



Wales Centre for Public Policy
Canolfan Polisi Cyhoeddus Cymru

International approaches to a just transition

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Summary

- This report synthesises international evidence on approaches to a just transition and examines whether a just transition in Wales can be considered through the lens of the Well-being of Future Generations (Wales) Act 2015 (WBFGA), updating previous WCPP research on this area. It concludes by summarising the key lessons for the adoption of a policy approach to a just transition for Wales.
- A key finding of this report is that there is no universally accepted definition of a just transition and a great deal of debate exists around the term. This has led to several different approaches towards its adoption. Similarly, there is no 'one size fits all' approach to a just transition, which needs to be shaped according to geographical and temporal contexts.
- Several concepts of justice can underpin a just transition. Bringing together environmental justice, climate justice and energy justice, for example, can lead to a more inclusive framework for a just transition and provides opportunities to promote fairness and equity.
- There are variances and several commonalities in the policies that countries and regions have taken, including:
 - The creation of a coordinating framework;
 - Long-term planning;
 - Capacity building; and
 - The provision of funds.
- Lessons from other countries' approaches demonstrate that for a just transition to be most effective it should not be considered an add-on to climate policies but should be embedded in a wide range of policies.
- The report finds the WBFGA could be effectively used as a foundation for the adoption of a just transition in Wales. The approaches to a just transition discussed in the report align with well-being goals within the Act.
- Several international examples provide lessons for adopting a just transition within a well-being framework, such as Scotland and New Zealand, although adjustments to reflect different national contexts are important.
- Identifying guiding principles for implementation will be critical in ensuring that the transition overcomes existing inequalities.

Introduction

The Wales Centre for Public Policy (WCPP) has been asked to support the Welsh Government as they define what is meant by a 'just transition' in the Welsh context. The Welsh Government are keen to learn lessons from how other countries have approached a just transition and the frameworks they have used, to understand if a just transition in Wales can be considered through the lens of the Well-being of Future Generations (Wales) Act 2015 (WBFGA).

This evidence review builds on previous work commissioned by the Welsh Government and conducted by WCPP on what a just transition in Wales might involve (Price et al., 2021) and on skills for a just transition (Silva et al., 2022). As there has already been significant research undertaken in this area and given the speed with which the concept of a just transition has evolved in recent years, this project provides an update on previous research and links the wider just transition literature to the Welsh context and WBFGA. This report responds to the following questions:

- 1 How is a just transition defined internationally? How has the concept of a just transition evolved in recent years?
- 2 What are the main approaches taken to a just transition across the world?
- 3 How does the just transition approach to decarbonisation compare with an environmental justice approach?
- 4 How do international approaches align with the WBFGA, and how might these shape the WBFGA as a just transition framework for Wales?

This report begins by considering the context of Wales' decarbonisation efforts. We discuss the origins and evolving nature of the definition of a just transition internationally, providing a brief background on the concepts of justice that underpin a just and fair transition to a net zero carbon economy. The report then presents some of the diverse global approaches to just transition policy and practice and considers lessons learnt. There is a focus on how certain countries have used a well-being framework to approach a just transition and whether these approaches align with the WBFGA. We conclude by summarising key lessons for the adoption of a policy approach to a just transition for Wales.

Context

There is widespread political agreement on the need to decarbonise economies in response to the ongoing climate emergency. The Welsh Government was one of the first national governments to declare a climate emergency in 2019 and has committed to achieve net zero carbon emissions by 2050 (Price, 2019; Welsh Government, 2021a). The Programme for Government 2021-2026 includes a focus on climate change and commits to building a greener and fairer economy as Wales makes progress towards decarbonisation (Welsh Government, 2021b). This focus on fairness and the impact of economic transition processes on society is central to the concept of a just transition, the first policy outlined in the Net Zero Wales Carbon Budget (Welsh Government, 2021a). However, the concept is defined differently across the UK and internationally and has evolved and expanded since it was pioneered in the 1970s by the international trade union movement.

The Welsh Government's commitment to sustainable development is clear, with the WBFGA being the fourth sustainable development strategy for Wales (Nesom and MacKillop, 2021). Within the Act, 'sustainable development' is defined as:

'...the process of improving the economic, social, environmental and cultural well-being of Wales by taking action, in accordance with the sustainable development principle aimed at achieving the well-being goals' (Welsh Government, 2015a).

The seven well-being goals established within the Act are outlined in Figure 1 below. The goals reflect the four pillars of sustainable development within the Act (social, cultural, economic and environmental). To achieve sustainability in Wales, it is important that these four aspects of well-being are improved.

The Act requires public bodies to set well-being objectives aimed at contributing to the achievement of well-being goals and to ensure that they are taking steps to meet these objectives. Public bodies are required to do this in accordance with the sustainable development principle which includes five ways of working. These are (Welsh Government, 2019: 13):

1. Looking to the long term so that we do not compromise the ability of future generations to meet their own needs;
2. Taking an integrated approach so that public bodies look at all the well-being goals in deciding on their well-being objectives;
3. Involving a diversity of the population in the decisions that affect them;

4. Working with others in a collaborative way to find shared sustainable solutions; and
5. Understanding the root causes of issues to prevent them from occurring.

Figure 1: Well-being goals established by the Well-being of Future Generations (Wales) Act 2015



Source: [Welsh Government \(2015b: 4\)](#)

Definitions of a just transition

At its core, a just transition can be defined as:

'...greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind' (ILO, 2022).

However, the increasing attention being paid to just transitions in response to the ongoing climate emergency has led to the development of diverse approaches to, and definitions of, the concept as it rapidly evolves. There have been several recent attempts to track this evolution and provide clarity of definition and scope. One review (Wang and Lo, 2021) identified five ways of framing a just transition:

1. As a **labour-oriented concept**, emphasising the origins of the just transition concept in the labour movement;
2. As an **integrated framework for justice**, bringing together other forms of justice including climate, energy and environmental;
3. As a **theory of socio-technical transition**, focusing on the structural changes needed to facilitate decarbonisation;
4. As a **governance strategy** concentrated on the political processes and institutional structures involved in the transition; and
5. As **public perception**, focusing on public attitudes towards decarbonisation.

The same review highlights that this list is not exhaustive and that a significant gap remains in relation to understanding how a just transition is defined and operationalised (Wang and Lo, 2021).

Labour-based approach to a just transition

The original just transition frameworks that emerged in the 1970s 'combined the environmental and social concerns of the labour movement to create accountability principles that could ensure support for workers in industries undergoing transitions' (Emden et al., 2020: 6). A labour-oriented just transition focuses on the rights of workers and communities specifically impacted by a transition to low-carbon societies. Building on the work of the labour movement, Emden et al. (2020) have outlined criteria by which just transition policies should be measured when taking a labour-oriented approach to a just transition which include engaging with communities, creation of well-paid jobs, intersectional diversity and a recognition that there is no 'one size fits all' policy.

Justice-based approaches to a just transition

The origins of the just transition concept are also closely tied to environmental justice, which Client Earth, an environmental law charity, defines as:

‘...the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.’ (Client Earth, 2021)

The environmental justice movement emerged in the 1980s among workers in the United States concerned about the unequal distribution of the environmental impacts of economic activity, including industrial pollution and working conditions (Martinez-Alier, 2012; Weber and Cabras, 2021). Scholarship in this field examines the connections between inequalities (class, gender, and race) and the environment to understand the justice issues which occur at these intersections (Schlosberg, 2009; Weber and Cabras, 2021). Closely related to environmental justice, are ‘climate justice’ and ‘energy justice’. Climate justice means:

‘...finding solutions to the climate crisis that not only reduce emissions or protect the natural world, but that do so in a way which creates a fairer, more just and more equal world.’ (Friends of the Earth, 2022)

Climate justice focuses primarily on how global justice transitions can be effective in the way that they respond to the implications for vulnerable groups of rapid climate change and the negative consequences that accompany it (McCauley and Heffron, 2018). In contrast energy justice refers to:

‘...the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic and health burdens on those disproportionately harmed by the energy system.’ (Initiative for Energy Justice, 2019)

Within an energy justice approach, ‘transition’ is incorporated from the production viewpoint of moving towards low carbon sources alongside concerns around consumption and achieving energy efficiency without compromising individual well-being or the continuity of the community (McCauley and Heffron, 2018).

Each of these justice types has its own distinct focus and policy community, although there is considerable conceptual overlap between them. Uniting them under the term ‘just transition’ brings together relevant stakeholders through a more inclusive framework with less need for specialist knowledge (Heffron, 2021). McCauley and Heffron argue that bringing together these three justices, namely environmental,

climate and energy, in this way provides an opportunity to analyse and promote fairness and equity throughout the transition away from fossil fuels (McCauley and Heffron, 2018). Just transition can be considered to be a synthesising concept, which incorporates environmental justice. This does not mean, however, that the just transition concept can be expanded to encompass all environmental and social justice concerns, as this would risk it losing coherence.

Intergenerational energy justice has also been referred to in relation to working towards a just transition. It is concerned with the temporal aspects of climate change and has been defined as:

'...a state of policies conducive to an equitable distribution of finite natural and non-renewable energy resources and aiming at preventing any severe damage of the biosphere, which takes account of the equal dignity and of the equality of rights of different generations, even when living in distant times.' (Pellegrini-Masini et al., 2020: 296)

Alongside environmental justice, intergenerational justice emerged in sustainability discussions during the 1980s as a form of distributive justice. A core tenet of sustainable development is that the needs of the present are met without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987).

A whole-systems justice approach

Abram et al. (2022) argue for a whole systems approach as a way of clarifying the conceptual boundaries of a just transition. According to this approach, the fundamental principles of 'justice', namely distributive justice, procedural justice, justice as recognition, and restorative justice, are key to developing a robust framework that can be used to identify and analyse the possibilities for a just transition. Distributive justice is concerned with the distribution of both the costs and the benefits of a transition in an equitable manner to ensure that everyone is better off (McCauley and Heffron, 2018). For example, the consideration of how affected and deprived communities may also benefit from transitional efforts, rather than simply financially appeasing them (Abram et al., 2022). Recognition justice is also significant as acknowledging the 'importance of contextual and relational drivers' of injustice is the starting point of adopting a whole-systems approach to a just transition (Abram et al., 2022: 1038). A key aspect of recognition justice is ensuring a sensitive approach to the lived experiences of different social groups and with this in mind, acknowledging that there is no single, linear roadmap towards decarbonisation. Procedural justice includes inviting affected stakeholders to take

part in decision-making processes, whilst participatory justice takes this further by ensuring that stakeholders are also empowered throughout the process. Restorative justice is often overlooked, involving the provision of compensation for people and communities for past, present and future losses (Abram et al., 2022).

Guiding principles for a just transition

There has been some debate in the literature about the extent to which a universal definition, framework or policy approach to a just transition is appropriate. A recent report by the Scottish Government notes that a considerable heterogeneity of definitions of 'just transition' exist (Pinker, 2020). This is partly a result of divergent ideological starting-points, but also because the form, meaning and process of a just transition in Wales will be inextricably tied to the 'structure of the industry, workforce and community' in each region (Pinker, 2020: 12). Many attempts to define a just transition focus not on developing a universal approach but instead presenting principles that can guide the development of a context-specific approach (see IEN, 2017; Piggot et al., 2019; Atteridge and Strambo, 2020; Pinker, 2020; TUC Cymru, 2020; JTA, 2022). Focusing on the importance of job quality in future employment as well as a shift to more environmentally and socially equitable societies, Emden and Murphy (2019: 14) recommend that securing a just transition should be measured according to the following labour-oriented principles:

1. **Engagement with communities.** Adequate and informed consultation is integral to the establishment of common and sustainable goals. To achieve this, national and local government as well as employers undertaking just transition policies must engage with and prioritise employment from local communities and, where possible, provide training for workers in these areas.
2. **Flexibility.** A recognition that there is no 'one size fits all' policy. Just transition programmes must therefore be designed with the local conditions, economic sectors and types and sizes of enterprises in mind.
3. **Well-paid jobs.** Workers should be able to expect new employment opportunities to have a salary equal to or better than their previous work.
4. **Protection of workers' rights.** Formal rights must be included in employment contracts including paid sick leave, disability, maternity and paternity leave, holidays, formal complaints procedures and access to occupational and mental health support.
5. **Opportunities for training and career progression.** There must be opportunities for in-work training that provides new qualifications and greater prospects for promotion and career progression in future.

6. **Job security.** Employment that is based on long-term or permanent employment status rather than short-term contracted work or zero-hours contracts.
7. **Intersectional diversity.** A workforce that works towards an objective of being inclusive of all groups in society including diversity across gender, ethnicity and sexuality.
8. **Safe-working environment.** The risk of workplace injuries should be minimised as much as possible and strict precautionary measures and protocols must be put in place when conducting any potentially dangerous work.

Taking a justice-based approach, the Friedrich Ebert Foundation (Hirsch et al., 2017) has developed a set of principles covering the climate, socioeconomic and political dimensions, that act as a reference framework for a just transition (Table 1). Each of the eight principles is informed by a set of indicators and countries are scored on their compliance to these indicators. This allows for the assessment of the levels of justice in a country's adoption of a just transition.

Table 1: Reference framework used to assess energy transitions developed by the Friedrich Ebert Foundation

Eight Principles for a Just Energy Transition
Climate Dimension of Justice
The national energy transition reflects the ambition to achieving zero Greenhouse Gas Emissions by 2050.
The energy transition is closely aligned with the implementation of the Sustainable Development Goals.
Socio-economic Dimension of Justice
The energy transition aims to create decent work, reflects commitments to support those who are losing jobs, and strives to reduce climate risks of vulnerable people.
The energy transition should have a positive impact on social equity.
The energy transition should contribute to gender equality.
Political Dimension of Justice

Due multi-stakeholder participation is ensured in the energy transition process.

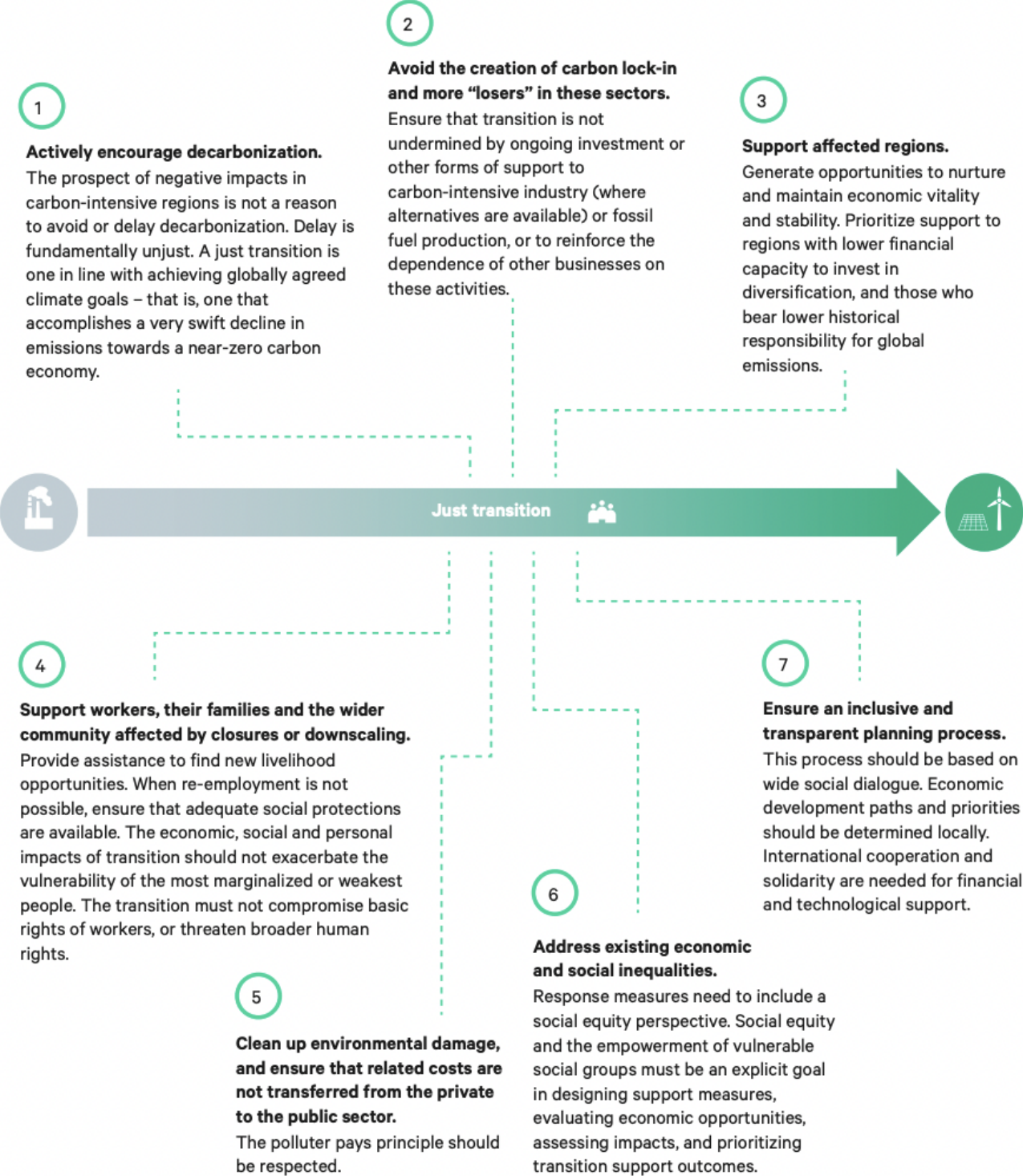
Good governance, transparency and accountability are ensured in the energy transition.

Human rights are respected, protected and fulfilled in the energy transition.

Source: [Hirsch \(2018\)](#)

Atteridge and Strambo (2020) provide a comprehensive overview of the concepts, principles and processes that emerge from the just transition literature and inform such frameworks. An example of such a set of principles is shown in Figure 2.

Figure 2: Example of a set of principles for a just transition developed by the Stockholm Environment Institute



Source: [Atteridge and Strambo \(2020: 7\)](#)

Approaches to a just transition

The numerous approaches to and definitions of a just transition in the literature are reflected in similarly diverse approaches in practice. The Just Transition Research Collaborative, which brings together around 20 academic researchers from North America, Europe, Australia and South Africa, has identified four different approaches to a just transition around the world (2018: 12-14):¹

- 1 **Status quo** – ‘a greening of capitalism through voluntary, bottom-up, corporate and market-driven changes’.
- 2 **Managerial reform** – ‘greater equity and justice is sought within the existing economic system and without challenging existing hegemony’.
- 3 **Structural reform** – ‘implies institutional change and structural evolution of the system. Solutions are not solely produced via market forces or traditional forms of science or technology, but emerge from modified governance structures, democratic participation and decision making, and ownership’.
- 4 **Transformative** – ‘an overhaul of the existing economic and political system that is seen as responsible for environmental and social crises’.

Policy approaches within a national framework have varied, with similarities and differences examined by experts within the field. Recent reports commissioned by the Scottish Government (Pinker, 2020) and the Stockholm Environment Institute (Piggot et al., 2019) examine case studies of just transition-aligned processes and principles, discussed below.

There are a number of commonalities in the policy approaches that countries and regions have taken towards a just transition, including the creation of a coordinating framework, long-term planning, and capacity building and funds. A policy approach adopted by several countries is the **creation of strategies and action plans as support mechanisms**. Norway’s Strategy for Green Competitiveness outlines the opportunities emerging from decarbonisation and includes recommendations on how Norway can achieve net zero through investment in new and green industries (Pinker, 2020). The UK government’s Net Zero Strategy: Build Back Greener frames innovation and skills to support the net zero target (Department for Business, Energy and Industrial Strategy, 2021). Also of note, Ireland’s detailed Climate Action Plan

¹ In practice, the labelling of different approaches is a question of judgment and there is a degree of overlap between these categories.

sets out actions in sectors such as transport, housing, agriculture and energy, required to meet the target of net zero emissions by 2050 (Government of Ireland, 2021) and the Mid-Century Strategy in the USA (Pinker, 2020), which provides targeted support to facilitate a just transition. Other countries, such as Germany and Canada, have taken the approach of establishing commissions to identify the impact of the transition upon different social and economic groups (Pinker, 2020). Germany's Coal Commission provides compensation for energy users for increased energy prices, alongside funding for 'transition measures' (Pinker, 2020).

Many of the policies establish transition funds aimed at supporting workers and local governments in areas affected by government plans to phase out fossil fuel-based electricity production. In Alberta, Canada's Coal Workforce Transition Fund intends to support coal workers through the provision of career counselling, tuition support for retraining and relocation assistance (Piggot et al., 2019). Other examples of this particular just transition-aligned policy approach are the Oil Worker Transition Fund in Scotland, which provides funding for the retraining of oil and gas workers to transition to new roles (Piggot et al., 2019), and the European Commission's Just Transition Mechanism, which includes a series of funds to support just transition-aligned activities (European Commission, 2019). Climate legislation referencing a just transition principle, such as New York State's Climate Leadership and Community Protection Act (Climate Act) 2019, which has led to the establishment of a Climate Justice Working Group, and the Climate Change Bill in Northern Ireland (Fearon and Barry, 2021) has also been introduced (see Annex).

Different understandings of an effective just transition

There has been much debate over whether these examples of just transition policies have achieved their aims, in whole or in part. This is partly a result of ongoing debate over the meaning of the term, including, for example, what a 'fair' distribution of resources looks like. Furthermore, many writers emphasise the need for the improved efficiency of public services to achieve a fair distribution of resources because services will have to draw on reduced energy inputs (for example, public transport's more efficient use of energy per passenger mile, compared to private vehicles) (Krawchenko and Gordon, 2021; Pianta and Lucchese, 2020; Smith, 2017). This approach tends to be excluded from examples of just transitions policies, as the examples focus on alleviating any immediate negative social implications resulting from the closure or downsizing of the extraction, distribution and use of fossil fuels. That is likely because such efforts are focused on decarbonisation policy, rather than the broader policy objectives which public (and publicly-funded) services are designed to achieve, including reducing inequality. One notable exception to this is Austria's 'Climate Ticket', which allows year-round train travel in Austria for around £2.50 a day (Serafimova et al., 2022).

Case study: A just transition in South Africa

There are lessons to be learned from South Africa's approach towards achieving a just transition (Connolly, 2022). In August 2022, South Africa adopted its Just Transition Framework for South Africa, following a thorough multi-stakeholder consultation. This Framework sets out a shared vision for the transition as well as guiding principles, policies and governance arrangements for implementing and overseeing the transition. The Framework addresses environmental, economic and social issues in a balanced way, taking into account the implications for the future livelihoods of South Africans. However, although South Africa has become a pioneer of the just transition movement, it has encountered coordination and alignment challenges.

A coordinated approach is needed for an effective transition. First referred to in South African policy in 2011, the just transition movement subsequently gained momentum the years that followed, but failed to create impact because efforts were uncoordinated, due to there being no single government entity with a responsibility to manage the process. An independent statutory body, the Presidential Climate Commission (PCC), has been created for this purpose, although it has yet to gain statutory powers.

Domestic policies must align with climate targets. As South Africa's climate commitments have become increasingly ambitious, some of its domestic policies have been aligned. However, there are other policies that risk hindering the achievement of these commitments, notably related to fossil fuel extraction.

The South African experience shows that stakeholders should be engaged throughout policy making processes and transparency in policy making is important. In 2017, the state utility company, Eskom, announced that five coal power plants would shut due to the need to transition towards renewables. However, trades unions had not been consulted before this announcement was made, and so responded by calling for protests against the decision.

Well-being and a just transition for Wales

Existing work by WCPP has highlighted the importance of establishing a set of core values to underpin a framework for a just transition in Wales and to act as its guiding principles (Jafry, 2021). This work identified WBFGA as a potential starting point or framework for this: national well-being Goal 7 calls for a globally responsible Wales, and many indicators within other goals also relate to a just transition.² The Act established Public Services Boards (PSBs) with the aim of improving joint working on well-being across public services in each local authority in Wales.

MacBride-Stewart and Parken (2021) suggest the implementation of a place-based approach to a just transition that builds upon existing Welsh initiatives and legislation, such as the WBFGA, under which PSBs are required to publish Well-being Assessments and Plans as part of the WBFGA framework.

Other existing Welsh Government platforms including Environment (Wales) Act (2016) and Prosperity for All: A Low Carbon Wales (2019) have been identified as alternative sources of core values (Jafry, 2021).

The Well-being of Future Generations Act as a foundation for a just transition

It has been asserted that a just transition 'would consist of a dual commitment to human well-being...and sustainability' (Swilling et al., 2016: 650). WBFGA outlines goals and ways of working that respond to this need, although the goals are sufficiently broad that the specific focus during implementation and achievement of the indicators will determine the degree of alignment. Our discussion so far has highlighted that there is no one accepted definition of a just transition and that a great deal of debate exists around the term.

When considering how to approach a just transition in Wales, it is useful to align the approaches that have so far been discussed with the seven well-being goals

² Consideration of the national indicators could develop this assessment further. The indicators can be found here <https://gov.wales/wellbeing-wales-national-indicators>.

established by the WBFGA. Table 2 summarises how each approach aligns with the goals. WBFGA emphasises a long- term and intergenerational approach and is, because of this, strongly aligned to an intergenerational approach as is demonstrated in Table 2. In terms of Emden et al.’s (2020) eight labour-oriented approaches to a just transition, it can be seen that Goal 1: A prosperous Wales addresses many of these approaches.

The close correspondence between the just transition concept and environmental justice discussed above, also aligns with Goals 1 and Goal 2: a prosperous and a resilient Wales. An energy justice approach aligns with Goal 3, a healthier Wales, as it is concerned with remediating health burdens whilst also achieving equity in the energy system. Environmental justice’s focus on vulnerable groups relates to Goal 4: a more equal Wales. Although this goal does not explicitly refer to vulnerable groups, it is unlikely to be achieved without due consideration of them, and this is an important consideration for implementation.

The focus of energy justice on moving towards low carbon production alongside energy efficient consumption, while ensuring individual and community well-being, could be understood as present within Goals 1 and 5: a prosperous Wales and a Wales of cohesive communities. Goal 1 refers to ‘An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately’ and Goal 5 emphasises communities, although it is unclear whether the reference to communities in Goal 5 has the same meaning (Welsh Government, 2015a: 4). Goal 6, a Wales of vibrant culture and thriving Welsh language aligns with procedural justice, which stresses the importance of including a plurality of perspectives throughout the transition to ensure that everyone is represented. Lastly, Goal 7, a globally responsible Wales, aligns well with the core tenets of a range of approaches aimed at improving societal and environmental well-being, including climate and environmental justice approaches.

Table 2: The seven well-being goals and aligned approaches

Well-being goal	Description (Welsh Government, 2015a: 4)	Approaches
Goal 1: A prosperous Wales	‘An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate	Many of Emden et al.’s (2020) eight labour-oriented approaches to a just transition (engagement with communities, flexibility, well-paid jobs, protection of workers’ rights, opportunities for training and career progression, job security employment).

	change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.’	Goal 1 is also naturally aligned with an intergenerational approach as it takes into account the benefits for the present and future generations of generating wealth through secure and safe work.
Goal 2: A resilient Wales	‘A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example, climate change).’	<p>A climate justice approach which seeks to reduce emissions and protect the natural world whilst also creating a fairer and more just environment, aligns with the goal of a resilient Wales.</p> <p>The focus of energy justice on moving towards a low carbon production along with energy efficient consumption while ensuring individual and community well-being can be considered to be present within Goal 5.</p>
Goal 3: A healthier Wales	‘A society in which people’s physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.’	<p>An intergenerational approach, in which there is a recognition that the needs of the present are met without compromising the ability of future generations to meet their own needs aligns with acting in a way to ‘benefit future health’ stated in Goal 3.</p> <p>An energy justice approach involves achieving equity in the energy system whilst also remediating health burdens, aligning with the core aim of Goal 3.</p>
Goal 4: A more equal Wales	‘A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances).’	<p>The focus within the environmental justice approach on vulnerable groups could be considered aligned with this goal. Although Goal 4 does not explicitly refer to vulnerable groups, it is unlikely to be achieved without due consideration of them, and this is an important consideration for implementation,</p> <p>A climate justice approach involves a holistic effort to addressing the climate crisis, one which not only protects the natural world but creates a fairer and more equal world.</p>
Goal 5: A Wales of cohesive communities	‘Attractive, viable, safe and well-connected communities.’	Procedural justice includes inviting affected stakeholders and communities to take part in decision-making processes. Similarly, participatory justice aims to ensure that stakeholders (or communities) are empowered

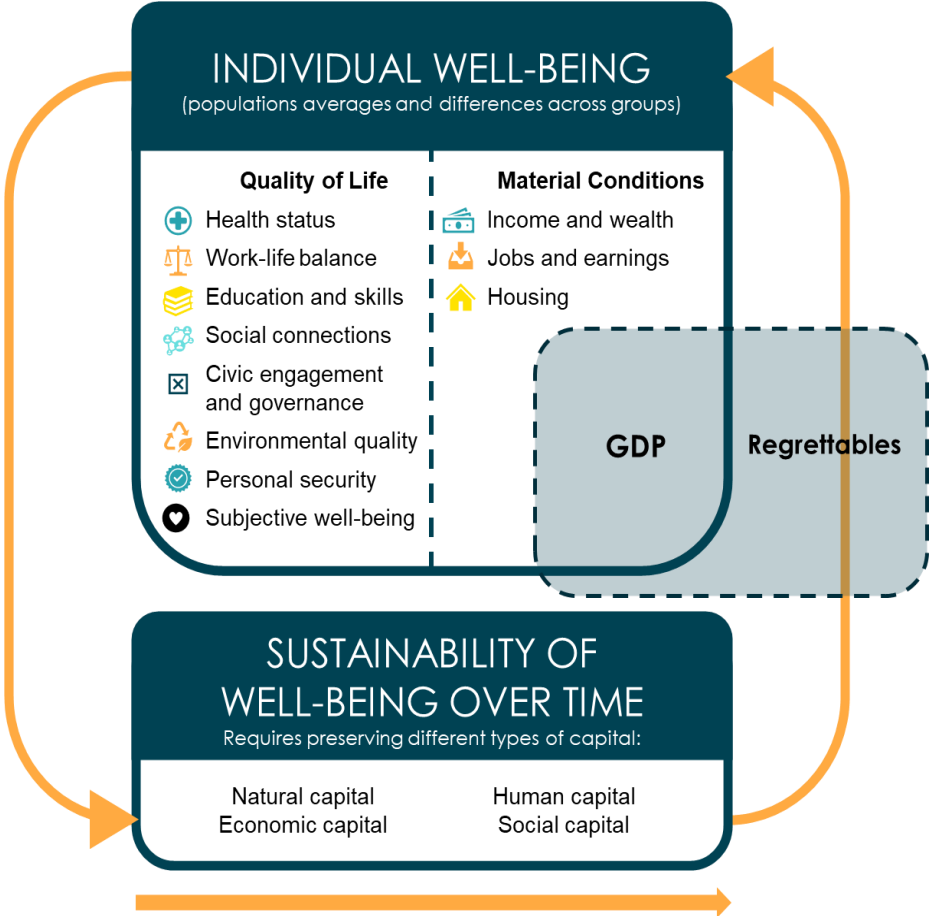
		<p>throughout the transition process and that their best interests are considered.</p> <p>Emden et al.'s (2020) labour-oriented principles align with Goal 5, including engagement with communities.</p> <p>The consideration of consumption-based concerns about achieving energy efficiency without compromising the continuity or well-being of the community within an energy justice approach align with Goal 5.</p>
Goal 6: A Wales of vibrant culture and thriving Welsh language	'A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation.'	Procedural justice is concerned with the engagement of a plurality of perspectives. The involvement of a range of people and communities, including those who speak Welsh, throughout the transition process will be important in promoting and protecting the Welsh language and culture.
Goal 7: A globally responsible Wales	'A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being.'	Goal 7 is underpinned by a range of approaches discussed, including intergenerational justice , climate justice and environmental justice .

Aligning the range of approaches discussed above with the well-being goals suggests that the WBFGA provides a suitable foundation for the adoption of a just transition in Wales. However, it may be beneficial to strengthen this foundation with a set of guiding principles to ensure that there is a consistent and clear approach to implementing a just transition. The justice dimensions set out in Hirsch et al.'s (2017) set of guiding principles (political, socioeconomic and climate), for example, align well with the goals of the WBFGA. These principles are underpinned by a range of indicators that allow for the measuring of progress towards achieving transition targets.

There are some international examples of how well-being frameworks can be used to guide a just transition approach. These frameworks have emerged in recognition of the limitations of focusing on gross domestic product (GDP) as a measure of economic prosperity and the failure to account for factors that contribute to individual

well-being. The OECD’s framework is one such example, (see Figure 3 below). It is a people-focused framework that captures outcomes and their distribution and illustrates how individual and community well-being are influenced by more than economic factors (Nesom and Tilley, 2021).

Figure 3: The OECD framework for measuring well-being



Source: [OECD \(2019: 15\)](#)

It asserts that adopting a well-being lens means that climate and well-being goals ‘should not be pursued independently’ (OECD, 2019: 11). Adopting a well-being lens means:

- Policy goals should be defined in terms of well-being outcomes and are systematically reflected in decision-making across the economy;
- Decisions should be taken considering multiple well-being objectives, rather than focusing on a single or very narrow range of objective(s) independently of others; and
- The interrelations between the different economic sectors and systems in which a policy intervenes are sufficiently well understood.

There are also country-specific examples of well-being frameworks for a just transition. Costa Rica, for example, has made a just transition an important element of its existing national climate plan (Beuermann and Brandemann, 2021). It considers a just transition as:

‘...a process of the entire economy that produces the plans, policies and investments that lead to a future in which all jobs are green and decent, net emissions are zero, poverty has been eradicated and communities are prosperous and resilient.’ (Beuermann and Brandemann, 2021: 8)

Case study: A just transition in New Zealand

New Zealand’s transition towards a low emissions economy is legislated in the Climate Change Response (Zero Carbon) Amendment Act 2019. In 2021, New Zealand delivered its ‘Wellbeing Budget’ (Government of New Zealand, 2021) with a just transition listed as one of the five ‘enduring well-being’ objectives set out in the budget, ‘supporting transition to a climate-resilient, sustainable and low-emissions economy while building back from COVID-19’ (Government of New Zealand, 2021). The objectives were selected using a collaborative and evidence-based approach, combining evidence from the Treasury’s existing Living Standards Framework with advice from experts within the sector and the Government’s chief science advisors. The Living Standards Framework includes a broad range of indicators for well-being outcomes, focusing on people, the country and the future.

In 2020, the Public Finance (Wellbeing) Amendment Bill introduced new requirements for the New Zealand Government to report annually on the wellbeing objectives within the Budget, one of which is just transition, and for the Treasury to report periodically on the state of well-being in New Zealand. Within its well-being framework, New Zealand has also sought to understand how policy levers and strategies can be used to address justices through a just transition. The Hapu/Iwi Resource Management Plan in the Bay of Plenty established legislative requirements to ensure that resource management issues important to local Indigenous peoples were taken into account. Involving Indigenous peoples in decision-making demonstrated recognitional, procedural and distributional justices (Krawchenko and Gordon, 2021).

Adopting a just transition

To be most effective in its adoption, a just transition should not be seen as an ‘add-on’ to climate policies but should be ‘embedded as an operational priority’ (Abram et al., 2022: 1035). In Scotland, a just transition policy has been embedded within the domestic political system through the Climate Change Act 2019. Scotland has more broadly acknowledged a shift towards embedding well-being economics in policy, such as within its National Performance Framework, which sets out national outcomes measured by ‘national indicators’ of well-being. The Scottish Government has a vision to create a well-being economy, which is described as ‘an economic system that places the well-being of current and future generations at its core’ (Cabinet Secretary for Finance and the Economy, 2022). As part of this vision, a Wellbeing Economy Monitor has been developed to measure how Scotland’s economy contributes to improving areas such as health, equality, environmental sustainability and fair work. Data collected from the Wellbeing Economy Monitor will be used alongside the National Performance Framework and other traditional existing metrics to guide ‘future economic decision making, helping us to deliver a just transition to a net zero, nature-positive, circular, wellbeing economy based on the principles of equality, sustainability, prosperity and resilience’ (Cabinet Secretary for Finance and the Economy, 2022: 2-3).

Similarly, the Office of National Statistics (ONS) has developed a Measures of National Well-being Dashboard which provides a visual overview of the UK’s progress against ten well-being indicators. Well-being is described as ‘how we are doing as individuals, as communities and as a nation, and how sustainable this is for the future’ (ONS, 2019). Areas of life include personal well-being, which measures life satisfaction, happiness and mental well-being, and the environment, which measures total greenhouse gas emissions and energy consumed within the UK from renewable sources.

Alongside Wales, Scotland and New Zealand have approached using well-being as a framework for collaboration. The Wellbeing Economy Governments (WEGo) partnership is a collaboration of national and regional governments promoting sharing of expertise and transferrable policy practices. The partnership currently comprises Wales, Scotland, New Zealand, Iceland and Finland. WEGo aims to progress towards the UN Sustainable Development Goals and develop ‘innovative policy approaches aimed at enhancing wellbeing through a broader understanding of the role of economics’ (Scottish Government, 2021).

Conclusion

A just transition approach demonstrates a commitment to fairness and inclusivity in decarbonisation policy. However, this research has demonstrated that there is no universal agreement on the definition of the term, partly because it is recognised that the successful delivery of fair and inclusive decarbonisation policies depends on national and local contexts.

In practice there is a considerable diversity in approaches to a just transition around the world, as nations grapple with the demands of the climate emergency on public policy. While it is accepted that a 'one size fits all' approach is not appropriate for different contexts, the international examples presented in this report highlight common features. These include the creation of a coordinating framework, long-term planning, capacity building and funding to support implementation. South Africa's approach highlights that stakeholders should be engaged throughout the policy making process to encourage support for the transition. As we have seen in the international examples, the ability to form partnerships between national governments, local governments, citizens, and the business sector is key to ensuring that policies are successful. This will likely also be the case in Wales. Underlying the recognition of the need for partnership is the related, sometimes alternative, notion of a 'fair transition'.

The report has explored the different elements of justice that underpin just (and fair) transitions. It has shown that the origins of the just transition concept are closely tied to environmental justice, but 'just transition' is mainly used as a synthesising term which seeks to incorporate related notions of energy justice and climate justice. It does not, and should not, incorporate all environmental and social justice concerns, however. Research has suggested that bringing together these justices within a just transition approach allows for a more inclusive framework and provides an opportunity to promote fairness. Intergenerational justice has also been discussed within a just transition approach to equalise the rights of different generations in the transition process.

There are international examples that illustrate the adoption of a just transition within a well-being framework. The OECD provides a guiding set of principles for a well-being framework. This asserts that decisions over how to meet well-being objectives should only be taken when considering how all of the objectives can be met together (OECD, 2019). Within a national context, both Scotland and New Zealand have used similar approaches to the WBFGA to integrate a just transition within domestic policy. The examples in this report illustrate that, to be most effective in its adoption, it is

important that a just transition is embedded in a wide range of policies as an operational priority during planning and implementation. Furthermore, international experience suggests that context-specific and place-based approaches are important for securing well-being for present and future generations.

As the WBFGA underpins a range of Welsh Government policies and practices with a focus on well-being and sustainable development, international experience suggests that the Act provides a suitable foundation for the adoption of a just transition approach in Wales. Several of the approaches to a just transition discussed within this report fit within this framework and the research suggests that these approaches align with the fundamental well-being goals and intentions of the WBFGA. Analysis of the WBFGA indicators and progress towards targets will be important in developing this understanding further.

While having the WBFGA as an approach to a just transition is important in setting the foundation, the way in which it is implemented will be critical in determining its success. Identifying the most appropriate guiding principles to help formulate and implement Wales' decarbonisation plans will be critical to ensure that the transition overcomes existing inequalities between individuals, communities and businesses. The roll out of innovative policy approaches to embed adjustments within Welsh Government policies will also be important (see Parken et al., forthcoming).

References

Abram, S., Atkins, E., Dietzel, A., Jenkins, K. Kiamba, L. and Kirshner, J. (2022). **Just Transition: A whole-systems approach to decarbonisation**. Climate Policy 22: 1033-1049.

Atteridge, A. and Strambo, C. (2020). **Seven principles to realize a just transition to a low-carbon economy**. Stockholm: Stockholm Environment Institute.

Beuermann, C. and Brandemann, V. (2021). **Just Transition in national climate plans: An analysis of case studies from South Africa, Costa Rica and Ukraine**. Friedrich Ebert Foundation. Retrieved from <https://library.fes.de/pdf-files/iez/18464.pdf>

Cabinet Secretary for Finance and the Economy. (2022). **Ministerial foreword: Wellbeing economy monitor**. 24 June 2022. Scottish Government. Retrieved from <https://www.gov.scot/publications/wellbeing-economy-monitor/>

Client Earth. (2021). **What is environmental justice?**. Client Earth Communications. Retrieved from <https://www.clientearth.org/latest/latest-updates/stories/what-is-environmental-justice/>

Connolly, K. (2022). **5 Lessons from South Africa's Just Transition Journey**. World Resources Institute. Retrieved from <https://www.wri.org/insights/5-lessons-south-africas-just-transition-journey>

Department for Business, Energy and Industrial Strategy. (2021). **Net Zero Strategy: Build Back Greener**. London: UK Government. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf

Emden, J., Ahmad, H., Murphy, L. and Cameron, C. (2020). **Lessons Learned: Just Transitions from Around the World**. Institute for Public Policy Research. Retrieved from <https://www.ippr.org/files/2020-12/lessons-learned-dec2020.pdf>

Emden, J. and Murphy, L. (2019). **A Just Transition: Realising the opportunities of decarbonisation in the North of England**. Institute for Public Policy Research. Retrieved from: <https://www.ippr.org/files/2019-03/energy-skills-march19.pdf>

European Commission. (2019). **The Just Transition Mechanism: making sure no one is left behind**. Retrieved from https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism_en

Fearon, S. and Barry, J. (2021). **Mapping a Just Energy Transition in Northern Ireland**. Belfast: Queen's University Belfast.

Friends of the Earth. (2022). **What is climate justice?**. Friends of the Earth. Retrieved from <https://climate.friendsoftheearth.uk/resources/what-climate-justice>

Government of Ireland. (2021). **The Climate Action Plan: Securing Our Future**. Dublin: Government of Ireland.

Government of New Zealand. (2021). **Wellbeing Budget 2021: Securing our Recovery**. Government of New Zealand. Retrieved from <https://www.treasury.govt.nz/publications/wellbeing-budget/wellbeing-budget-2021-securing-our-recovery-html#section-4>

Heffron, R. (2021). **What is the 'Just Transition'?**. In: Achieving a Just Transition to a Low-Carbon Economy. London: Palgrave Macmillan: 9-19.

Hirsch, T., Matthes, M. and Funfgelt, J. (2017). **Guiding Principles and Lessons Learnt for a Just Energy Transition in the Global South**. Friedrich Ebert Foundation. Retrieved from <https://library.fes.de/pdf-files/iez/13955.pdf>

Hirsch, T. (2018). **Lessons Learnt and Guiding Principles for a Just Energy Transition in the Global South**. Just Transition Research Collaborative. Retrieved from <https://medium.com/just-transitions/hirsch-b2826c0bf2c5>

Indigenous Environmental Network [IEN]. (2017). **Indigenous principles of just transition**. Indigenous Environmental Network. Retrieved from <http://www.ienearth.org/wp-content/uploads/2017/10/IENJustTransitionPrinciples.pdf>

Initiative for Energy Justice. (2019). **Initiative for Energy Justice**. Retrieved from <https://iejusa.org>

International Labour Organisation [ILO]. (2022). **Frequently Asked Questions on just transition**. International Labour Organisation. Retrieved from https://www.ilo.org/global/topics/green-jobs/WCMS_824102/lang—en/index.htm

Jafry, T. (2021). **Climate Just Transition in Wales: Developing a Framework for Action**. Policy Briefing. Wales Centre for Public Policy. Retrieved from <https://www.wcpp.org.uk/publication/achieving-a-just-transition-in-wales/>

Just Transition Alliance [JTA]. (2022). **What is Just Transition?**. Just Transition Alliance. Retrieved from <http://jtalliance.org/what-is-just-transition/#>

Just Transition Research Collaborative. (2018). **Mapping Just Transition(s) to a low-carbon world**. Geneva: United Nations Research Institute for Social Development (UNRISD).

Krawchenko, T. and Gordon, M. (2021). **How Do We Manage a Just Transition? A Comparative Review of National and Regional Just Transition Initiatives.** Sustainability. 13(11): 1-16.

MacBride-Stewart, S. and Parken, A. (2021). **Inequality in a Future Wales: Areas for action in work, climate and demographic change.** Retrieved from https://www.futuregenerations.wales/wp-content/uploads/2021/11/FGCW_Equalities-Report_E-UPDATED.pdf

Martinez-Alier, J. (2012). **Environmental Justice and Economic Degrowth: An Alliance between Two Movements.** Capitalism Nature Socialism. 23 (1): 51-73.

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

Nesom, S. and MacKillop, E. (2021). **What matters in the implementation of sustainable development policies? Findings from the Well-Being of Future Generations (Wales) Act 2015.** Journal of Environmental Policy and Planning. 23(4): 432-445.

Nesom, S. and Tilley, H. (2021). **Well-being and the impacts of Covid-19 and Brexit.** WCPP Evidence Briefing Paper. Retrieved from <https://www.wcpp.org.uk/publication/well-being-briefings-for-public-services-boards/>

OECD. (2019). **Accelerating Climate Action: Refocusing Policies through a Well-being Lens.** OECD. Paris.

ONS. (2019). **Measures of National Well-being Dashboard.** ONS. Retrieved from <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuresofnationalwellbeingdashboard/2018-04-25>

Parken, A., MacBride-Stewart, S., Ashworth, R, and Minto, R. (forthcoming). **Equality and Fair Work for Just Transition to Net Zero.** Research report for the Welsh Government, Mainstreaming Equality Project.

Pellegrini-Masini, G., Pirni, A., Maran, S. and Klockner, C. (2020). **Delivering a timely and Just Energy Transition: Which policy research priorities?** Environmental Policy and Governance. 30(6): 293-305.

Pianta, M. and Lucchese, M. **Rethinking the European Green Deal: An Industrial Policy for a Just Transition in Europe.** Review of Radical Political Economics. 52(4): 633–641.

Piggot, G., Boyland, M., Down, A. and Torre, A. R. (2019). **Realizing a just and equitable transition away from fossil fuels.** Stockholm: Stockholm Environment Institute.

Pinker, A. (2020). **Just transitions: a comparative perspective**. Aberdeen: The James Hutton Institute and SEFARI Gateway.

Price, J. (2019). **Why a 'Just Transition'? Decarbonisation and economic justice**. Wales Centre for Public Policy. Retrieved from <https://www.wcpp.org.uk/commentary/why-a-just-transition-decarbonisation-and-economic-justice/>

Price, J., Roberts, M., and Bristow, D. (2021). **Towards a just transition in Wales**. Wales Centre for Public Policy. Retrieved from <https://www.wcpp.org.uk/publication/achieving-a-just-transition-in-wales/>

Schlosberg, D. (2009). **Defining Environmental Justice: Theories, Movements, and Nature**. Oxford: Oxford University Press.

Scottish Government. (2021). **Wellbeing Governments (WeGO). Scottish Government**. Retrieved from <https://www.gov.scot/groups/wellbeing-economy-governments-wego/>

Serafimova, T. Finger, M., and Montero, J. (2022). **Modal shift: The moment of truth. Main takeaways and lessons learnt from the European Year of Rail**. Retrieved from: https://cadmus.eui.eu/bitstream/handle/1814/74040/PB_2022_11_FSR.pdf?sequence=1&isAllowed=y

Silva, L., Price, J., and Tilley, H. (2022). **Developing skills for a just transition**. Wales Centre for Public Policy. Retrieved from <https://www.wcpp.org.uk/publication/developing-skills-for-a-just-transition/>

Smith, S. (2017). **Just transition: A report for the OECD**. Retrieved from: <https://www.oecd.org/env/cc/g20-climate/collapsecontents/Just-Transition-Centre-report-just-transition.pdf>.

Swilling, M., Musango, J. and Wakeford, J. (2016). **Developmental States and Sustainability Transitions: Prospects of a Just Transition in South Africa**. *Journal of Environmental Policy & Planning*. 18 (5): 650-672.

TUC Cymru. (2020). **A green recovery and a just transition**. Cardiff: TUC Cymru.
Wang, X., and Lo, K. (2021). **Just transition: A conceptual review**. *Energy Research and Social Science*. 82, 102291: 1-11.

Weber, G. and Cabras, I. (2021). **Environmental Justice and Just Transition in the EU's Sustainability Policies in Third Countries: The Case of Colombia.** *The International Spectator*. 56: 119-137.

Welsh Government. (2015a). **Well-being of Future Generations (Wales) Act 2015.** Retrieved from <https://www.futuregenerations.wales/wp-content/uploads/2017/01/WFGAct-English.pdf>

Welsh Government. (2015b). **Well-being of Future Generations (Wales) Act 2015: the essentials.** Retrieved from <https://gov.wales/sites/default/files/pdf-versions/2021/6/3/1623854132/well-being-future-generations-act-essentials.pdf>

Welsh Government. (2019). **Wales and the Sustainable Development Goals: Supplementary Report to the United Kingdom of Great Britain and Northern Ireland Voluntary National Review of progress towards the Sustainable Development Goals 2030.** Welsh Government. Retrieved from https://gov.wales/sites/default/files/publications/2019-07/supplementary-report-to-the-uk-review-of-progress-towards-the-sustainable-development-goals-2030_0.pdf

Welsh Government. (2021a). **Net Zero Wales Carbon Budget 2: 2021-2025.** Cardiff: Welsh Government.

Welsh Government. (2021b). **Programme for government: update.** Cardiff: Welsh Government.

World Commission on Environment and Development. (1987). **Our Common Future.** Oxford. Oxford University Press.

Annex

Recent reports commissioned by the Scottish Government (Pinker, 2020) and the Stockholm Environment Institute (Piggot et al., 2019) examine case studies of just transition-aligned processes and principles alongside additional examples, shown in Table A1, below.

Table A1: International just transition policies

Country/ region	Policies	Description	Support mechanisms	Source
Alberta, Canada	Coal Workforce Transition Fund Coal Community Transition Fund	Intended to support coal workers and local governments in areas affected by government plan to phase out coal-based electricity production	<u>Workers:</u> career counselling, tuition support for retraining, grants to bridge gap between unemployment and retirement, and relocation assistance <u>Local government:</u> grants for studies on long-term impacts (social and economic), support for long-term economic planning and business development programmes	Piggot et al., 2019
Spain	Framework Agreement for a Just Transition of Coal Mining and Sustainable Development of the Mining Regions for the Period 2019-2027	Action plan to support workers and areas affected by plans to close coal mines	<u>Workers:</u> re-training programs aimed at re-deployment to green industries, early retirement funds and social assistance support <u>Local government/businesses:</u> funding for business initiatives intended to	Piggot et al., 2019

			develop mined regions and plans for environmental restoration of mined regions	
China	Mine closure provisions in the 13th Five Year Plan for Coal Industry Development, 2016-2020	Strategy to cap coal output and increase efficiency of mining. Outlines provision for a plan to close mines.	<u>Workers:</u> re-training and job seekers assistance, unemployment support <u>Local government:</u> funding and assistance for redevelopment and environmental reclamation of mine regions	Piggot et al., 2019
Scotland	Oil Worker Transition Fund	Funding to support oil and gas workers to transition to new roles as North Sea oil production is reduced	<u>Workers:</u> funding for re-training	Piggot et al., 2019
USA	Mid-Century Strategy Partnerships for Opportunity and Workforce and Economic Revitalization Plan (POWER program)	National decarbonisation strategy Support initiative for communities affected by the decline of the coal industry	Provision of targeted support to facilitate a just transition <u>Workers:</u> health and retirement support <u>Local area:</u> Mine area redevelopment and environmental reclamation	Pinker, 2020
Canada	Task Force on Just Transition for Canadian	Commission to collect information on	Five years of funding for community adaptation,	Pinker, 2020

	Coal Power Workers and Communities	the effects of the transition and identify solutions to support a just transition	skills development and economic diversification	
Germany	The Coal Commission	Commission to facilitate a just transition as coal is phased out	Compensation for energy users for increased energy prices, and funding for 'transition measures'	Pinker, 2020
Peru	REDD+	Regulations to support REDD carbon offset schemes	Incentive scheme for preservation of forests by local communities	Pinker, 2020
Norway	Strategy for Green Competitiveness	Strategy outlining the opportunities emerging from decarbonisation	Variety of recommendations on how Norway can achieve Net Zero including investment in new and green industries	Pinker, 2020
Northern Ireland	Climate Change Bill	Climate legislation introducing a just transition principle	Established a just transition commission and climate advisor and provides a just transition fund for agriculture	Fearon and Barry, 2021
UK	Net Zero Strategy: Build Back Greener	Strategy for transition to net zero emissions	Strategy framed innovation and skills to support net zero target	Department for Business, Energy and Industrial Strategy, 2021
Ireland	The Climate Action Plan	Strategy setting out actions required to meet the target of net	Funding for support for workers, retrofitting housing, building new public transport and	Government of Ireland, 2021

		zero emissions by 2050	other actions to support a just transition	
European Commission	Just Transition Platform Just Transition Mechanism	Access point for support, knowledge and opportunities related to just transition and the Just Transition Mechanism for EU members	<u>Platform</u> : knowledge exchange platform <u>Mechanism</u> : series of funds to support just transition aligned activities	European Commission, 2019
Austria	Climate ticket	Rail travel is available for just over £2.50 a day with this new ticket, which is designed to make shifts to more sustainable transport affordable to citizens	Ticket prices enforced by law, and economically supported by central government	Serafimova et al, 2022

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