in terms of who is responsible, I would argue that every actor is responsible.”

Mijin Cha

“ We have to understand the top down and bottom up dynamics of the energy system... we need to constantly see it as the interaction between multiple, different scales.”

Max Lacey-Barnacle

“ It's not an either/or, it's everyone, it's across scale... but the more that the next level up can drive that, I think the more likely it is that will happen. So I don't think anyone's off the hook, everyone's responsible.”

Shalanda Baker

“ It's not even just power in terms of governance – local, national, international and so on and so forth – but other bodies coming in like industry, business and community watchdogs like Citizens Advice, and so the easy cop out is to say that 'everyone has responsibility.’”

Kirsten Jenkins

“ [It] involves groups, individuals, institutions at all levels, but they all have very different roles.”

Tavis Potts

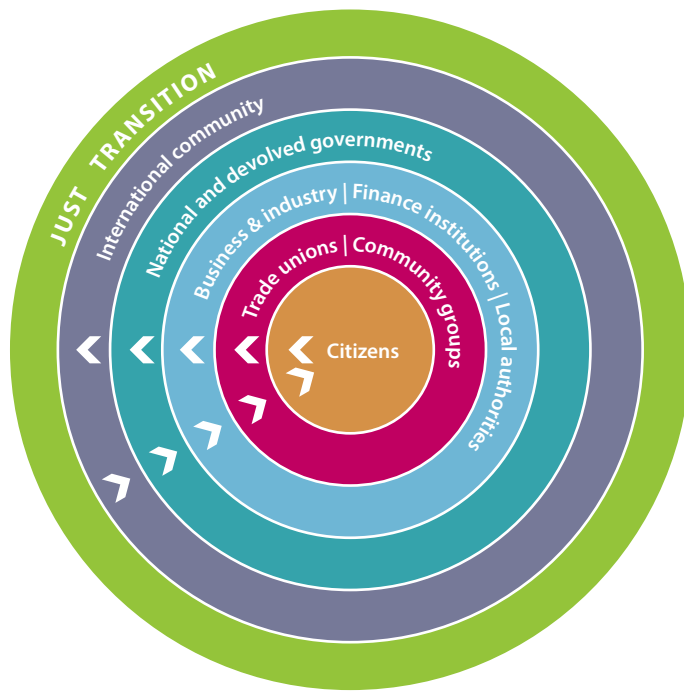


Figure 2: Responsibility for embedding energy justice reaches across all scales of decision-making

Capacity to act, motivations and accountability mechanisms

While it might be comparatively straightforward to determine who is responsible for embedding energy justice, each actor has different capacities in which they can act, along with different motivations for seeing energy justice principles embedded. There are also different accountability mechanisms for ensuring that energy justice is embedded, which vary for the different stakeholder groups, and which are not always easy to define or robust to implement. The following section looks at each stakeholder group in turn.

International community

One interviewee said the United Nations Framework Convention on Climate Change (UNFCCC) should be driving energy justice targets through setting an overarching framework for national and local policy makers to adopt and deliver at the national and regional level. Others emphasised the important role of the European Parliament and the United Nations in setting goals and targets. Recognition was also given to the work done at the international level by the International Trade Union Confederation in protecting workers through the energy transition.

“ Quite a lot of people come back to this idea of international oversight, where there is a body like the European Commission or European Parliament that looks at that higher level and sets the standards, goals and targets that embed justice – which people are then held accountable to through mechanisms such as treaty sign ups and goal setting.”

Kirsten Jenkins

“ The developing world has made very little impact on the creation of climate crisis, but they do see the undue proportion of the effects of that climate crisis. They have been – and will be – terribly affected by climate change and so there is a need, there is a definite need for these concepts to be applied on a truly worldwide basis.”

Iain Todd

This emphasises the importance of the role of international agreements in setting international goals and commitments for embedding energy justice in climate commitments and action plans. This might be through UNFCCC processes and agreements, or via Nationally Determined Contributions (NDCs) that each country commits to deliver against. It could also include setting goals around limiting offsetting of carbon emissions overseas and recognition of international supply chains in technology lifecycles as well as protecting workers rights through transition.

National and devolved governments

Most interviewees thought that national or devolved governments had the biggest role to play in developing policy and setting legislation for embedding energy justice and that they also had the greatest capacity to act. Interviewees, however, had differing opinions on the motivations of national and devolved governments to act. Motivations ranged from voter priorities, lobbying pressure (which was generally seen as pressure to avoid action) and political legitimacy in creating a smooth transition for citizens and society.

Voter pressure

We heard that governments could be motivated to embed energy justice by responding to citizen pressure and voter priorities; or face 'backlash' and civil unrest due to the effects of transition on society. Likewise, Citizens Assemblies were seen as a tool by which voters could convey their expectations to governments.

“ Whether the government is motivated to make sure that the transition is just, I’m somewhat agnostic on. I think that the point is that they can be moved and pressured to do so.”

Mijin Cha

“ Our elected officials are elected by people, so we have more leverage there.”

Shalanda Baker

Lobbying

Governments are also subject to lobbying by those with vested interests in maintaining the status quo, such as fossil fuel industries and international organisations. Lobbying by these groups aims to halt the speed of transition and undermine public confidence in climate change discourses.

“ Big oil companies have been lobbying major governments and creating these relationships for years.”

Marie Claire Brisbois

“ There’s a lot of those who are trying to slow down the process because they’re afraid of change and they’re also using hard lobbying to do it.”

Kacper Szulecki

“ When you’ve got the [Australian] prime minister [then Treasurer] rocking up into the Houses of Parliament with a piece of coal saying, “this is good for humanity”, you can see the entrapment by the resources, like the political sphere being entrapped by the resources sector and the deep relationships that exist.”

Megan Farrelly

Political legitimacy

Some national and devolved governments were observed to be making strides forward without apparent voter or lobbying influence. For instance, the Scottish Government was praised for its work with the Just Transition Commission and for recognition that place-based decision-making and participation in policy change is a central component in achieving net zero. The UK government was also acknowledged for appointing the Citizens Climate Change Assembly. There was also praise for the Biden administration in the US for appointing Shalanda Baker to the role of Deputy Director for Energy Justice, in what was seen as a complete reversal in attitude to the previous administration.

However, even where there appears to be motivation, there is limited accountability on national governments to operationalise energy justice and deliver a just transition. In the UK, the Climate Change Committee has the role of reporting to Parliament and holding government to account on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change. However, there is no such body to hold national and devolved governments to account on progress made in embedding energy justice policies and practices, or delivering a just transition to net zero.

Local government (UK context)

Three interviewees discussed the potentially important role that local authorities (LAs) could play in delivering energy justice through local place-based policymaking and strategies if properly enabled to do so. However, it was felt that LAs would currently struggle to deliver on this due to a lack of statutory powers, funding cuts, local politics and other competing operational priorities.

“ It’s fairly weak in the LA side, that is because of funding, resource funding cuts, LAs really struggling to deliver, just basic services... there are issues, also, about the culture of decision making in those LAs – local politics is a factor... so I think we have to look at ways of actually embedding a just transition into our planning and licensing regimes.”

Tavis Potts

“ After 10 years of austerity, it’s very, very difficult for local government to play a meaningful role and what’s impressive is the small number of local authorities who have managed to continue investing in energy improvements. Durham is a good example and that’s really because they’ve managed to raise their own funding to continue what they’ve been doing.”

Simone Abram

Nonetheless, it was thought that if more statutory duties were devolved to LAs they would be able to rapidly ‘raise their game’ and make significant changes within a short space of time – in the same way that many LAs had shown their effectiveness at response to the global Covid-19 pandemic when stimulated to do so.

Business, industry and the role of trade unions

The role of business and industry in delivering energy justice was discussed in two separate ways – the role of incumbent fossil fuel industries and the role of new and emerging renewable energy industries.

Incumbent industries

Most interviewees discussed the role of incumbent fossil-fuel industries who had to either divest from their traditional business models in order to realign themselves with new low-carbon ventures – or face extinction. These businesses were seen to be at the forefront of ensuring a just transition in the narrower sense as defined above. This was due to the urgent need to protect workers through providing reskilling and future employment opportunities – whether that be through taking existing workers with them through transition, or by helping to secure alternative employment. The role of unions in particular was seen as fundamental to ensuring that workers protections were met.

'Green' industries

Conversely, some interviewees considered that the newer 'green' industries provided fewer workers rights than the traditional industries. This was due to several factors. Firstly, because they did not have to evolve an existing industry model there was no responsibility for newer industries to protect workers through transition. Secondly, these newer industries were also seen to have weaker trade unions (or no trade unions) and were considered to be paying lower wages than the incumbent industries. One reason for this may be that many of the newer industries are smaller and more distributed across regions than the traditional, largely centralised industries – therefore, the industry make-up is entirely different. However, it raises the issue that 'green' industries, although better for climate change, may not necessarily be better for workers. There is therefore a role for union support across the whole energy industry to ensure 'decent work' for all, decent pay and other workplace protections including ongoing professional development for workers.

Finally, it was also considered, that consumer safeguards were needed as new industries could be seeking to profiteer from lucrative new markets such as EVs, renewable energy technologies and storage.

“ We tend to assume that the incumbents are somehow bad and the newcomers, the challengers, those who are, supposedly, green, they're the good guys. It doesn't really have to be so.”

Kacper Szulecki

“ The renewable energy jobs that have been created in the US, they pay less, they're largely non-union and so that, to me, is not a just transition, that is not a solution to the loss of fossil fuel jobs. So the idea of what makes it just has to be a part of the solution and so ensuring things like wage support and ensuring things like the right to organise, and workplace democracy, are part of the solution, even if they don't necessarily seem intuitive when you're talking about greenhouse gas emissions reductions.”

Mijin Cha

The interviewees diverged on what role business and industry should take in ensuring energy justice principles were enacted. Five interviewees stressed that industry should not have any role in setting justice standards, as they considered that industry would only change their existing practices if legislated to do so, due to their obligation to shareholders to maximise profit.

“ The private sector is engaged in a net zero target, but do they care about it being just, I think, is the very big question and I will confess, I have zero faith in the private sector because, by nature they’re very profit motivated and more than that, a lot of the public trading companies have a requirement to maximise quarterly profits. That model is incompatible, fundamentally, with either the ideas of justice or an actual energy transition.”

Mijin Cha

Others saw a remit for business to shape the way forward and to lead by example. Incorporating ethical standards was seen as a shrewd business move, one that companies could promote to their customers, although there were concerns over ‘greenwashing’ if legislation wasn’t robust. One interviewee said that businesses in general would like to do more, but without legislation enforcing every business to adopt ethical standards, it would make their market position untenable. Where viewpoints converged was in recognising that business operations could be caught in a pincer movement – between governments legislating for change on the one hand, and from customers demanding change on the other.

“ People are really becoming aware and accepting that this is the future and you have to hedge against those risks that are coming... So because of this mind-set change, the industry is also going to behave differently.”

Kacper Szulecki

“ I think that there is a strong argument that equity and the absence of injustice is good business practice. If we think about something like income inequality one argument is that the more people that have money, the more money they will spend and so it’s better for the economy.”

Mijin Cha

“ So for people who are focusing their efforts on changing companies from the inside or changing government from the inside, like ‘yes, please, go, do it, keep doing it,’ but we also need people working on the outside at changing the structures that keep unjust practices in place and that can mean demanding policies and regulations from the European Union or the UN or the national governments.”

Marie Claire Brisbois

Finance institutions

The role of finance institutions for affecting change was mentioned by four interviewees. They considered that there needed to be more accountability regarding what types of industry attracted investment, with appropriate safeguards to ensure the finance industry moved away from investing in fossil fuels. These interviewees suggested that many companies were currently holding obligations in insurance and pension investments that they wouldn't be able to meet as climate change obligations ramped up. They also considered the role of 'ethical finance' which positions itself with meeting environmental, social and governance (ESG) factors and consideration that institutions should lead change rather than wait for governments to legislate for change. However, there was also consideration that international commitments made at COP26 should uphold ethical finance obligations.

“ There's all kinds of pieces of this economic puzzle that need to change and it's massive. It's the financing sector, it's banking, it's government subsidies and loans, it's the economic policies... I don't think we can have the economic system that we have now and have energy justice or social justice at all.”

Marie Claire Brisbois

Local communities / citizens

Interviewees discussed the role of communities and citizens under two distinct remits. The first was the role of citizens as advocates for change, making their voices heard in promoting energy justice from the 'bottom up'.

“ I definitely think participation and I definitely think energy justice should, very much, be focused at the local scale, that's where the rubber hits the road, that's where we get action at the local scale. It does link up, potentially, to influencing national systems and even global systems. I really do believe that bottom up effort is what's required.”

Tavis Potts

“ There is a role for people to be advocating for these policies, creating them where they can, asking for resources and rolling things out, but also listening to, essentially, the grass roots because we need people on every level and we also need people at the grass roots to be taking these initiatives, to be pushing things forward.”

Marie Claire Brisbois

It was considered important to raise public awareness of the scale of change needed for transition to a low carbon economy since, without social acceptance, there could be potential for societal unrest and backlash. Three interviewees discussed the positive role of Citizens Assemblies in both educating people on climate issues and democratically gathering agreement on ways forward. However, there was also discussion that Citizens Assemblies should not be the only route adopted, as they could potentially benefit only those who attended and therefore had 'a voice'. There was also discussion around who should fund public awareness more generally.

“ There’s so much money flowing around everywhere for the technological engineering changes required, but no money to do work on educating the public on just transitions ... We could run ward level climate assemblies, citizen juries and education campaigns, it would be amazing, so this is a part of the argument, the political economy of arguing for resources.”

Tavis Potts

“ There are examples of communities that do things like visioning exercises to envision their communities and what it would look like, fossil fuel free, in the next 20/30 years.”

Mijin Cha

The second distinct remit for communities and citizens was through the development and ownership of renewable energy projects and community-led schemes, which disrupted the traditional centralised model of technology and infrastructure ownership and hierarchical power structures. One UK-based academic criticised energy justice literature for not exploring the issue of ownership in energy systems with sufficient depth, noting that who owns and controls energy infrastructures (e.g. public, private or civil society actors) is fundamental to how energy transitions play out.

Community ownership was also discussed by three other interviewees, including both of the USA-based academics, while the Australia-based academic considered that there was a role for government to take a strong hand in reshaping the utility landscape to dampen market forces.

“ Across the world you have tens of thousands of local community-led energy schemes where people are trying to reclaim or take back power of their local energy grid, of local energy technologies and become part of the energy transition in a way in which they are owners of parts of the energy system.”

Max Lacey-Barnacle

Section summary

Drawing from the interviews we have summarised the discussions held on the actors responsible for embedding energy justice, their capacity to enact change, their motivations to act and mechanisms by which they can be made accountable in Table 1 below.

Table 1 Capacity, motivations & accountability

Responsible actor	Capacity to act	Motivation to act	Accountability mechanism
International community	Has the capacity to bargain international agreements and set framework for countries to deliver on	Oversight of the scale of transition needed and acknowledgement that this is an opportunity to reshape societies & economies	None identified through interviews
National / devolved government	Has the capacity to shape policy and legislation	Voter priorities, protection of societal stability, mitigation of civil unrest & protest Pressure from lobbying and interest groups	Political mandates, international commitments, international and national courts
Local government	In the UK currently limited due to lack of statutory duties, financing, local politics and operational priorities However already has the capacity to incorporate into local policies and strategies	Voter priorities, mitigation of civil unrest & protest. Ability to proactively plan for transition on a place-based approach through local planning procedures Levelling up local communities	Could be made to act through imposition of statutory duties
Business & industry	Has the capacity to act now, but this could damage market position without legislation to enforce others to do likewise Incumbent industries have additional time pressures by which to act	Role and motivation of incumbent industries is different to that of clean tech industries. The first is having to pivot orientation while the second is establishing ground Legislation, consumer demand, ethical boards, shareholder advocacy, corporate ethics, reputational pressure, competitive advantage by moving early	Litigation, boards & shareholders, social licence, consumer safeguards, corporate social reporting, ethical finance
Trade unions	TUs have capacity to champion workers and ensure that agreements made are implemented Traditional TUs have achieved much through advocating for a just transition for fossil fuel workers. However, the role of TUs appears to be reduced in emerging industries	Worker protections, upskilling and retraining for workers to move to renewable jobs	Members
Finance institutions	Have the capacity to act now	Reputational pressure, ethical finance	Litigation, boards & shareholders, social licence
Local communities	Democracy – voting. Also have capacity to develop and own renewable projects, disrupting traditional hierarchies and structures	Benefits from community-led schemes can be distributed per community's wishes	Members – residents, local businesses, charities, organisations etc.
Citizens / everyone	Democracy – voting, civil unrest, campaigns, Citizens Assemblies	Acknowledgement that transition will impact on all areas of life, all of society	None identified through interviews



Implications and next steps

This report has highlighted some of the complexity faced in operationalising energy justice principles and progressing the delivery of a just transition to net zero. We know that energy transition has to happen quickly to reach international climate change mitigation targets, with action occurring across all of society. However, without embedding energy justice principles we run the risk of replicating the unjust structures of the previous energy system with unjust 'green' energy structures.

However there is currently an opportunity to proactively embed energy justice principles and practices across the sector as national leaders progress net-zero activity at international negotiations, and many sub-state and non-state actors sign up to the Race to NetZero and create policies and strategies for delivering this.

As identified in this work, many stakeholders need to take action. While there is clear motivation to act across all stakeholder groups, there are a range of challenges that impact the capacity of each group to fully operationalise energy justice, and limited accountability mechanisms identified for supporting this delivery. While some of these challenges can be addressed by stakeholders acting independently, many result from the interactions between the different stakeholders, either in driving action or holding organisations to account.

We have determined that it will take all stakeholders working together to deliver a just transition but there is still much we need to learn about the practicalities of this. For instance, we need to understand what it will take to bridge the stakeholder silos in order to overcome barriers and create collaboration between stakeholders. We also need to understand what actions stakeholders require from others in order for them to act, while also finding practical ways of embedding energy justice in their organisational practices in the meantime. To address this will require working directly with these stakeholders to understand the interdependencies and tipping points between the different stakeholder groups in relation to capacity, motivation and accountability.

We also need to explore ways in which justice can be quantified by those who take action. For instance, you can measure the cost of energy, you can measure the environmental impact of energy and you can measure security of energy supply – but how do you measure justice? Justice is much more subjective, it's not clearly quantifiable and so the ability to translate it into practice is much harder. However, finding practical and applicable ways of delivering on energy justice principles and ensuring a just transition is a moral imperative if we are to achieve a fairer energy future for all.

“The scale of transformation that we need is extraordinary. I don’t know if I can even wrap my mind around how much needs to happen on a global scale to make this all work and if we’re doing so, with leaving three quarters of the human population behind, there’s no way that that could be sustainable. And it would be such a tragedy because there’s such an opportunity for lifting people up in this transition.”

Shalanda Baker

The authors wish to wholeheartedly thank the 12 interviewees who gave up their time and expertise to contribute towards the ALIGN project. We would also like to state that the assumptions made within this report are our own, and should not be taken as the viewpoint of the interviewees.



Appendix 1 Methods

This report forms part of a wider study, Project ALIGN (Aligning Impacts for Getting to Net zero) and builds on previous work undertaken. This included a rapid realist review of the abundant literature published in peer-reviewed journals regarding energy justice and justice in energy transitions as detailed in our earlier publication [Energy Justice POINTs: Policies to create a more sustainable & fairer future for all.](#)

Our review of the academic literature left us with many unanswered questions. Therefore, we undertook 12 separate interviews with academics who had published literature in this domain to gain a wider understanding of the terms ‘energy justice’ and ‘just transitions’ using expert elicitation. Expert elicitation is a multidisciplinary technique that explores the opinions of experts where there is uncertainty in the topic of study. This uncertainty becomes visible when two or more experts give different answers or even conflicting answers to the same questions¹⁵. While this can pose difficulties for quantitative research, this conflict of opinion was considered necessary for this qualitative research study in order to further our understanding of the differing viewpoints raised in the published literature. We therefore deliberately approached experts who would have conflicting answers to the interview questions.

Experts were selected based on their published academic outputs in the domain of energy justice and just transition and who came from a range of disciplinary backgrounds and geographical regions. We also endeavoured to select an equal representation of male and female experts. We invited 18 experts to undertake the interviews, of whom 6 declined (66% acceptance rate).

The 12 experts interviewed (6 male and 6 female) were based in academic institutions across the UK, the European Union, the USA, Australia and Norway, with their research spanning their countries of residence as well as Central America and Africa. Their disciplinary backgrounds ranged across environmental policy, political science, social and political science, law, human geography, sustainable development, environmental geography and social anthropology.

The interviews, which were each one-hour long, were held via Zoom during February and March 2021. The format for each interview comprised two interviewers and one interviewee. The interviews were semi-structured with six standard questions and space given to reflect on and expand on any key points or discussions arising. Written consent was obtained before the interviews commenced and verbal consent was obtained at the start of each interview to ensure interviewees understood the process and expectations. All interviews were audio recorded and transcripts made and held in accordance with the study’s Ethics Approval that was granted by the University of Strathclyde.

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About ALIGN

Project ALIGN (ALigning Impacts for Getting to Net-zero) is one of four unique Fellowships, funded by UKRI, to support engagement with the international climate negotiations in the run up to the 26th Conference of the Parties of the UN Framework Convention on Climate Change (COP26) through the provision, synthesis, translation and interpretation of scientific evidence.

ALIGN aims to provide evidence around the multiple benefits of a just net-zero energy transition (JNT). Appropriate climate change actions offer the potential for delivering multiple benefits, e.g. post-pandemic economic recovery, advancing UN sustainable development goals. There is an opportunity for countries to leverage economic and social gains in net-zero transitions, enhancing political currency and social legitimacy. However, without a comprehensive approach or framework for considering the multiple benefits or impacts of transition, existing injustices could be amplified, and new vulnerabilities created in the wider economy.

This programme of work is innovative in bringing together insights and evidence from areas traditionally siloed, aligning the case for a just transition with financial, environmental, and other outcomes, and feeding into wider decision-making frameworks (e.g. at UNFCCC level). It builds on aligned work, and focuses on Glasgow and Scotland as exemplars for delivering a socially just net-zero transition, while providing frameworks and evidence to make the case for the multiple benefits (e.g. resilience, prosperity, health, etc.) of a just net-zero transition in other countries, accelerating COP 26 outcomes.

