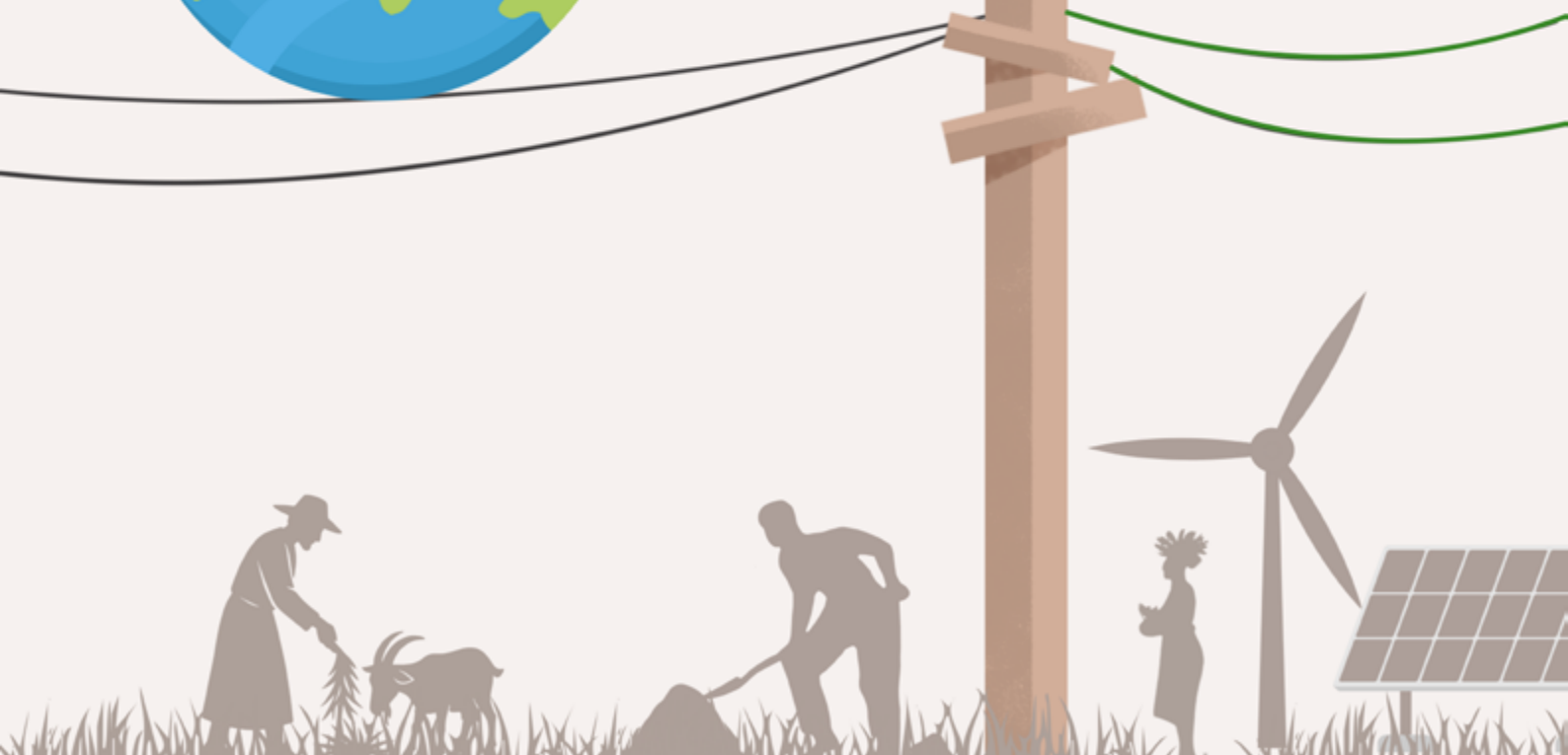


No Transition Without Justice:

Strengthening Environmental Rule of Law for People and Planet





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Abbreviations

ABRAGET	Brazilian Thermoelectric Association
AfD	Alternative für Deutschland
ANZ	Australia and New Zealand Banking Group Limited
AR6	Sixth Assessment Report
BKW	Bernische Kraftwerke
CEB	Executives Board for Coordination
COP	Conference of the Parties
CRIA	Child Rights Impact Assessment
EHRD	Environmental Human Rights Defenders
EMDE	Emerging Markets and Developing Economies
GDP	Gross Domestic Product
GHG	Greenhouse Gas Emissions
GSS+ bonds	Green, Social, Sustainability, and Sustainability-Linked Bonds
HLCP	High-level Committee on Programmes
IACHR	Inter-American Commission on Human Rights
IAWP	International Alliance of Waste Pickers
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICFTU	International Confederation of Free Trade Unions
IEA	International Energy Agency
IFC	International Finance Corporation
ILO	International Labour Organization
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services

IPCC	Intergovernmental Panel on Climate Change
IPG	International Partners Group
ITUC	International Trade Union Confederation
IUCN	International Union for Conservation of Nature
JETP	Just Energy Transition Partnership
JTF	Just Transition Fund
JTM	Just Transition Mechanism
LSE	London School of Economics
LT-LEDs	Long-term Low Emission Development Strategies
NAP	National Adaptation Plan
NbS	Nature-based Solutions
NBSAP	National Biodiversity Strategies and Action Plans
NDC	Nationally Determined Contribution
OECD	Organization for Economic Co-operation and Development
OHCHR	Office of the High Commissioner of Human Rights
PPP	Public-private partnership
SLB	Sustainability-linked bonds
UNCDP	United Nations Committee for Development Policy
UNDESA	United Nations Department of Economic and Social Affairs
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNICEF	United Nations International Children's Emergency Fund
WWF	World Wide Fund for Nature

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Foreword

As the world undergoes a profound and necessary transformation to address the environmental challenges of our times: just transition holds the key to ensuring a sustainable and resilient future for all.



However, in this transformation, both processes and outcomes matter, and they are mutually reinforcing. The way transition processes are designed and implemented will determine whether they deliver not only the desired long-term environmental benefits, but also fulfil commitments to equity, justice, inclusion and sustainable development. At the same time, tangible and equitable outcomes help build legitimacy, trust and institutional learning, which in turn strengthen future transition processes and their implementation.

Building on the United Nations Environment Programme's (UNEP) 2019 Global Report on Environmental Rule of Law and its subsequent 2023 review, this publication underscores how environmental rule of law can guide these just transition processes and outcomes so that they are both fair and inclusive while being grounded in the rule of law.

In doing so, this report emphasizes the importance of legal systems and strong institutions in enabling just transition across societies and sectors, ensuring that no one is left behind.

This report outlines seven key elements through which environmental rule of law can support a fairer and more effective just transition—including legal frameworks, access to justice, institutional integrity, and the protection of rights, such as the right to a clean, healthy, and sustainable environment.

As UNEP continues to work on addressing the three planetary environmental crises – the crisis of climate change, the crisis of nature, land and biodiversity loss, and the crisis of pollution and waste, the grounding of just transition in the environmental rule of law could potentially set us forth on the path of systemic solutions anchored in the strength of legal systems.

Nairobi, July 2026

A handwritten signature in black ink that reads "PKameri".

Patricia Kameri-Mbote
Director of the Law Division
United Nations Environment Programme

Executive Summary

The understanding, interpretation and operationalization of just transition takes different forms across different contexts. However, key elements consistently emerge across these diverse approaches, allowing this report to suggest a working definition of the term. The following definition is proposed, not as prescriptive or exclusive, but as a broad framing to guide understanding and discussion:

Just transition, in the environmental context, refers to a fair, inclusive and rights-based transformation towards environmentally and socially sustainable and resilient economies and societies that respects environmental rule of law and ensures no one is left behind in addressing environmental challenges across all sectors.

In this context, just transition calls for a transformation of economic and governance systems to safeguard the environment while upholding environmental rule of law, realizing human rights, enhancing equity, alleviating poverty, and empowering people. It recognizes that these goals can be mutually reinforcing and emphasizes the deep interdependence among all components of the environment, and between people and the planet.

At its core, just transition confronts environmental challenges and their close link to social – including human rights – and economic dimensions. Beyond promoting decent work and

“**Just transition, in the environmental context, refers to a fair, inclusive and rights-based transformation towards environmentally and socially sustainable and resilient economies and societies that respects environmental rule of law and ensures no one is left behind in addressing environmental challenges across all sectors”**

protecting workers’ rights, just transition also spans diverse stakeholders, sectors and timeframes, at both national and global levels, addressing the fundamental interrelationship between people and the planet.

The impacts of transition – and its associated measures – will be wide-ranging, both direct and indirect, affecting different sectors and social groups. A siloed approach must be replaced with integrated, cross-sectoral policies,

measures and mechanisms capable of identifying and responding to unintended consequences alongside direct impacts.

The complexity and scope of just transition – particularly when accounting for the interconnectedness of environmental components, intersectionality, and the diversity within stakeholder groups – requires strong policy coherence across macroeconomic, environmental, social and industrial dimensions. It also needs the meaningful participation of diverse groups, especially civil society, alongside strong, independent, transparent and accountable institutions that are adequately resourced, technically capable, and equipped with fit-for-purpose mandates.

Just transition presents an opportunity to rectify past harms, confront systemic injustices, and uphold the rights of future generations. Its urgency must not come at the expense of fairness or sustainability. A transition that is neither just nor environmentally sustainable risks creating new injustices and deepening current environmental and human rights crises.



Canadian rare earth mining highlights the environmental footprint of critical energy transition minerals that enable technologies, defence applications, and electric vehicles. Photo: MotionPixxleStudio. Adobe Stock.

The core elements of environmental rule of law and just transition closely align and reinforce one another. Both prioritize fairness, equity, and environmental protection, while highlighting the interconnected nature of environmental, economic, social, and cultural rights.

Environmental rule of law acts as both a catalyst and a framework for achieving just transition. It emphasizes accountability, transparency, and participatory governance, while providing the legal foundation needed to uphold environmental and social safeguards.

Environmental rule of law can help manage the complexity of just transition by recognizing the interconnections between environmental systems, human rights and socioeconomic factors. It also provides guidance for balancing diverse interests, managing urgent timelines, and coordinating across institutional and sectoral divides. Additionally, environmental rule of law reinforces just transition policies by ensuring accountability, enabling civic engagement and supporting effective implementation.

There is no one-size-fits-all model for just transition. It must be context-specific and grounded in national realities. Environmental rule of law provides the legal and institutional foundation to guide all actors and support a sustainable, inclusive transformation. Conversely, just transition is essential to ensure that environmental norms and standards are effectively implemented within the framework of the rule of law.

Framing just transition as a rule of law issue addresses deeper concerns of governance, legitimacy and integrity, especially in an era of environmental emergency.

Just transition policies can be effective only when they are fairly designed and implemented. Legal mechanisms are essential to balancing the allocation of benefits and burdens, while protecting the rights of both present and future generations. Judicial systems are critical for upholding fairness, resolving conflicts and addressing grievances. Achieving just transition demands a coordinated, integrated application of environmental rule of law across seven key elements:

1. Fair, clear and implementable just transition laws and policies
2. Access to information, public participation and justice in just transition processes
3. Accountability and integrity of institutions and decision makers, including in just transition finance
4. Clear, coordinated mandates and roles across and within institutions
5. Accessible, fair, impartial, timely and responsive dispute resolution mechanisms
6. Recognition and protection of environmental rights
7. Just transition strategies adapted and contextualized to national realities

Making just transition work in practice is complex, nuanced and context-specific. Current trends show that environmental rule of law can advance just transition through the following pathways:

1. Laws and institutions

Several countries have adopted specific just transition laws and policies, while others are integrating just transition provisions into environmental, energy, mining and climate laws. They are also establishing institutions with clear mandates, and facilitating coordination through adequately resourced mechanisms. These provisions are increasingly found in climate, energy and mining laws and are expanding into other sectors. Integrating just transition measures across sectors enhances coordination and policy coherence. Effective implementation depends on strong institutional capacity and coordination. Institutions need clear and coordinated mandates, alongside new or adapted mechanisms.

2. Rights

A rights-based approach is critical to prevent violations particularly regarding participation, land tenure, and the right to a clean, healthy and sustainable environment. Protecting and supporting environmental human rights defenders (EHRDs) reinforces rights frameworks and strengthens environmental and climate action.

3. Civic engagement

Enabling meaningful civic engagement improves the design and implementation of laws, policies and projects. This helps to anticipate and mitigate unintended social and environmental consequences. Civic engagement – grounded in access to information, public participation and access to justice – is essential to ensure that transition is inclusive, equitable and well-informed.

4. Justice

Justice systems and courts are key to making just transition work more effectively and fairly. They play a crucial role in upholding distributive, procedural and restorative justice, thereby reinforcing the fairness, legitimacy and impact of just transition outcomes. This includes recognizing environmental rights and removing barriers to access to justice.

5. Finance

Financial mechanisms, including just transition finance, must be fair, accountable and adequate. Environmental rule of law can guide the development and oversight of these mechanisms, ensuring their integrity. Innovative approaches – such as direct revenue sharing, green bonds and blended finance – can help bridge funding gaps, but they must be scaled and aligned with principles of justice.

Nickel mine near Warmu in the remote Kimberley region of Western Australia. Photo: Philip Schubert. Adobe Stock.



“

Framing the just transition as a rule of law issue addresses deeper concerns around governance, legitimacy, and integrity, especially in an era of environmental emergency.”



Renewable energies are a central element in just transition. Photo: Andrew Gustar. Licence: CC BY-ND 2.0. Flickr.

01

Introduction

1.1 Context

Across the globe, countries are committing to far-reaching societal, industrial and economic transitions in response to three interconnected environmental crises: the climate crisis; the crisis of nature, land, and biodiversity loss and desertification; and the crisis of pollution and waste.



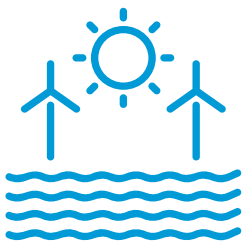
Civil society call for just transition at UNFCCC COP29. Photo: Kamran Guliyev / UN Climate Change.

“ The transition toward environmentally and socially sustainable economies and societies must ensure fair, inclusive, and rights-based processes and outcomes that respect the rule of law and ensure no one is left—or pushed—behind”

These transitions are essential to safeguarding the future of the planet and its people. However, to be effective, sustainable and legitimate, they must also be just — ensuring that the benefits and burdens of change are fairly shared, that no one is excluded or further marginalized, and that justice guides both the processes and outcomes of transition.

The transition to environmentally and socially sustainable economies and societies must guarantee fair, inclusive and rights-based processes and outcomes that uphold the rule of law and ensure no one is left — or pushed — behind. Actively identifying, addressing and mitigating the impacts of transitions, and ensuring that the social and economic costs and benefits of climate and environmental action are fairly distributed, is essential for just transition.

The concept of “just transition” has gained prominence in national and international policy discussions, originally focusing on the protection of workers’ rights and livelihoods — particularly in carbon-intensive sectors such as coal, oil and heavy industry. The preamble of the Paris Agreement acknowledges this, referring to “the imperatives of just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities” (United Nations, 2015, p.2).



“

By strengthening environmental rule of law, countries create the conditions for sustainable, equitable and legitimate transitions that integrate environmental, social and economic concerns.

While labour-related concerns remain critical, they represent only one aspect of the broader picture. A truly just transition must also uphold environmental integrity, social and economic equity, and the rule of law, complementing – not replacing – the labour-focused approach. Strategies must be economically viable, socially acceptable and environmentally sustainable. Acknowledging this, State Parties to the **United Nations Framework Convention on Climate Change (UNFCCC) expanded the scope of just transition beyond labour issues, urging Parties to “transition towards low-emission energy systems... while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards just transition” in the Glasgow Climate Pact (Decision 1/CP.26), and introducing the concept of “just transition financing” (Decision 5/CP.26).** Today, the just transition concept is widely applied across the climate context and beyond.

In this broader context, the environmental rule of law provides a framework that both enables and reinforces just transition. In 2019, UNEP published the First Global Report on Environmental Rule of Law, finding that the failure to fully implement and enforce environmental laws is one of the greatest challenges to effectively mitigating climate change, reducing pollution, and preventing widespread species and habitat loss (UNEP, 2019). A second review in 2023 underscored the need for coherent laws and coordinated institutions to tackle environmental challenges, while underlining the importance of social justice in environmental governance (UNEP, 2023d). These reports clarified that environmental rule of law includes principles of environmental and climate justice. It also requires the design and protection of civic engagement and procedural rights, including access to information, public participation in decision-making and access to justice. Effective environmental rule of law needs well-designed and coherent laws and policies, implemented by capable institutions with clear, coordinated mandates, and grounded in respect for fundamental rights.

By strengthening environmental rule of law, countries create the conditions for sustainable, equitable and legitimate transitions that integrate environmental, social and economic concerns. They ensure that environmental and social transformations are guided not only by policy but also by justice – anchored in legal commitments, institutional capacity, civic participation and respect for rights.

Environmental rule of law is particularly important given the urgency of just transition. While the need for action is immediate, this pressure must not compromise the essential legal and participatory processes that protect rights – including environmental rights – and ensure accountability. Rushing transitions risks creating additional environmental and social challenges, including adverse impacts on human rights and the environment.

Just transition policies will only be effective if they are fairly designed and fully implemented. This involves balancing the interests of diverse stakeholders and acknowledging the interdependence of environmental systems across multiple sectors – from climate and energy to forestry and agriculture. Transition measures must address immediate effects while also considering long-term environmental and social impacts, including the rights of future generations. Applying a retrospective, restorative justice perspective can further strengthen these measures, enhancing both fairness and effectiveness. Conversely, impunity or inconsistent, discriminatory application of the law undermines implementation and erodes the political will needed for just transitions.



European energy transition with solar power. Photo: AlexGo. Adobe Stock.

Environmental rule of law provides the frameworks and tools necessary to navigate the delicate balancing act that just transition requires. Just transition presents an opportunity to tackle some of the most pressing challenges to global environmental protection, sustainable development and the realization of human rights. Upholding environmental rule of law can strengthen, accelerate, and fortify this transformation, making it more resilient and equitable — ultimately paving the way for truly sustainable environmental and social economies and societies.

1.2. Purpose and objectives

This publication aims to provide insights and actionable guidance for states and stakeholders, highlighting the importance of integrating environmental rule of law within just transition to secure a fair, equitable and sustainable future for all. The report seeks to make just transition work for people and the planet by incorporating key components of environmental rule of law. Its specific objectives are to:

- **Clarify the concept of just transition within the environmental context**, providing a proposed formulation that goes beyond the traditional labour-centric or sectoral approach. This clarification is important for building a shared vision and fostering ongoing dialogue among all stakeholders, including governments, businesses and civil society.
- **Offer guidance on achieving just transition**, by leveraging an environmental rule of law framework to ensure that policies and projects benefit both people and the planet. The guidance includes practical steps, good practices and case studies from regions that have successfully implemented just transitions, showcasing tangible outcomes and lessons learned.

1.3. Target audience

This report is designed to inform states, decision-makers and stakeholders engaged in transition policies and initiatives. Its primary audience includes government officials and policymakers, businesses and industry leaders, civil society

organizations, labour unions, community representatives, as well as academics and researchers. These groups play important roles in shaping, implementing, and advocating for effective and equitable transition strategies that align environmental sustainability with socio-economic equity.

1.4. Scope and methodology

1.4.1. Scope

This report examines just transition across various environmental contexts, addressing the integration of environmental sustainability with socioeconomic equity and the protection of rights. It covers all relevant sectors, including energy, manufacturing, agriculture and transportation – and aims to provide a comprehensive understanding of just transition through the lens of environmental rule of law. This approach ensures that transitions are governed by principles of accountability, transparency, fairness, and justice, benefiting both people and the planet.

1.4.2. Methodology

The report employs research, analysis of country examples and identification of good practices.¹ It includes a review of existing literature, case studies from countries with successful transition strategies and insights from key stakeholders. This approach aims to provide actionable guidance for policymakers and stakeholders to achieve a fair, equitable, and sustainable future.

The case studies within this report were initially crowdsourced using a template disseminated by UNEP. To address substantive and geographical gaps, the research team supplemented these with a collection of 14 case studies from around the world. Each case study was classified according to the intersection of just transition and environmental rule of law, and has been highlighted throughout the chapters where appropriate.

1.5. Structure

The report begins by examining the concept of just transition in Chapter 2. It traces the historical evolution of the term and the various ways it has been defined, identifies common elements and explores the scope of the concept. The chapter then proposes a working definition of just transition in the environmental context, analyses its dimensions, including stakeholders, sectors and time – and summarizes its key elements and approaches.

Building on this conceptual foundation, Chapter 3 explores the relationship between environmental rule of law and just transition. It demonstrates how the application of environmental rule of law – across its seven elements – can serve as a catalyst for achieving just transition.

Chapter 4 examines current trends in making just transition work through environmental rule of law, focusing on laws and institutions, rights, civic engagement, justice and financing. Finally, Chapter 5 provides conclusions and recommendations, summarizing the key takeaways, highlighting major challenges and opportunities and offering targeted guidance for stakeholders.

¹ These good practices demonstrate how just transition can be successfully integrated and implemented within the environmental rule of law framework. Through the documentation of these good practices, the report aims to deepen the understanding of the overlap between environmental rule of law and just transition in reality and inspire states and other stakeholders to replicate good practices wherever possible.

A full-page photograph showing a woman in silhouette on a wooden pier or boat, holding a long wooden pole over the ocean at sunset. The sun is low on the horizon, creating a bright, shimmering reflection on the water's surface. The woman is positioned on the left side of the frame, facing right. The background is a vast expanse of water meeting a hazy, orange-tinted sky.

Timor-Leste (Dili District): A woman collects fish and sipu at sunset; coastal livelihoods depend on marine resources increasingly affected by illegal fishing and overfishing.
Photo: Martine Perret / UN Photo.

02

Understanding just transition

While the idea of just transition is gaining traction globally, particularly in discussions on climate change and labour rights, the term is not consistently defined or understood. Different institutions, movements and communities use it in varied ways and for diverse purposes.

In the environmental context, a transition refers to a significant economic, social or political transformation aimed at addressing environmental problems. Such transitions can occur across different sectors and contexts. However, not every transition is necessarily just (see box on unjust transition, below).

Transitions are intended to create economic and environmental benefits, but they may also harm specific communities or have unintended environmental consequences. For example, the energy transition may displace workers and raise energy prices in certain areas (ILO, 2015). Economic opportunities arising from the phaseout of coal mining and coal-fired power are concentrated in sectors currently dominated by men. As a result, unless gender inequalities are addressed, the creation of new jobs may not automatically translate into equitable benefits for women (UN Women, 2023).

Box 1: What does not qualify as “just transition”?*

Incremental transition: A small change matters but it does not constitute a transition – it is merely a shift. Such changes are not transformative enough to address the interconnected environmental, economic and social crises facing the world, and may even reinforce existing unsustainable and unjust structures and processes.

Shortsighted transition: While addressing short-term impacts is important, just transition is a long-term process involving transformative changes in human economies, societies, resource use and our relationship with the environment.

Rushed transition: The environmental, economic and social challenges the world faces are urgent. However, prioritizing speed over procedural fairness and neglecting the time needed to clearly define goals risks producing suboptimal outcomes.

Selective transition: A transition that targets a single sector, stakeholder or impact cannot be considered just. It must be holistic; otherwise, it risks causing spillovers, leakage or other unintended negative effects on other sectors and stakeholders, potentially undermining its original objectives.

Discriminatory transition: A transition that reinforces systems of oppression or discrimination – based on sex, gender, race, religion, ethnicity, nationality, age or other factors – cannot be considered just transition.

Non-inclusive transition: A transition that disregards collective, cooperative and inclusive decision-making is not just. Just transition requires broad inclusion and participation from all stakeholders.

**This is not an exhaustive list, but an illustrative framework intended to identify recurring risks that can derail just transition efforts, supporting more intentional, inclusive and equitable processes and outcomes.*



Sugar cane worker in Guánica, Puerto Rico, January 1942. Sugar cane-based bioethanol is part of renewable transport fuel supply chains, but transition-supported industries can still involve hazardous, physically demanding labour and inadequate working conditions. Photo: Jack Delano / Library of Congress. Public domain.

Industries deemed sustainable and supported by transition measures may still be associated with human rights abuses, poor working conditions and health hazards (Pinker, 2020). Moreover, economic pressures from a transition could have unintended consequences, such as driving developing countries to clear forests to increase agricultural exports in order to finance imports of green technology (UNDESA, 2024). Increased demand for renewable energy is expected to drive a surge in mineral production (World Bank, 2023). The impacts of these actions can undermine attempts to mitigate climate change and address other environmental harms (Johansson, 2023). At its heart, just transition is about justice and equity. Failing to consider social and economic impacts, as well as the political economy of the transition, will undermine its effectiveness and make it politically untenable (UNDESA, 2022).

This chapter unpacks the concept of just transition and its multiple dimensions. It begins by exploring the historical context, tracing its roots in the labour movement to its current prominence in climate discussions and other sectors. Next, it analyses different definitions of just transition and identifies common elements. The chapter then examines its nature and applicability across stakeholders, sectors and timeframes. Finally, it considers different justifications and approaches for just transition, highlighting general principles.

2.1. Historical context

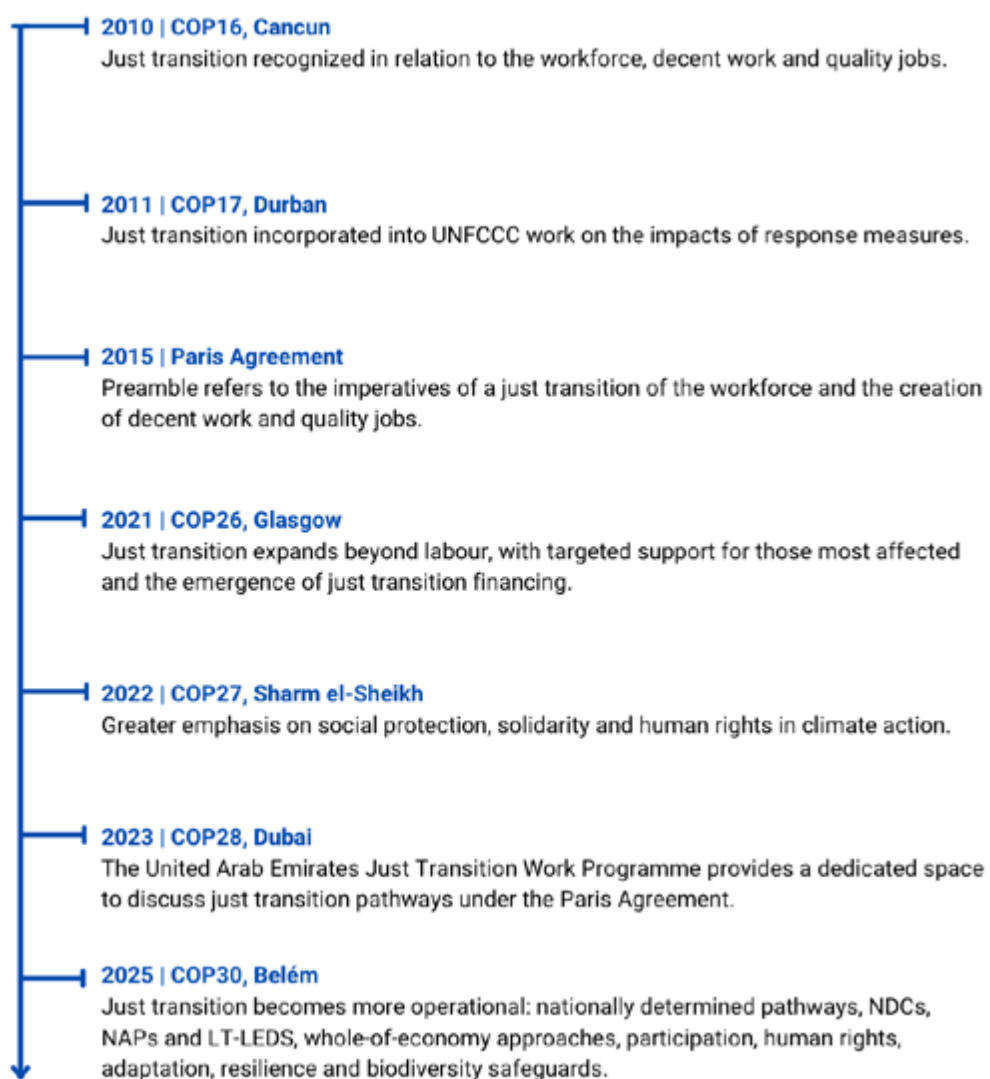
The origins of the just transition concept are often traced to the United States of America labour movement in the 1970s, as a response to the perceived threat of environmental regulation on workers in certain industries (Thomas, 2021). In the 1990s, several unions adopted just transition resolutions and in 1997, a coalition of environmental justice organizations and labour unions from across the world founded the Just Transition Alliance to address workplace health and protect workers and communities from the impacts of pollution (Morena et al., 2018).

Just transition entered the climate discussion in the late 1990s, when the International Confederation of Free Trade Unions (ICFTU) started using the term to describe the potential job losses associated with a rapid move away from fossil fuels, while acknowledging the labour risks posed by climate change itself (Thomas, 2021). At the time, climate change was a divisive issue

among labour and trade groups in Europe and North America. While British, German and Spanish unions supported the adoption of binding targets for emission reduction in the Kyoto Protocol, North American unions, including the United Mine Workers of America, lobbied against it (Thomas, 2021).

Although early articulations of just transition emerged from labour struggles over employment security, its normative foundations can also be understood through broader theories of justice linked to human opportunities and freedoms. The capability approach highlights that equal access to resources does not automatically translate into equal opportunities, as individuals differ in their ability to convert resources into meaningful outcomes due to social, environmental and institutional constraints (Sen, 1999; Robeyns, 2025). Building on this basis, Nussbaum proposes a more explicit normative framework, identifying a set of central human capabilities (including life, bodily health, practical reason, affiliation and control over one's environment) that should be secured as a minimum threshold for a life consistent with human dignity (Nussbaum, 2020). Although the capability approach was not developed specifically for climate governance, its emphasis on substantive freedoms and opportunities resonates strongly with the concerns that motivated early just transition debates and continues to inform them today.

Figure 1: Development of just transition under UNFCCC.



In international climate discussions, the concept of just transition was mainstreamed and evolved. The Cancun Agreements, adopted at the sixteenth session of the Conference of the Parties (COP) to UNFCCC in 2010, recognized that “addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development ... while ensuring just transition of the workforce that creates decent work and quality jobs” (Decision 1/CP.16, para. 10). The next year, at UNFCCC COP17, Parties further incorporated just transition as a focus area in the work programme on the impact of the implementation of response measures (Decision 2/CP.17)

The concept of just transition continued to develop within the context of labour and workers’ rights. In 2013, the International Labour Organization (ILO) adopted a set of conclusions on achieving decent work, green jobs and sustainable development, articulating a vision for “a just transition for all towards an environmentally sustainable economy” that contributes “to the goals of decent work for all, social inclusion and the eradication of poverty” (ILO, 2013, p. 1). These conclusions outlined guiding principles for transitioning to environmentally sustainable economies and societies (see box on ILO guiding principles, below), and a basic framework for just transition, that formed the basis of the ILO Guidelines for Just Transition Towards Environmentally Sustainable Economies and Societies for All published in 2015 (ILO, 2015). Both the conclusions and the guidelines cover a broad range of sectors, including agriculture, construction, recycling and tourism, and promote a vision of greening economies to “manage natural resources sustainably, increase energy efficiency and reduce waste, while addressing inequalities and enhancing resilience” (ILO, 2015, p. 3).

“ In 2013, the International Labour Organization (ILO) adopted a set of conclusions concerning achieving decent work, green jobs and sustainable development, including a vision for “a just transition for all towards an environmentally sustainable economy” (ILO 2013, p. 1).

Following the incorporation of “just transition of the workforce” into the preamble of the Paris Agreement, the twenty-sixth session of the COP to UNFCCC in 2021 expanded just transition beyond labour issues. The Glasgow Climate Pact called on Parties to “transition towards low-emission energy systems ... while providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for support towards just transition” (Decision 1/CP.26, para. 20) and introduced the term “just transition financing” (Decision 5/CP.26). At the same COP, 18 developed country parties – including the United States of America, New Zealand and the European Union and several of its Member States – signed a political declaration on “Supporting the conditions for just transition internationally” committing to assist developing countries and emerging economies in transitioning to sustainable development while supporting workers, businesses and communities (Just Transition Declaration, 2021). Later, the Sharm el-Sheikh Implementation Plan, adopted at COP27, emphasized the social solidarity and protection aspects of just transition (Decision 1/CMA.4).

At COP30 (2025), Parties to the UNFCCC shifted from broad principles towards a more operational approach. Under the United Arab Emirates Just Transition Work Programme, they confirmed that just transition pathways are nationally determined, aligned with the Paris Agreement, and implemented through national climate plans, including NDCs (nationally determined contributions), NAPs (national adaptation plans) and LT-LEDS (long-term low emission development strategies).



Second Thematic Session of the Leaders' Roundtable: "Energy Transition" COP30 in Belém, Brazil. Photo: Connect4Climate. License: CC BY-NC-SA 4.0. Flickr.

Parties also reflected a wider understanding of just transition: it is multisectoral and multidimensional, relying on equity and inclusive participation, social dialogue, labour rights, decent work and quality jobs, skills development, social protection, and respect for human rights (UNFCCC, 2025a).

Parties agreed to develop a Just Transition Mechanism to support international cooperation, technical assistance, capacity-building and knowledge sharing, enabling equitable and inclusive transition pathways. COP30 outcomes framed just transition less as a safeguard against harm and more as a driver of stronger climate ambition. They integrated adaptation and resilience into transition pathways, with greater attention to those facing the most acute climate impacts, and extended the concept to environmental safeguards by linking just transition with ecosystem integrity and biodiversity conservation (UNFCCC, 2025a).

COP30 also adopted the Global Mutirão decision, which recognized that newer NDCs increasingly include stakeholder engagement, response measures and just transition, pointing to their growing integration into national planning (UNFCCC, 2025b). Separately, the Belém Gender Action Plan, also adopted at COP30, connected gender-responsive climate action with just transition for the workforce, including through decent work and quality jobs (UNFCCC, 2025c).

Today the just transition concept is widespread in the climate context. It is found in national and subnational climate laws, including in the European Climate Law and the EU's Just Transition Mechanism, South Africa's 2022 Just Transition Framework, Chile's 2021 Strategy for a Just Energy Transition, and Greece's 2021 Just Transition Development Plan (see section 4.2). As of July 2024, 67 countries reference the just transition in their NDCs (Figure 2. Nationally Determined Contributions referencing "just transition") (Climate Watch, 2024; World Resources Institute, 2025). The concept of just transition also appears in policy discussions in relation to other sectors, such as agriculture and plastics, as described in section 2.4.

Box 2: ILO Guiding Principles for a just transition for all

ILO, Resolution concerning a just transition towards environmentally sustainable economies and societies for all, 111th Session of the General Conference of the ILO, 16 June 2023.

10. The achievement of the ILO's mandate for social justice and a human-centred approach to the future of work is key to a just transition.

11. A just transition promotes environmentally sustainable economies in a way that is inclusive, by creating decent work opportunities, reducing inequality and by leaving no one behind.

12. Just transition involves maximizing the social and economic opportunities of climate and environmental action, including an enabling environment for sustainable enterprises, while minimizing and carefully managing challenges. It should be based on effective social dialogue, respect for fundamental principles and rights at work, and be in accordance with international labour standards. Stakeholder engagement is also important.

13. A just transition is central to delivering sustainable development in its economic, social, and environmental dimensions and to addressing the linkages between them. It is instrumental in taking ambitious action on environmental and climate change and pursuing the realization of the goals and commitments of the Paris Agreement and, as appropriate, other international environmental agreements relevant to a just transition.

14. Ensuring a just transition is important for all countries at all levels of development, and for all the economic sectors, the formal as well as the informal economy, and should be in line with the national development priorities.

15. Strong social commitment and consensus is fundamental. Social dialogue must be integral to policymaking and implementation. Engagement and consultations should take place with all relevant stakeholders.

16. Human rights and fundamental principles and rights at work should be respected, promoted and realized. International labour standards should be ratified and effectively implemented.

17. Gender equality, social inclusion and equity should be promoted, paying particular attention to Indigenous and tribal peoples and groups in vulnerable situations.

18. Policy coherence at all levels and across different fields should be fostered. Adequate provisions for financing for a just transition should be put in place.

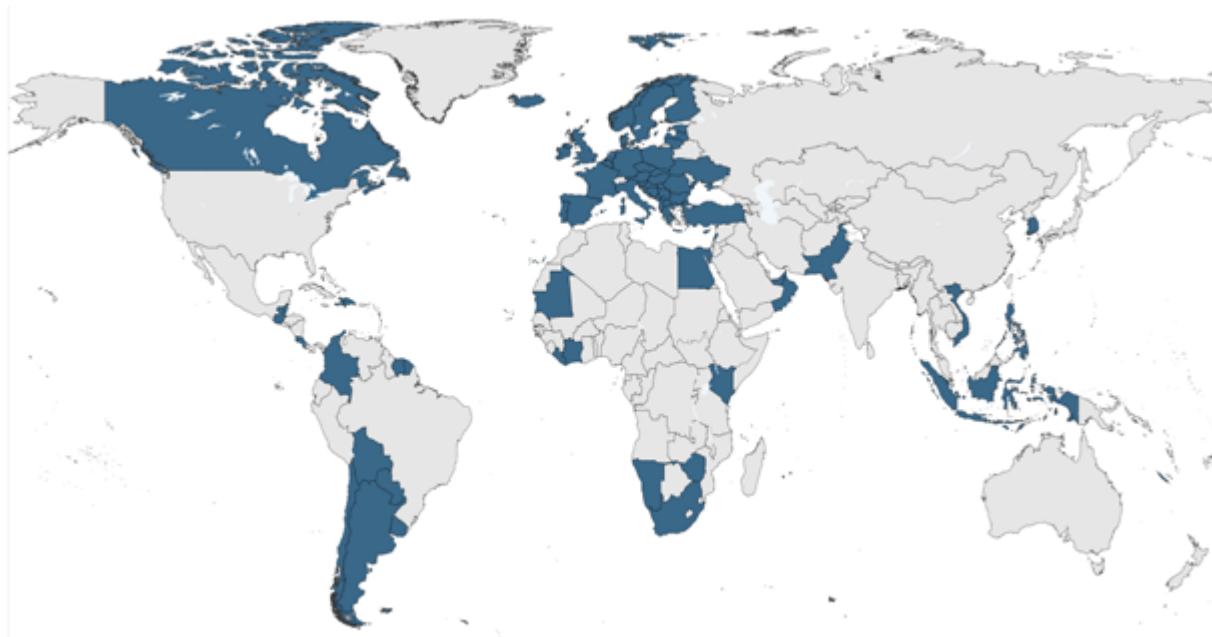
19. The promotion of sustainable public, private and social enterprises by fostering an enabling environment, such as through supportive policies, incentives and clear regulatory frameworks is key for a just transition. Such policies and incentives should be coupled with the promotion of effective social dialogue, advancement of decent work and the promotion of environmentally sustainable business models.

20. Recognizing the ILO mandate as expressed in part IV of the Declaration of Philadelphia and that there is a climate crisis, industrial and productive development policies and access to technology should be a key part of the just transition, to ensure the well-being of all people and the planetary boundaries.

2.2. Defining just transition

While there is no universally agreed definition (Lo and Wang, 2021; OECD, 2023), the phrase “just transition” appears in different contexts and formulations such as “just energy transition” and “just transition of the workforce”. A number of international organizations have offered descriptions or definitions of just transition, including the International Labour Organization (ILO), the Intergovernmental Panel on Climate Change (IPCC), the Office of the High Commissioner of Human Rights (OHCHR), the UN Department of Economic and Social Affairs (UNDESA), the International Trade Union Confederation (ITUC) and the UN Committee for Development Policy (UNCDP) (see table of definitions, below).

Figure 2: Nationally Determined Contributions referencing “just transition”. 69 Parties¹ to the Paris Agreement have explicitly used the term “just transition” in their NDCs.



Map created by UNEP using data from Climate Watch, 2024

Rather than providing a single definition, some actors have articulated a set of principles to guide how just transition should be understood and applied in practice. For example, the G20 has framed it through guiding principles that envision energy transitions as inclusive, equitable and people-centred, ensuring that no one is left behind. This includes safeguarding livelihoods, supporting workers and communities affected by the shift away from fossil fuels, promoting decent work and social protection, advancing gender equality, and enabling the participation of all stakeholders in decision-making (G20, 2024).

The principles also stress the need for strong international cooperation, financing, and capacity-building to enable developing countries to pursue transitions that are both just and sustainable. In this framing, just transition involves aligning climate ambition with social and economic development – balancing the urgency of decarbonization with fairness, opportunity and protection for vulnerable groups.

The lack of a commonly agreed terminology and definition creates challenges. Inconsistent interpretations of “just transition” across international legal instruments can complicate negotiations and hinder legal interpretation. A shared definition could aid judges in interpreting and

Box 3: G20 Brazil 2024 - Principles for Just and Inclusive Energy Transitions

1. Energy planning for just and inclusive energy transitions.

Acknowledge the importance of long-term regional and domestic energy planning and policies across various sectors to guide actions and financing mechanisms that promote energy transitions and design and implement just and inclusive energy transition policies in individual countries, while ensuring energy security, affordability, accessibility, and markets stability and economic prosperity.

2. End energy poverty.

Tackle all forms of energy poverty, with a focus on ensuring access to affordable, reliable, sustainable and modern energy, including clean cooking, for all.

3. Social dialogue and stakeholder participation.

Foster social dialogue and encourage meaningful and effective participation by all relevant stakeholders, including from affected communities, employers' organisations and trade unions in the decision-making processes related to energy transitions.

4. Social protection.

Strengthen the access to appropriate social protection systems for all as part of just and inclusive energy transitions in order to support workers and communities, with particular consideration to the poor and those in vulnerable situations.

5. Policy inclusiveness.

Incorporate intersectional perspectives on gender balance, including women empowerment, age, race, ethnicity and those in any vulnerable situations into energy planning and policies and ensure a fair distribution of costs and benefits.

6. Respect rights.

Respect, promote and consider respective obligations on human rights, and on the rights of Indigenous Peoples, local communities, persons with disabilities as well as labour rights in the planning and implementation of energy transitions policies and projects.

7. Invest in affordable and reliable solutions for just and inclusive energy transitions.

Explore efficient, inclusive and just mechanisms for cost allocation in energy solutions and their impact on the cost of energy, with a focus on timely mobilisation of resources and working towards facilitating low-cost financing in developing countries for innovative technologies and business models, to widely share the benefits and to help mitigate the burden of energy transitions, especially on the poorest segments of the population.

8. Implement secure and sustainable solutions.

Implement effective and inclusive measures to ensure localised value creation and maximise the socio-economic, environmental and other benefits and their fair distribution, while making efforts towards mitigating negative socio-economic and environmental impacts of energy-related policies and infrastructure and the extraction, refining and processing of certain critical energy transition minerals while respecting permanent sovereignty over natural resources and energy infrastructure.

Continues next page

Box 3: G20 Brazil 2024 - Principles for Just and Inclusive Energy Transitions (continued)

Continued from previous page

9. Sustainable and inclusive economic growth for all.

Promote social and economic development through reliable, diversified, sustainable and responsible supply and value chains, inclusive international cooperation and local value creation and beneficiation at source for all, including in developing countries and economies in transition.

10. Quality jobs and workforce development.

Create decent work and quality jobs in accordance with nationally defined development priorities and enable sectoral labour mobility and workforce transformation through reskilling and up-skilling to create avenues of employment, while creating greater opportunities for all, noting the ILO guidelines on a Just Transition for all in this regard, as relevant.

applying just transition provisions by enabling reference to approaches adopted in other jurisdictions and forums. Divergent definitions also make it harder to monitor the uptake and effectiveness of just transition approaches, as different legal instruments, projects and cases may be included or excluded depending on the definition used. More broadly, this lack of consistency hampers global discussion and the exchange of experiences that could advance global environmental, social and economic goals.

Despite the varied interpretations of the phrase ‘just transition’ and the absence of a common definition, certain fundamental elements emerge across the different approaches. These can serve as a starting point for developing a common understanding of just transition. This section identifies key elements that appear across definitions. It explores the possible scope of just transition in terms of stakeholders, sectors and time. From this, it proposes a working definition of just transition in the environmental context.

2.2.1. Common features in just transition definitions

All definitions share the premise that a transition to a more environmentally sustainable economy is not only desirable, but inevitable. Just transition involves managing this shift in ways that also ensure its economic, social and environmental viability.

Most definitions emphasize that **no one should be left behind**, but this could be interpreted in several ways. A transition towards a sustainable economy and society will create new opportunities, yet these may only be available to certain groups while others are left behind or pushed further behind. A proactive and intentional plan is therefore needed to ensure that benefits are equitably available to all.

The transition may also eliminate existing opportunities, for example, by rendering unsustainable industries unprofitable or obsolete. Those affected – particularly individuals whose experience, training, age, gender, physical capabilities or geographic location make career shifts difficult – risk being left behind (UNFCCC, 2016). This concern extends beyond the formal workforce to include subsistence farmers and fishers, nomads, pastoralists, communities benefiting from resource rents, domestic labourers and care providers and others engaged in traditional livelihoods. The “no one left

Table 1: Examples of definitions of just transition

	Source	Definition
ILO	ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all (2015)	A process towards an environmentally sustainable economy, which needs to be well managed and contribute to the goals of decent work for all, social inclusion and the eradication of poverty.
Working Group on Business and Human Rights	Extractive sector, just transition and human rights. A/78/155	...the term "just transition" refers to the transition to a green and zero-carbon economy that is fair and inclusive, creates decent work opportunities and upholds the human rights of affected communities, in particular Indigenous Peoples and populations affected by energy poverty, through social dialogue and meaningful participation, particularly in decision-making on the use of land and natural resources.
UN Secretary-General	Synthesis report on opportunities, best practices, actionable solutions, challenges and barriers relevant to just transition and the full realization of human rights for all people / Report of the Secretary-General. A/HRC/60/52	Just transition should be understood comprehensively as a transition towards environmentally sustainable economies and societies for all that is fair, equitable and inclusive, creates decent work opportunities, reduces inequalities and poverty, and enhances and upholds all human rights, including the right to development and the right to a clean, healthy and sustainable environment.
Special Rapporteur on extreme poverty and human rights	Extreme poverty and human rights. A/75/181 (2020)	An essential understanding of the "just transition" is that the workers and communities affected by the ecological transformation should be protected from its impacts...The transition also needs to open up new opportunities and strengthen the rights of people living in poverty.
UNDESA	Policy Brief no. 141: A just green transition: concepts and practice so far (2022)	...strategies, policies or measures to ensure no one is left behind or pushed behind in the transition to low-carbon and environmentally sustainable economies and societies.
UNCDP	Report on the twenty-fifth session E/2023/33 (2023)	...ensuring that no one is left behind or pushed behind in the transition to low-carbon and environmentally sustainable economies and societies...
OECD	Unpacking public and private efforts on just transition (2023)	The concept of the just transition recognises that social and environmental issues are interlinked and broadens the debate around moving to a low-carbon economy -- that is, away from a purely technical discussion to one that considers the impact on social justice, place and identity.
ITUC	"Just transition" on the Agenda (2009)	a tool the trade union movement shares with the international community, aimed at smoothing the shift towards a more sustainable society and providing hope for the capacity of a 'green economy' to sustain decent jobs and livelihoods for all.
IPCC	"Synthesis report of the IPCC sixth assessment report (AR6)," Annex I Glossary	...a set of principles, processes and practices that aim to ensure that no people, workers, places, sectors, countries or regions are left behind in the transition from a high-carbon to a low-carbon economy.
IUCN World Commission on Environmental Law (WCEL)	Technical Brief: The Role of Law in Enabling a Just Transition (2023)	...a fair distribution of burdens and benefits of the transition to a low-carbon economy.
Indigenous Summit	Indigenous Summit Just Transition (2024)	For Indigenous Peoples, a just transition means exercising our own customary institution and Indigenous Peoples' governance systems, based on our traditions and ways of life. It is a restoration of what we were, a return to wholeness, from the womb of our mother to the stars above us. It is our cultural right to be who we are and our physical right to be healthy and have a good life, to be safe. We seek Just Transformation until all that is sacred is restored.

behind” concept is inherently inclusive and requires particular attention to individuals and groups who are vulnerable or at risk of vulnerability.

Definitions of just transition **bridge multiple perspectives**. They unite concepts from labour law and environmental law (Doorey, 2017), as well as human rights (ILO and OHCHR, 2023). Definitions operate at multiple levels, considering individuals, groups, sectors, countries, supply chains, societies and economies. Defining just transition is an opportunity to bring together aspects of climate justice, energy justice and environmental justice (Heffron and McCauley, 2018).

The element of justice is key to just transition. Definitions of just transition bring in multiple theories and practices of justice in different contexts (Lo and Wang, 2021; Abram et al., 2022). This includes procedural, distributive and restorative justice (Abram et al., 2022; Tigre et al., 2023). Procedural justice includes the requirement for consultation and engagement with all stakeholders, from workers to businesses to affected communities. Distributive justice describes the fair and equitable allocation of costs and benefits associated with transition and is strongly connected to the concept of “no one left behind”. Restorative justice addresses past harms and injustices.

2.2.2. Scope of just transition

The most significant differences among definitions of just transition lie in their scope, across multiple dimensions (see figure on scope of definitions, below). In its broader form, it extends beyond the immediate and near-term impacts on workers in the energy sector to encompass wider social, economic and environmental considerations. However, this wider perspective should not diminish or dilute the urgent concerns of workers in the energy sector. Expanding the concept of just transition across multiple dimensions allows for a more holistic and consistent approach to tackling environmental, social and economic challenges while strengthening the overall effectiveness of transition strategies.

The first dimension expresses the range of stakeholders, from workers and labour organizations to all communities and people, with special attention to those who are vulnerable or uniquely positioned to lead change. Almost all definitions of just transition address labour issues and the protection of workers (Eisenberg, 2019), aiming to ensure that the burdens of decarbonization do not fall disproportionately on vulnerable workers. They also emphasize access to secure employment, adequate pay, healthy and safe working conditions and freedom from discrimination.

Beyond labour, definitions encompass broader socioeconomic justice, including the social and economic impacts of environmental degradation (Johansson, 2023; Savaresi et al., 2023). This includes workers outside the formal economy, such as unpaid domestic labourers, informal-sector workers, subsistence farmers, pastoralists and communities engaged in traditional or alternative livelihoods, as well as those indirectly affected by the transition. Other key stakeholders include Indigenous Peoples, women, children, youth and future generations (see section 2.3.). The scope also extends to diverse social, economic and environmental interests, covering impacts on health, sanitation, food security, property, housing and cultural heritage.

The second dimension is sectoral, spanning from a core focus on climate change and energy to broader consideration of all environmental threats, particularly the three planetary environmental crises and their underlying causes and drivers. Today, just transition is most closely associated with energy and climate change. However, the ILO and other organizations have a long history of promoting just transition across different sectors, including construction, agriculture and waste management (ILO, 2015). The just transition framework can also be applied in other contexts, from addressing plastic pollution to enhancing sustainable forestry (see section 2.4.).

Figure 3: Scope of definitions of just transition, from core definitions focused on near-term impacts on labour in the energy sector to wider definitions encompassing broader temporal and sectoral scales.



Recent conceptualizations of just transition have expanded its scope along a **third dimension: the temporal dimension**. A narrow definition focuses on the present and near-term aspects of the transition. A broader understanding stretches further into the future, encompassing rights of future generations, and reaches into the past to include restorative justice (Abram et al., 2022). This expanded temporal scope raises important questions about how to define justice in relation to past harms and how to distribute benefits fairly across present and future generations (see section 2.5.).

There is significant value in adopting a multifaceted scope for just transition. While some approaches emphasize the effects of the energy shift on workers in fossil fuel and related industries (Johansson, 2023), a broader perspective allows for consideration of trade-offs and connections among diverse interests. This approach intersects with existing concepts like sustainable development and environmental justice, enabling it to build on existing frameworks to tackle the challenges of transition. In this report, we adopt a broad definition of just transition that encompasses the social, economic and environmental impacts of the global shift towards sustainability across sectors, while emphasizing justice and fairness for all stakeholders and across generations.

2.2.3. A working definition of just transition in the environmental context

Drawing on diverse interpretations from both theory and practice, this report proposes the following articulation of just transition in the environmental context, intended to guide ongoing dialogue and support the practical implementation of just transition efforts:

Just transition, in the environmental context, refers to a fair, inclusive and rights-based transformation towards environmentally and socially sustainable and resilient economies and societies that respects environmental rule of law and ensures no one is left behind in addressing environmental challenges across all sectors.

For the purpose of this definition:

- “transition” means a transformation involving substantial changes in economic, social or political systems and processes, going beyond a mere shift or incremental change.
- “environmental context” refers to all planetary systems and components (such as biodiversity, water, soil, land, and air) that support human and other life on Earth, as well as the drivers of their degradation or loss, including but not limited to climate change, nature loss, land degradation, and pollution and waste.
- sustainable means meeting the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987).
- “rule of law” means a principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated, and that are consistent with international human rights norms and standards (S/2004/616; United Nations, 2023).

Just transition calls for a transformation of economic and governance systems to safeguard the environment while upholding the environmental rule of law, respecting human rights, enhancing equity, alleviating poverty, and empowering people. It recognizes that these goals can be mutually reinforcing and emphasizes the deep interdependence among all components of the environment, as well as between people and the planet.

Just transition is guided by the principles of equality, inclusiveness, intergenerational equity and non-regression, ensuring that environmental and economic progress does not come at the expense of certain groups or future generations. It requires that legal and policy frameworks, as well as institutions, both protect and meaningfully include those most affected by environmental change, while fostering sustainable and resilient societies and economies for present and future generations. It demands both fair processes and equitable outcomes: decision-making must be inclusive, transparent and participatory, and the distribution of benefits and burdens – such as economic shifts, environmental restoration, and policy impacts – must be equitable.

In the environmental context, just transition recognizes the interconnectedness of all environmental and social systems, acknowledging that actions in one area can have wide-ranging impacts on others. It addresses the interlinkages among the three environmental planetary crises – the crisis of climate change, the crisis of nature, land and biodiversity loss, and the crisis of pollution and waste – and spans key sectors, including climate action (such as reducing greenhouse gas emissions), biodiversity conservation, restoration and sustainable, pollution control, land and water management, and the sustainable use of resources across their life cycles and value chains. It is guided by core environmental principles – prevention, precaution, equality and non-discrimination, the “polluter pays” principle, the use of the best available scientific knowledge, non-regression, common but differentiated responsibilities, and international cooperation – as well as a rights-based approach.

2.3. Just transition across stakeholders

A broad range of individuals, communities, peoples and groups both influence and are affected by just transition. Different stakeholders hold distinct, yet often mutually reinforcing, interests

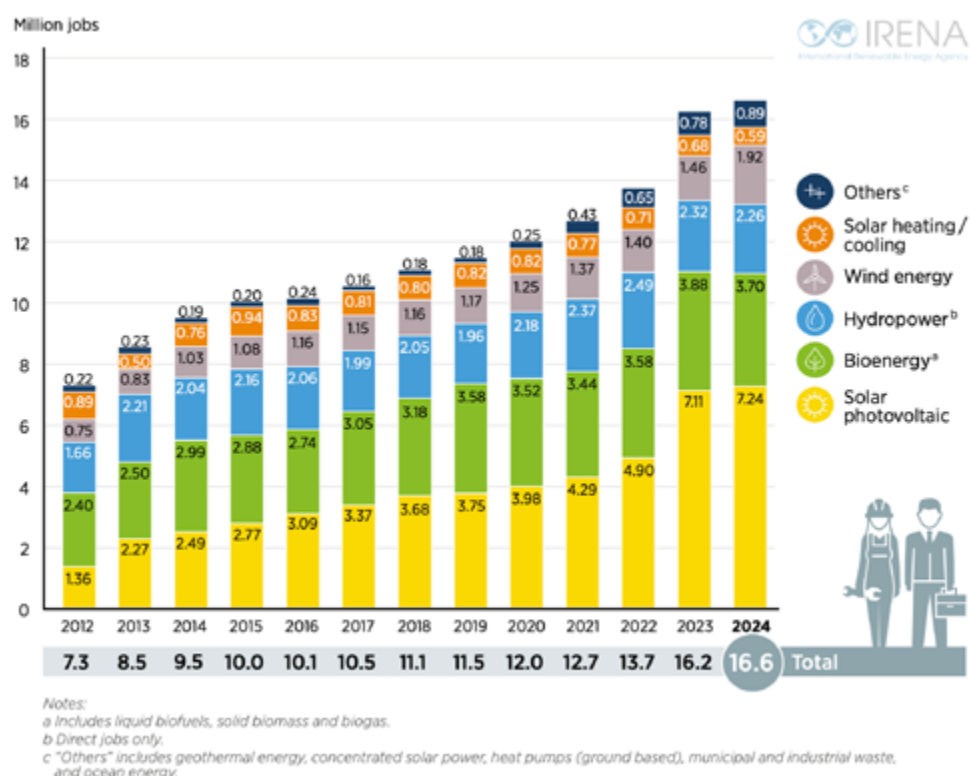
that must be carefully considered and balanced. When transition measures fail to engage specific groups, such as women, Indigenous Peoples and low-income communities, they risk entrenching existing power imbalances. Measures that are facially non-discriminatory measures may, in practice, disproportionately impact marginalized groups; therefore, explicitly considering impacts across gender, race, ethnicity, and other factors is essential to mitigate these harms (Johnson et al., 2020; Lahiri-Dutt, 2023). However, a lack of disaggregated data continues to limit understanding of how economic transitions affect different groups (Walk et al., 2021). This section highlights selected examples of the interests, concerns and roles of different stakeholders in just transition.

2.3.1. Workers

Workers have long been at the forefront of the just transition movement, as climate change and environmental degradation increasingly threaten employment, health, and livelihoods. Climate impacts, such as heat stress, disease exposure and declining business viability, already affect workers, particularly in tourism, agriculture, and fishing, with informal and outdoor workers facing heightened risks (Rosemberg, 2010; Herren et al., 2012; Doorey, 2017). Those in vulnerable situations, including informal workers, women and underrepresented groups, often lack access to social protection, reskilling opportunities and government support, leaving them particularly exposed (International Labour Conference, 2017; ILO and OHCHR, 2023).

There are mixed views on how transition will affect workers. The ILO estimates that a sustainable energy transition and the development of a circular economy may result in the loss of approximately 78 million jobs, while creating around 103 million jobs (ILO, 2024b). However, the jobs created may not align with the skills or geographic location of workers who lose employment, potentially producing winners and losers – and ultimately injustice – even when the overall impact

Figure 4: Jobs in the renewable energy sector as of 2024.



Source: IRENA and ILO (2024).

is positive (Eisenberg, 2019). It is important to recognize that just transition for workers extends beyond job numbers. Just transition policies are critical to ensure decent work, safeguard rights and create fairer opportunities across sectors that are both environmentally sensitive and prone to worker exploitation, such as mining and textiles (Bick et al., 2018; ILO, 2019; UNEP, 2020b).

Workers in the informal economy may be disproportionately affected due to limited access to social protection and unemployment benefits, as well as exclusion from reskilling and upskilling opportunities, and other government support mechanisms. Furthermore, gender inequalities in workforce transitions and access to skills development, along with the exclusion of other underrepresented groups, must be considered in such policies (ILO and UNEP FI, 2023).

2.3.2. Indigenous Peoples

Indigenous Peoples are central to the discourse on just transition, as their livelihoods, cultural identities and collective rights are profoundly tied to land, territories and natural resources. Historically marginalized and excluded from decision-making processes, they often bear disproportionate impacts from extractive industries, large-scale development projects and climate change policies that overlook their rights and knowledge systems. For example, around half of the world's critical energy transition minerals for clean energy production² are located in or near Indigenous territories (Owen et al., 2023), creating tensions with Indigenous Peoples' land rights and tenure (UN, 2025). Natural resource extraction, including that linked to renewable energy projects, remains one of the most pressing concerns for Indigenous Peoples worldwide (ILO, 2022; A/HRC/18/35). Limited recognition, weak institutional support, and reduced access to remedies exacerbate these impacts, often resulting in infringements of Indigenous rights that far outweigh potential short-term benefits from extractive operations (ILO, 2022; A/HRC/18/35).

Without proper safeguards, transition initiatives risk repeating patterns of land dispossession, forced displacement, community fragmentation, and the marginalization of Indigenous women and youth (Declaration of Indigenous Peoples' Participants in the Conference on Indigenous Peoples and the Just Transition, 2024). A genuinely just transition must therefore recognize Indigenous rights and governance systems, ensure meaningful participation and equitable benefit-sharing, and promote Indigenous-led initiatives across renewable energy, mineral extraction, business development, and green finance (A/HRC/54/31; Business and Human Rights Resource Centre, 2024).

2.3.3. Gender

Climate and environmental crises disproportionately affect women (ILO, 2008; Knox, 2013; Universal Rights Group, 2024). Women also experience economic transitions differently due to systemic inequalities (Walk et al., 2021). While more than 80% of green jobs will be in male-dominated sectors (UN Women, 2023), women remain overrepresented in informal, low-wage, and care work – and underrepresented in just transition programmes (UN Women, 2023). Their exclusion, however, is often indirect, as seen in communities impacted by mine closures. Disruptions caused by shifts away from unsustainable industries can increase domestic violence and, in some cases, force women into precarious livelihoods (Lahiri-Dutt et al., 2022; Lahiri-Dutt, 2023).

² Critical energy transition minerals refer to mineral commodities that are necessary for the construction, production and storage of renewable energy, as defined by the UN Secretary General's Working Group on Transforming Extractive Industries for Sustainable Development (UNEP, 2024).



Declaration of Indigenous Peoples' Participants in the Conference on Indigenous Peoples and the Just Transition, 12-14 April 2024, New York.
Photo: Indigenous Peoples Rights International.

Gendered impacts of just transition intersect with race, class, Indigeneity, ethnicity, sexuality, ability status, colonial history and caste (Caretta and Vela-Almeida, 2025). Individuals who belong to one marginalized group face compounded disadvantages. Nonbinary and queer communities are largely overlooked in just transition literature and policy, yet they may experience heightened vulnerability compared to those not belonging to these communities (Goldsmith, de León and Reyes Galindo, 2024).

A gender-responsive just transition must close wage gaps, formalize informal work and ensure equitable access to sustainable employment (ILO, 2024a). It should also be based on sex-, age- and disability-disaggregated data and intersectional analysis; gender-responsive budgeting; equal access to reskilling and green jobs; childcare and social protection measures; safe transport and workplaces; protection from harassment and violence; and support for women-led cooperatives, enterprises and community energy initiatives (UN Women, 2023; ILO, 2024a; UNFCCC, 2024).

Women are leaders and champions in just transition and climate action (Walk et al., 2021). Their full participation has been shown to strengthen decision-making, promote equitable policies and enhance economic resilience (UN Women, 2023).

2.3.4. Children and youth

Children face disproportionate climate risks – approximately 1 billion children live in countries experiencing extreme vulnerability, which threatens their rights, including health (UNICEF, 2025; Li, 2022; Save the Children, 2023) and education (A/76/207; Morgera, 2024). Without targeted safeguards, transitions to sustainable economies and societies could exacerbate these inequalities, particularly for children and youth in marginalized situations. Recognized as key agents of change, young people have mobilized globally for climate justice, including through litigation (Decision 1/CP.27; UNFCCC, 2022; MacKay et al., Parlee and Karsgaard, 2020; Slobodian, 2020; Donger, 2022; Parker et al., 2022). Incorporating a child- and youth-rights perspective into just transition can help address poverty and mitigate exploitation and educational deprivation (CERI, 2023).



children live in countries at extreme vulnerability which threatens children's rights, including health and education.

2.3.5. Older persons

Depending on their political and economic power older persons face heightened vulnerability to environmental hazards due to age-related, socioeconomic and institutional factors, including ageism and inadequate policy responses (A/HRC/47/46; A/HRC/49/61). Their rights are seldom addressed in climate policies, despite increasing care needs (A/HRC/49/61). Just transition presents an opportunity to enhance environmental conditions affecting older persons' rights, while also addressing systemic factors that contribute to their exclusion. For example, addressing energy ageism links social policy with structural, cultural and geographic factors affecting older people (Žuk and Žuk, 2022). Active participation of older persons ensures age-sensitive perspectives and draws on their knowledge of sustainable practices, relevant for, among other factors, disaster resilience (A/HRC/49/61). Traditional environmental knowledge held by elders, including Indigenous practices, is invaluable for effective climate action, supporting sustainable agriculture and cultural preservation (A/HRC/47/46).

2.4. Just transition across sectors

“

The need for just transition is apparent across diverse sectors, from renewable energy to agriculture and plastics... To be effective, just transition needs a holistic rather than a siloed approach ”

The need for just transition is apparent across diverse sectors, from renewable energy to agriculture and plastics. While it is commonly associated with climate change mitigation, ensuring just transition is also important in the context of pollution and waste, as well as biodiversity and nature loss. In these areas, environmental, social and economic impacts can undermine sustainability goals, while the rights and well-being of workers, communities, Indigenous Peoples and other stakeholders may be threatened.

Different elements of the environment are interconnected: climate change drives biodiversity loss; plastics are derived from fossil fuels; and industries like agriculture and fishing influence multiple environmental challenges from water security to carbon sequestration to species conservation. **To be effective, just transition needs a holistic rather than a siloed approach.**

Limiting the scope of the just transition to energy and climate change risks creating unaccounted-for trade-offs (A/HRC/59/42). The full life cycle of fossil fuels – from extraction and processing to use and disposal, including their role in plastics and petrochemical production – entails serious and far-reaching human rights and environmental impacts (A/HRC/59/42). Ramping up renewable energy to achieve a clean energy transition will involve a significant increase in production of critical energy transition minerals, which can damage ecosystems, pollute waterways, harm human health and feed into conflict (UN Secretary-General's Panel on Critical Energy Transition Minerals, 2024). Land use and associated habitat loss and greenhouse gas emissions (GHG), including carbon opportunity costs (Searchinger et al., 2018), are key factors in planning solar and wind farms, energy infrastructure and biomass energy production (Gasparatos et al., 2017). Wind turbines and solar panels can kill birds and bats, while hydropower can fragment and damage riparian ecosystems (Gasparatos et al., 2017). Ultimately, achieving just transition will require holistic thinking.

This section reviews a limited set of examples of sectors where just transition is relevant or already being discussed. This is not an exhaustive list, but a demonstration of the range of areas and industries included in a broad interpretation of just transition.



Photovoltaic panels in the rural areas of China. Photo: hrui. Adobe Stock.



Case study: Indonesia: Coal mining to heritage tourism through community leadership

The closure of coal mines following a proactive transition from non-renewable energy to renewable energy often has long-term consequences, leaving regions economically stagnant for decades (World Bank Group, 2018). However, the revival of Sawahlunto, a former coal town in West Sumatra, Indonesia, illustrates the potential of successful civic participation in mitigating such impacts. After mine closures, residents repurposed their homes into homestays to support heritage tourism. This grassroots initiative was supported by government-provided management training and eventually led to the formation of a homestay owners' association (Yudiantoko and Priyotomo, 2021). These community efforts were further recognized when Sawahlunto was nominated to the UNESCO World Heritage list, with active local engagement through meetings, lectures and public seminars shaping the site's presentation (ICOMOS, 2016). This example shows that through early planning, financial support and meaningful community involvement, just transition processes can overcome economic and social challenges.

Old coal trail in Sawahlunto, West Sumatra, Indonesia. Photo: erwinjonathan. Adobe Stock.

2.4.1. Energy

The concept of just transition is most closely associated with the shift to renewable energy. Transitioning away from fossil fuel industries, such as oil and coal, threatens jobs in already depressed and often impoverished regions. If not managed responsibly, it could lead to human rights violations, conflict and harm to communities along the value chain (UN Secretary-General's Panel on Critical Energy Transition Minerals, 2024). The siting of solar arrays, wind farms, transmission lines and other infrastructure can also lead to environmental degradation and local impacts.

In addition to job loss in specific sectors (ILO, 2024b), badly designed renewable energy policies can exacerbate energy inequality across regions and groups (Belaïd, 2022). However, the presence of climate policies is generally associated with reduced energy poverty (Li et al., 2024). At the same time, climate change itself affects energy costs and access (Tao et al., 2024) making these effects difficult to disentangle.

2.4.2. Mining

The transition to renewable energy and associated electrification of vehicles, homes, offices and industry has created an increased demand for minerals such as lithium, copper, nickel and cobalt. These minerals are essential components of batteries, solar panels, wind turbines and electric infrastructure, among other uses (IEA, 2024). Increased mining demand creates economic opportunities and benefits as well as the potential for negative environmental impacts and infringement of human rights (Aba et al., 2024).

As part of the mining transition, countries are employing benefit sharing mechanisms such as community development agreements and funds, and land and resource leasing arrangements (Aba et al., 2024). Kenya's 2016 Mining Act and 2017 Mining (Community Development Agreement) Regulations require mining companies to enter into community development agreements with local communities, ensuring that benefits from mining projects are shared (2016, sects. 38 & 128; 2017). In 2022, Sierra Leone adopted the Mines and Minerals Development Act, mandating that 70% of revenue generated from leasing land for mining projects be allocated to landowners (2023, para. 36).

2.4.3. Plastics

In recent years, the just transition concept has entered global discussions around plastic pollution. In this context, just transition describes the need to protect communities and workers suffering health impacts from exposure to hazards throughout the plastic life cycle, as well as the need to consider livelihoods and potential impacts on jobs (Scientists' Coalition for an Effective Plastics Treaty, 2023). Transitioning away from plastics is essential due to the negative environmental impacts they have throughout their life cycle, particularly via air and water pollution, as well as on human health and the health of ecosystems (UNEP, 2023a). The International Alliance of Waste Pickers (IAWP) has sought to highlight the importance of just transition in the negotiation of an international agreement to end plastic pollution and the recognition of waste pickers as essential stakeholders in plastics decision-making (O'Hare and Nøklebye, 2024).

2.4.4. Agriculture and livestock

Agriculture and livestock raising are key drivers of GHG emissions, deforestation, biodiversity loss and land degradation. Transitioning away from unsustainable agriculture, including animal agriculture, will affect farmers and agricultural workers (Blattner, 2020). This transition might involve a shift to regenerative agriculture or restructuring food systems in ways that ensure traditional

and local farmers in rural communities are not marginalized as sustainability efforts accelerate (Matsumae et al., 2023). Evidence demonstrates that resilient and inclusive agricultural transformation improves livelihoods and nutrition when it is centred on equity (FAO, 2021). However, shifts in food systems must be accompanied by support for producers in adapting practices, accessing inputs and engaging with new markets (Willett et al., 2019; Springmann et al., 2025). Just transition recognizes the vulnerability of agricultural workers to human rights violations and unsafe working conditions, including exposure to pesticides and extreme heat, and calls for policies and investments that provide support, resources and opportunities to adopt sustainable practices while safeguarding livelihoods and promoting social inclusion.

2.4.5. Forestry

Halting deforestation and supporting forest restoration will affect agricultural and logging industries, among others, potentially impacting the livelihoods of some of the world's poorest people (Rietig et al., 2022). Engaging a wide range of stakeholders, including Indigenous Peoples, local communities and workers in affected industries, will be critical. National forest policy initiatives can aid just transition by supporting sustainable local practices and alternatives to degradation (Rietig et al., 2022). Just transition in the forestry sector requires balancing multiple, sometimes competing, economic and environmental interests, including biodiversity protection (Grantham Research Institute, 2022), the siting of renewable energy projects and infrastructure, biofuel production and the development of sustainable forest products (FAO, 2008).

“Engaging a wide range of stakeholders, including Indigenous Peoples, local communities and workers in affected industries, will be critical”

2.4.6. Construction

In 2023, the buildings and construction sector accounted for 34% of the world's emissions, with embodied carbon in materials like steel and cement constituting 18% of global building-related CO₂ emissions (UNEP, 2025). Unsustainable construction can also be water and energy intensive, and utilize materials obtained through harmful environmental practices linked to deforestation and open-pit mining. New initiatives for green buildings have the potential to create employment while improving energy efficiency and sustainability of the built environment. The ILO has estimated that green construction within the energy sector alone could create 6.5 million jobs (ILO, 2018).

In the transition, it is also critical that climate resilience is integrated into both existing and new green buildings to reduce costs associated with reconstruction processes (IFC, 2023). However, a transition to more sustainable construction also threatens to exacerbate inequality among neighbourhoods, catalyze gentrification and infringe on the rights of construction workers (Rivera, 2024). Therefore, it will be important to ensure that the benefits associated with this growth are fairly distributed. Construction unions will play a role. For example, in New Brunswick, Canada, Insulators Local Union 131, a member of the International Association of Heat and Frost Insulators and Allied Workers, developed a programme to expand work opportunities in installing energy efficient insulation, which compensated in part for a decline in work in pulp mills and oil refineries (Calvert, 2023).



Stark contrast between the forest and agricultural landscapes near Rio Branco, Acre, Brazil. Photo: Kate Evans / CIFOR. Licence: CC BY-NC-ND 2.0. Flickr.

2.4.7. Biodiversity

In 2022, ILO, UNEP and IUCN (International Union for the Conservation of Nature) jointly published a report on Decent Work in Nature-based Solutions (NbS), which explored the relationship between nature-based solutions – measures to address environmental, social and economic challenges through conserving and restoring natural ecosystems – and labour. The report found that policies supporting just transition are essential for ensuring that NbS provides economic benefits that are fairly distributed and help address poverty and unemployment (ILO, UNEP and IUCN, 2022). Ecosystem restoration itself has been connected to just transition, as a means to redress environmental injustice and support community resilience, including in an urban context (Mabon et al., 2024).

2.5. Just transition across time

Equity over time is a core element of just transition. The oft-cited tension between the “end of the world” and the “end of the month” (Martin and Islar, 2021) highlights the temporal aspect of just transition: while mitigating climate change and environmental harm generates long-term benefits, the policies and measures used can impose short-term costs on certain groups. This does not imply an absolute prioritization of short-term needs over long-term goals. Instead, it calls for careful consideration of how the benefits and burdens of environmental transitions interact with past, present and future conditions.



Renewable energy in Costa Rica. Photo: tamifreed. Adobe Stock.

Case Study: Costa Rica: National Bioeconomy Strategy

Costa Rica's National Bioeconomy Strategy includes the country's plan to achieve decarbonization, circular economy and develop new industries leveraging its biological resources to promote social inclusion, equality and women's empowerment (Government of Costa Rica, 2020). The National Bioeconomy Strategy aligns with global frameworks such as the 2030 Agenda and the Paris Agreement. It prioritizes social inclusion, economic diversification with green jobs and sustainable development with climate action. The implementation of this strategy is led by the Interministerial Bioeconomy Committee (Comité Interministerial de Bioeconomía – CIB) established in June 2019. This committee, composed of the Ministry of Science, Innovation, Technology, and Telecommunications (MICITT), the Ministry of Environment and Energy (MINAIE), the Ministry of Economy, Industry, and Trade (MEIC), and the Ministry of Agriculture and Livestock (MAG), has received support from various strategic partners, including the Economic Commission for Latin America and the Caribbean (ECLAC), the Development Banking System (SBD), the Inter-American Development Bank (IDB), and the UNDP's Biodiversity Finance Initiative (BIOFIN).

2.5.1. Present and near-term

The three planetary environmental crises of climate change, nature, land and biodiversity loss, and pollution and waste cannot be seen as problems for the future: they are creating harmful, even irreversible impacts today. Climate change has slowed agricultural growth and productivity of aquaculture and fisheries, contributed to the spread of vector-borne and zoonotic diseases, heat related deaths and malnutrition, driven an increase in devastating floods and storms, and led to displacement around the world (see figure on climate impacts, below) (IPCC, 2022). The increase in extreme weather events due to climate change is estimated to cost the world \$143 billion a year (Newman and Noy, 2023). Habitat destruction is linked to increases in disease; land degradation has reduced agricultural productivity across 23% of the terrestrial area of the planet; pollinator loss threatens up to \$577 billion in annual global crop output; genetic diversity among domesticated and cultivated plants and animals and their wild relatives is declining, making agriculture and livestock more vulnerable to pathogens and pests; marine fish stocks have decreased significantly as a result of overfishing; and Indigenous Peoples and local communities face impacts on health and livelihoods from deforestation, loss of wetlands, mining, pollution and water insecurity (IPBES,

2019). The lifetime cost of plastic produced in 2019 is estimated at \$3.7 trillion (WWF, 2021), and in low- and middle-income countries, waste mismanagement contributes to the deaths of up to 1 million people per year (WWF, 2023).

At the same time, measures and policies intended to address climate change and environmental degradation can harm specific individuals and groups in the short term, even if they result in a long-term net benefit to society. Environmental policies have relatively little aggregate impact on employment, trade, investment and productivity, but they do create winners and losers, putting disproportionate costs on specific industries and communities (OECD, 2021).

The impacts of environmental degradation and environmental transitions are already being felt worldwide, particularly by low-income individuals and vulnerable communities. These short-term, heterogeneous effects cannot be ignored. Failing to account for them in transition policies risks backlash, policy failure and the perpetuation of injustice.

2.5.2. The future

Environmental degradation and the measures we take (or fail to take) to mitigate it will affect both current and future generations. Sustainable development requires meeting the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment, 1987). This concept is closely connected to the principle of intergenerational equity, which views the Earth and its resources as a planetary trust, held by each generation as both beneficiary and custodian, with a responsibility to preserve it for successors (Brown Weiss, 1984). Intergenerational equity implies fair distribution of benefits, risks and costs among present and future generations (Brown Weiss, 1988; United Nations, HLCP, 2024). This principle has been recognized in environmental agreements and invoked in numerous legal cases, often brought by children and youth acting representing generations to come (Slobodian, 2020). Intergenerational equity is also closely tied to intragenerational equity, as inequities within the current generation are magnified over time and exacerbated by environmental harm (Brown Weiss, 2010).

Just transition is crucial to meet the obligations of intergenerational equity.

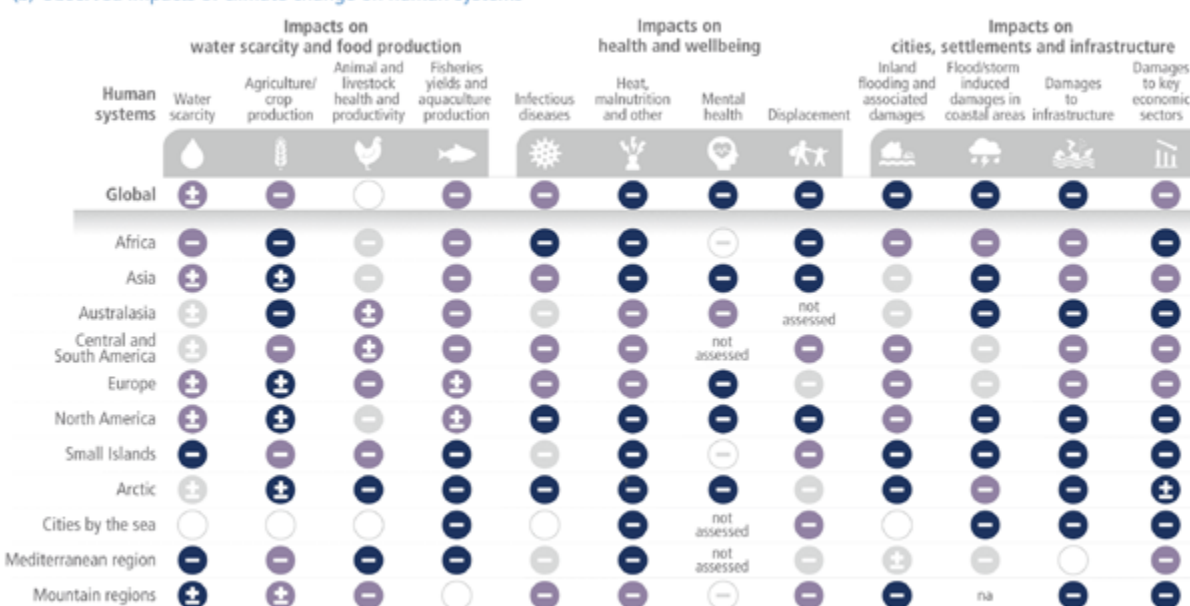
Without immediate action, climate change will have severe long-term consequences for both ecosystems and human societies (Allen et al., 2022). The Maastricht Principles assert that “failure to invest adequate resources to ensure a just and fair transition from the production and use of fossil fuels and other ecologically harmful activities” constitutes a violation of obligations to future generations (Maastricht Principles, 2023).

A focus on future generations encourages a more systematic understanding of global risks and long-term trends, which is essential to achieving just transition. It calls for governance mechanisms that embed intergenerational justice into legal frameworks, promote science-based policymaking, and establish accountability for states and businesses (CEB/2023/1/Add.1).

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The impacts of environmental degradation and environmental transitions are already being felt worldwide, particularly by low-income individuals and vulnerable communities.

Figure 5: Observed impacts of climate change on human systems.

(b) Observed impacts of climate change on human systems



Source: IPCC Sixth Assessment Report Impacts, Adaptation and Vulnerability Figures: Summary for Policymakers Figure SPM.2

2.5.3. The past

Just as decisions made in the present affect the rights and opportunities of future generations, decisions made in the past have created the conditions we face today. History can inform and guide just transition, and potentially just transition processes can help address past harms and injustices (IPCC, 2023).

Just transition can incorporate consideration of the past in several ways. First, it must ensure that transition measures, policies and projects do not perpetuate past injustices or add to cumulative impacts that disproportionately affect vulnerable communities, such as those in sacrifice zones (Boyd, 2022). This requires attention not only to overtly discriminatory policies, but also to how transition measures interact with current and historical structures that lead to inequality. Second, historical factors should inform the fair allocation of costs and benefits, alongside current and future needs and capacities. Third, lessons from past transitions with significant economic and social impacts, such as the Industrial Revolution or the late 20th-century digital revolution can guide current efforts. Fourth, restorative justice should be incorporated, addressing immediate harms while seeking to redress past dispossession and reshape unequal systems that continue to burden communities (Velicu and Barca, 2020; Fitz-Henry and Klein, 2024).

2.6. Elements and approaches

Just transition approaches range from support for green jobs and occupational safety regulation to calls to completely rebuild economic and political systems. Many approaches are process-focused, working towards inclusive decision-making that gives workers and affected communities a voice, often through organized unions. Grassroots approaches to just transition forefront local communities and interests, sometimes contributing to national and global movements (Morena et al., 2018).

Across these approaches, several general elements of just transition become apparent. As discussed in the following chapters, these elements show significant overlap with the principles of environmental rule of law.

Respect for environmental, social, economic and cultural rights. Just transition incorporates a range of intersecting rights, from the right to work and rights at work to the right to a healthy environment (ITUC, 2009b; Bhattacharjee, 2013; Novitz, 2023; Areias, 2024). The right to work often serves as an enabler for other rights, including access to food, shelter, healthcare and social security benefits such as pensions. A strong social safety net can be just as important as – if not more important than – job creation. The right to work is closely linked to rights to human dignity and freedom from discrimination, while access to essential goods and services, including affordable energy, food and housing, supports the realization of these rights. The right to a healthy environment, including safe and sustainable food, clean air, a stable climate, sufficient water and non-toxic workplaces – is a core aspect of just transition. Procedural rights, including the rights to information, participation and access to justice, are equally essential for ensuring that these rights are respected and fulfilled.

Inclusion and involvement of all stakeholders. The principle of “no one left behind” lies at the centre of just transition. Realizing this requires meaningful consultation with all affected stakeholders, including workers, communities, businesses and governments (ILO, 2015; UNFCCC, 2016; IPCC, 2023; Sharma and Aggarwal, 2025). The range of stakeholders requiring special consideration is endless: Indigenous Peoples, racial, religious and ethnic minorities; women; LGBTQI+; children; older persons; informal workers; members of marginalized classes and castes; individuals and families living in poverty; unhoused persons; people without access to education or digital resources; and persons with disabilities, among others. The challenge of just transition is to enable social dialogue and democratic consultation to ensure all voices are heard. Robust processes – embedded in NDCs and collective bargaining agreements – can help mobilize the collective action needed to achieve broad social consensus (ILO, 2025).

Equity in allocation of costs, benefits and opportunities. Transitioning to a more sustainable world will have a net positive impact, but the benefits will not necessarily be equally distributed. Just transition requires measures to ensure that costs do not fall disproportionately on particular individuals and groups, and that benefits and opportunities associated with transition are fairly distributed. The reallocation of benefits can include pensions, subsidies, direct payments, as well as capacity-building and retraining programmes (IPCC, 2022; IPCC, 2023; Tigre et al., 2023; Aba et al., 2024).

Transparency and accountability. Just transition requires accountability from both public and private actors. Businesses must be held responsible for working conditions as well as social and environmental impacts. Government transparency and accountability are key to ensuring justice (ILO, 2015). Transparency, alignment with domestic and international standards, oversight,

traceability, and access to information are vital for ensuring accountability, enabling participation, and addressing human rights and environmental risks (UN Secretary-General's Panel on Critical Energy Transition Minerals, 2024).

Tailored to specific context. While lessons from different jurisdictions can inform just transition efforts, approaches that work in one context may not be effective in others. Solutions for fairly allocating benefits and mitigating impacts must be tailored to each social, economic and political context (ILO, 2015; UNFCCC, 2016). Demographics, gender dynamics, cultural values and geopolitical factors may also play a role.

These elements show significant overlap and complementarity with the principles of environmental rule of law, as discussed in the next chapter.

2.7. Key takeaways

- The concept of just transition has a long history, combining economic, social and environmental concerns.
- A shared understanding of just transition could foster greater coordination and coherence in both its design and implementation.
- The relationship between people and the planet is at the essence of just transition.
- An environmental and human rights approach provides a holistic and integrated perspective, considering the temporal dimension, multiple levels (national, regional and international), sectors and stakeholders necessary for a truly just transition.
- The concept of just transition goes beyond jobs, beyond energy and beyond the near future.
 - Across stakeholders: Implementing just transition is not simply about retraining affected workers. The large-scale economic and social shifts needed for a sustainable future will transform livelihoods and may raise human rights concerns. Particular groups, such as women, Indigenous Peoples, youth and older persons, may require special attention.
 - Beyond energy: Climate change, biodiversity loss, pollution and other environmental threats across sectors endanger human rights and well-being, creating an urgent need for transition. Different sectors are interconnected, meaning that actions in one area can have both positive and negative impacts on others.
 - Across time: Just transition concerns not only the present, but also the rights of future generations and the redress of past injustices.

While the need for just transition is urgent, the process cannot bypass the necessary safeguards to protect rights and ensure stakeholders are involved. In fact, a well-grounded just transition can accelerate progress, for example, projects that have secured free, prior and informed consent tend to advance more smoothly. The following chapters examine how environmental rule of law can support a just transition through strong institutions, protection of rights, and the promotion of public participation and access to justice.

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While the need for just transition is urgent, the rush to just transition cannot skip over the necessary processes to ensure that rights are protected, and stakeholders are involved. On the contrary, a well-grounded just transition process can actually accelerate progress.”



Reed huts powered by solar energy on the Floating Islands on Lake Titicaca. Photo: James. Adobe Stock.

Environmental rule of law as catalyst for just transition

3.1. Introduction

Environmental rule of law applies rule of law principles specifically within the environmental context (UNEP, 2019; UNEP, 2023d). The UN defines rule of law as:

“a principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated, and which are consistent with international human rights norms and standards. It requires, as well, measures to ensure adherence to the principles of supremacy of law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision-making, legal certainty, avoidance of arbitrariness and procedural and legal transparency” (S/2004/616; United Nations, 2023).

“

The concept of environmental rule of law arose in response to an implementation gap observed in the environmental space: not only was there a significant discrepancy between laws “on the books” and environmentally harmful activities in practice, but implementation, compliance and enforcement in relation to environmental matters seemed to lag behind that of other fields (UNEP, 2019). ”

The concept of environmental rule of law arose in response to an implementation gap in the environmental sector: despite a proliferation of laws, there was a significant discrepancy between laws “on the books” and environmentally harmful activities in practice. Implementation, compliance and enforcement in environmental matters often lagged behind other fields (UNEP, 2019). Throughout the 20th century, environmental laws expanded

globally, yet environmental conditions continued to decline – from unprecedented biodiversity loss to widespread pollution, exposure to hazardous substances, and the existential threat of climate change. In the 2010s, the term “environmental rule of law” entered international discourse as a call to apply consistent and fair legal standards specifically to environmental governance. In 2019, the United Nations Environment Programme published the First Global Report on Environmental Rule of Law, followed by a second report in 2023. The Political Declaration adopted by the United Nations Environment Assembly in 2022 recognized the importance of fostering environmental rule of law and effective international environmental governance through multilateral processes and encouraged Member States to promote the development and implementation of environmental rule of law (UNEP/EA.SS.1/4).

There is significant overlap between the seven core elements of environmental rule of law (see box on core elements, below) and the concept of just transition. Both highlight fairness and equity and focus on the importance of inclusive and meaningful participation, transparency and access to justice. The concepts both recognize the relationship between environment and human rights, particularly the

Figure 6: Timeline of development of the concept of environmental rule of law.



Box 4: Core elements of environmental rule of law

Environmental rule of law has seven core elements.

1. Fair, clear and implementable environmental laws. Environmental rule of law is premised on laws that are fair and nondiscriminatory in their development, application, and impact; easily understood and unambiguous; and able to be implemented to effectively achieve their aims in the particular institutional, cultural, and economic context of the country.

2. Access to information, public participation and access to justice. Access to environmental information allows the public to identify violations and determine how to engage effectively. Public participation in environmental decision-making informs the development of fair and implementable laws and improves public support and compliance. Access to justice reinforces both information access and participation, strengthening enforcement by providing mechanisms to protect rights and resolve disputes.

3. Accountability and integrity of institutions and decision makers. Environmental institutions must demonstrate accountability, transparency, and integrity to ensure public support and compliance and to deliver effective environmental protection.

4. Clear and coordinated mandates and roles, across and within institutions. Environmental governance concerns multiple normative systems (statutory, customary, religious, etc.), levels (local, national, international), and sectors (forests, agriculture, waste management, water, etc.) resulting in institutional overlap and gaps. Clear mandates and cross-sectoral coordination are essential for effective implementation.

5. Accessible, fair, impartial, timely and responsive adjudication. Dispute resolution and enforcement mechanisms that are fair, impartial, timely, and responsive increase compliance with environmental regulations, support for environmental initiatives, and public confidence in the judicial process.

6. Recognition of the relationship with rights. Environmental rule of law has a mutually reinforcing relationship with constitutional, human and other rights. A healthy environment is necessary for realizing rights to life, property, and health as well as cultural, economic, and political rights. Constitutional, human, and other rights – including both substantive and procedural rights – provide tools for strengthening and enforcing environmental protections.

7. Specific criteria for interpretation of environmental law. Clear and detailed guidance on environmental laws enable implementing agencies to adopt consistent regulations and enforcement practices and facilitate compliance on the part of regulated communities and the public.

rights of individuals and communities in situations of exclusion, marginalization or vulnerability. Other elements of environmental rule of law will be essential for effectively implementing just transition: clear and implementable laws to set up norms and processes; accountable institutions with clear and coordinated mandates and specific interpretation criteria for effective implementation; and accessible and impartial adjudication to resolve disputes and address grievances.

This chapter examines the role of environmental rule of law in catalyzing just transition. The first section explores the relationship between environmental rule of law and just transition, arguing that just transition is impossible without environmental rule of law, and vice versa. The second section describes how each of the components of environmental rule of law – laws and institutions, rights, civic engagement and justice – fits into the just transition context. The final section concludes by highlighting the opportunities for advancing just transition through the application of environmental rule of law.

Table 2: Linkages between elements of environmental rule of law and just transition

	Elements of just transition	Elements of Environmental Rule of Law
 Aligned elements	 Respect for environmental, social and economic rights	 Recognition of the relationship with rights.
	 Inclusion and involvement of all stakeholders	 Access to information, public participation, and access to justice.
	 Transparency and accountability.	 Accountability and integrity of institutions and decision makers.
 Complementary elements	 Equity in allocation of costs, benefits and opportunities.	 Fair, clear, and implementable environmental laws.
	 Tailored to specific context.	 Clear and coordinated mandates and roles, across and within institutions.
		 Accessible, fair, impartial, timely, and responsive adjudication.
		 Specific criteria for interpretation of environmental law.

3.2. Relationship between environmental rule of law and just transition

The framework of environmental rule of law is inherently complementary to that of just transition. Just transition seeks a transformation of global economic and governance systems to mitigate environmental crises while acknowledging the interconnectedness of all environmental components, respecting human rights, promoting equity, alleviating poverty and empowering people. Environmental rule of law provides the mechanisms to achieve this transformation through law development, implementation and accountability measures. **Integrating environmental rule of law into the just transition discussion emphasizes the importance of accountability, transparency, institutional capacity, effectiveness and rights.** Framing just transition as a rule of law issue underscores concerns about the integrity, legitimacy and effectiveness of governance, particularly in times of urgent environmental challenges.

Environmental and economic interests are inherently interconnected and mutually reinforcing. Natural resources have significant economic value, which is threatened by environmental degradation. While environmental regulation may impose short-term economic costs, the long-term economic impacts of resource loss, environmental degradation and natural disasters are often far greater. For example, the World Bank estimates that the loss of select ecosystem services – such as fisheries, wild pollination and timber from forests – could reduce global GDP by \$2.7 trillion by 2030, exceeding 10% of GDP in low- and lower-middle income countries (Johnson et al., 2021).

The recognition of the mutual dependence of environmental and economic interests is enshrined in the concept of sustainable development. Goal 8 of the Sustainable Development Goals is: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (A/RES/70/1). The connection between environmental protection and labour is further established in the preamble of the Paris Agreement, which cites the imperatives of just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities (UN, 2015). Legal measures that couple economic incentives with environmental protection to support a transition to a more sustainable economy can have overall positive effects on labour markets and societies. Both environmental rule of law and just transition recognize the connection between environmental and economic interests, as well as social and cultural interests and human rights.

Environmental rule of law is particularly important given the urgency of just transition. When the need and will to move quickly are strong, there is a risk of prioritizing speed over justice – focusing solely on achieving the transition rather than ensuring that it is fair, inclusive and sustainable. For example, policies aimed at retraining and employing workers affected by climate change mitigation measures can fail if implemented hastily, without consulting the workers, ensuring adequate social support and opportunities, and guaranteeing that administering agencies are sufficiently funded, capable and free from corruption. In the worst cases, some transition projects can cause greater environmental, social and economic harm than they prevent (ILO, 2015; ILO, UNEP and IUCN, 2022; Lee, 2022; UNEP, 2024b). Environmental rule of law helps ensure that processes for adopting and implementing laws are consistent and effective.

\$2.7
trillion

in global GDP could be lost by 2030 as a result of the decline in a number of selected ecosystem services



Bieruń coal mine in Poland, scheduled to close in 2035. Photo: Ewelina. Adobe Stock.

Case Study: Poland: Social contract and “Jobs After Coal”

For decades, coal has accounted for a majority of electricity generation in Poland (IEA, n.d.). However, growing EU climate mandates (European Parliament, 2022) and financial losses in the sector (Zientara, 2009) have put pressure on the country to transition away from coal. While a small percentage of total employment now lies in the coal value chain, the sector remains deeply rooted in regional economies, making phase-out politically and socially sensitive (Śniegocki et al., 2022). Unlike the unplanned shrinkage of the coal sector in previous decades, driven by economic forces, the current coal phase-out reflects a more deliberate, policy-driven approach to managing the transition.

In 2018, the government introduced a reform programme to restore sector competitiveness, but it failed to achieve meaningful restructuring due to strong union resistance (Śniegocki et al., 2022; Government of Poland, 2018). As the sector continued to transform, particularly under EU decarbonization constraints, recurring protests have reflected coal workers' concerns over pensions, job security and the pace of change (Scislowska, 2021; Associated Press, 2023; Ptak, 2025). In May 2021, following negotiations with trade unions, the Polish government agreed to a coal phase-out by 2049. The agreement, which was signed by the government, trade union representatives, as well as corporate and community representatives, addressed just transition concerns directly by offering early retirement, job transfer and retraining options, as well as regional support mechanisms funded by the EU Just Transition Fund (JTF) (Śniegocki et al., 2022).

In May 2024, the Jobs After Coal programme, an initiative funded by the Just Transition Fund (JTF), was launched to support the transition away from coal in Eastern Wielkopolska (ZEPAK, 2024; Sasiak, 2024). With €60 million in EU support, the programme provides retraining, entrepreneurship support and family assistance for those affected by the transition (Sasiak, 2024). The programme also supports businesses that hire participants (Sasiak, 2024). This shift to structured, participatory and regionally grounded transition strategies marks a significant turning point in the transformation of Poland's coal sector (Sasiak, 2024).



Community consultation on biocarbon in Cassou, Burkina Faso. Photo: Ibrahim Toure / ICRAF. Licence: CC BY-NC-SA 2.0. Flickr.

Political capture of the just transition process by powerful interest groups poses a real risk, potentially leading to policies that fail to allocate benefits fairly and may cause environmental, economic and social harm. Once adopted, such policies can be difficult to reverse (Rietig et al., 2022). Lobbying by industry groups and trade unions has, at times, sought to weaken climate mitigation efforts in the name of making the transition more “just” (Thomas, 2021). Similarly, fossil fuel companies and other entrenched interests have used the just transition concept to delay or obstruct action on climate change and related environmental crises (Harry, Maltby and Szulecki, 2024). Environmental rule of law can help address these risks by strengthening transparency and accountability, and by providing independent and appropriate forums for balancing the environmental and social concerns of different stakeholders.

Just transition policies will only be effective if fairly designed and fully implemented. Impunity – allowing violations of the law without consequences – or applying the law inconsistently or with discrimination threatens the effective implementation of just transition, as well as the political will behind it. For example, mineral policies that are applied only to some companies but not to others have led to criticism and may undermine public support, even if the policy itself is designed to achieve just transition (Aba et al., 2024).

Environmental rule of law will also be important for navigating the multiple sectors and interests involved. Processes for participation and consultation will be crucial to ensure that all stakeholders have a chance to be heard, particularly those who are affected by just transition policies or projects. Institutional coordination will also be especially necessary and difficult as just transition-related policies and projects typically fall under multiple government bodies, such as the ministries of environment, energy, finance, infrastructure, among others.

Strengthening environmental rule of law can lead to transitions that are faster, more robust, resilient and equitable. Developing policies with strong participation and stakeholder buy-in will improve implementation and reduce challenges and delays. By emphasizing the link between environmental protection and human rights, and ensuring those rights are upheld, environmental rule of law helps ensure that transition is truly transformative rather than a superficial shift. Without this foundation, transitions risks leaving behind those already marginalized by previous changes, further entrenching inequality and deepening existing inequalities.

Just as just transition depends on environmental rule of law, the effective realization of environmental rule of law is impossible without just transition. As discussed in Chapter 2,

just transition requires consideration of the economic, social and environmental impacts of policies and measures aimed at achieving sustainability, as well as the fair distribution of their benefits and costs (ILO, 2015). A successful shift to more sustainable production and consumption is essential for the effective implementation of environmental law. When this transition is not carried out in a just manner, it can undermine the legitimacy of, and compliance with, environmental laws, policies and institutions, and can perpetuate violations of human and environmental rights.

Transition measures that do not sufficiently address impacts on different stakeholders can trigger political backlash. Energy policies intended to combat climate change may have contributed to the rise of populist right-wing parties such as Alternative für Deutschland (AfD) in Germany and the BoerBurgerBeweging in the Kingdom of the Netherlands (The Economist, 2023). Climate mitigation policies have also sparked protests by coal miners in Poland and the United States of America, dairy farmers in the Kingdom of the Netherlands, lithium miners in Serbia, and rural and working-class groups opposing fuel taxes in France (Kormann and Steed, 2019; Lazare, 2019; Martin and Islar, 2021; Scislowska, 2021; Moses, 2022; Associated Press, 2023; Cohen, 2024; Higgins, 2024). In many cases, protestors perceive that their interests are not adequately represented in national and global decision-making, and that their voices are not being heard. Such dynamics can have significant political consequences, potentially undermining both just transition goals and the effectiveness of environmental rule of law.

3.3. Application of environmental rule of law in just transition

Achieving just transition requires the coordinated and integrated application of environmental rule of law across all seven elements. These elements are mutually reinforcing and must work together to ensure an effective and equitable transition.

3.3.1. Fair, clear and implementable just transition law and policies

Environmental law³ will form a necessary part of the legal framework of just transition. This includes laws intended to catalyze or facilitate transitions to renewable energy, sustainable agriculture, and a circular economy, as well as laws creating safeguards against potential environmental impacts associated with transition. Environmental laws will be important to ensure that the increase in mining of critical energy transition minerals to scale up renewable energy will not create environmental hazards for workers, communities and ecosystems (UN Secretary-General's Panel on Critical Energy Transition Minerals, 2024). Specific just transition laws and policies will be part of the larger environmental legal landscape and will need to work with other environmental laws. Just transition provisions can be included in broader laws on climate change, energy, mining and other areas. Just transition requires the harmonization of environmental law with other areas of law, including labour, trade, development and human rights (Doorey, 2017).

3. For the purpose of this report, environmental law includes all legislation, regulations, constitutional provisions, codes, ordinances, international treaties, ministerial decisions and declarations, executive orders, case law and other legally binding norms intended for or relevant to environmental protection and natural resource management. In this report, "policy" and "policy frameworks" include all law as well as non-legally binding government policy adopted at the national, international or subnational level.

“ Just as just transition depends on environmental rule of law, the effective realization of environmental rule of law is impossible without just transition.”

“ Environmental law will be a necessary part of the legal framework of just transition. This includes laws intended to catalyze or facilitate transitions to renewable energy, sustainable agriculture, and a circular economy, as well as laws creating safeguards against potential environmental impacts associated with transition”



Thematic hearing on business and prior consultation, IACHR 154th Regular Session (Washington, D.C., 17 March 2015). Photo: Daniel Cima. Licence: CC BY-NC-SA 2.0. Flickr.

Policies supporting education and vocational training will be needed to ensure that workers can take advantage of new jobs created through the transition to a more sustainable economy. During previous periods of transition, such as the Industrial Revolution, education has played a vital role in ensuring economic success, as well as individual well-being (Olsen, 2010).

Social protection will be important to help communities affected by economic transition or by climate change or environmental degradation itself. The increased vulnerability linked to environmental degradation and climate change, as well as the policies intended to transition the economy, may necessitate a change in legal frameworks for unemployment insurance and pensions (Doorey, 2017). Social protection can be tied directly to a green economy through, for example, the conversion of fossil fuel subsidies to social benefits (ILO, 2024b). Strong social protection tied to sustainability policies can also foster broad political support for the urgent measures needed to address environmental threats.

3.3.2. Access to information, public participation and access to justice in just transition

The involvement of all stakeholders in just transition can both build political buy-in and deepen understanding of the needs and interests of affected individuals and groups (Olsen, 2010; UNDESA, 2022). Conversely, failing to account for the needs of impacted communities can undermine the political stability of the transition (UNDESA, 2024).

Public participation must go beyond pro forma consultation. Meaningful engagement needs to begin early in the policy or project process and take into account local challenges, including language, literacy and digital access (UNDESA, 2022). Transition policies and projects should view stakeholders not as obstacles to overcome, but as active partners and sources of knowledge and expertise. Involving a diverse range of stakeholders, particularly marginalized communities, can lead to more successful and effective transition policies and practices by fostering innovation, building grassroots support, and ensuring that measures are responsive to local contexts (Abram et al., 2022; see case study Colombia, below).

Effective public participation requires access to information, as well as the tools to understand and apply it. This is particularly important in the context of just transition, where decisions rely on diverse types of evidence, from economic studies and financial analyses to environmental and social impact assessments. Simply making the raw data publicly available is not sufficient; it must be accessible and understandable to stakeholders and affected communities, and perceived as legitimate and trustworthy.



Arhuaco village in Colombia. Photo: AteneaSGP. Wikimedia Commons.

Case Study: Colombia: Shared prosperity through participation in energy communities

Since 2020, Colombia has made significant strides in transforming its energy sector by enabling the establishment of energy communities, which allow Indigenous Peoples and Afro-Colombian groups to take a leadership role in decentralized and sustainable energy generation. Colombia's 2020 NDCs seek to diversify the energy matrix, promote self-generation of energy through alternative sources, harmonize environmental requirements for nonconventional renewable energy sources (FNCER), and expand access to energy in noninterconnected zones. In 2021, these commitments were made legally binding in Law 2169.

The 2023 National Development Plan (Law 2294) introduced a framework allowing users to generate, trade and use energy efficiently through FNCER, renewable fuels, and distributed energy resources (Law 2294). Importantly, Indigenous Peoples and Afro-Colombian communities are empowered to form energy communities and receive public funding for infrastructure, operation and maintenance. This legal framework has paved the way for pioneering projects that integrate Indigenous governance with sustainable energy systems.

One notable example is the Terra Initiative, a joint project between the Arhuaco Indigenous Peoples represented through Confederación Indígena Tayrona (CIT) and Greenwood Energy, set in the Sierra Nevada de Santa Marta (Greenwood Energy, 2022). Launched in April 2022, the Terra Initiative seeks to produce 39.9 MW of solar energy, using revenue from energy sales to purchase 613 hectares per year for conservation. Over the project's duration, this will result in the protection of 119,000 hectares. The initiative also involves building three villages for 1,200 Arhuaco people, including land designated for agriculture, livestock and ecological restoration. Greenwood Energy has pledged to transfer full ownership of the solar farm to the Arhuaco community after 35 years, guaranteeing long-term benefits and self-sufficiency. The Arhuaco will also receive 5% of the gross revenue from each kilowatt sold, providing financial resources for land conservation and sustainable development.

A central aspect of the project's success is its emphasis on Indigenous governance (Greenwood Energy, 2024). Sacred sites were identified and safeguarded through consultations with Arhuaco spiritual leaders, influencing the placement of transmission lines and infrastructure to minimize environmental and cultural impact. Beyond financial and environmental benefits, the Terra Initiative fosters capacity-building within the Arhuaco community. Greenwood Energy has committed to training Indigenous technicians for the operation and maintenance of the solar plants, ensuring the community's ability to manage and sustain the project. Additionally, the use of blockchain technology will provide transparency and accountability by tracking environmental impact and financial transactions over the project's lifetime.



INVESTING IN PEOPLE AND PLANET FINANCING THE LOW-CARBON, RESILIENT TRANSITION

Climate action risks stalling amid overlapping crises, making better-quality climate finance—prioritising adaptation and resilience for those most affected—essential to a low-carbon, resilient transition. Photo: Simone D. McCourtie / World Bank.

Access to justice protects and reinforces rights to public participation and access to information and provides an additional mechanism for stakeholders to have their voices heard. Access to justice also serves the restorative justice dimension of just transition, helping ensure that those negatively affected by transition policies are compensated and not forgotten.

3.3.3. Accountability and integrity of institutions and decision makers, including just transition finance

Institutions responsible for environmental protection and use of natural resources will be closely involved in implementing just transition. Law enforcement agencies, judicial institutions, scientific bodies, and other government departments engaged in monitoring, enforcement, dispute resolution and adjudication will be essential for ensuring the transition is effective and inclusive.

This is particularly relevant in the context of just transition finance. Just transition finance encompasses the distribution of financial responsibility – between public and private sectors, developed and developing economies, consumers and workers, among others – and the financial instruments used, such as grants, concessional loans and bonds, to help fund decarbonization while ensuring social equity (UNFCCC, 2023). While climate finance broadly supports climate action, just transition finance ensures that the transition is not only environmentally sustainable but also socially and economically fair (Zadek, 2019).

While financial instruments play a crucial role in funding just transition initiatives, the effectiveness of these initiatives depends on strong regulatory frameworks, transparency and enforcement mechanisms to prevent misallocation and ensure meaningful results (UNFCCC, 2023). This can involve defined, measurable policy actions, tying funding to specific milestones, clear environmental and human rights safeguards, transparent and trusted monitoring by third parties such as multilateral development banks or international agencies, and compliance

Case Study: EU: Just Transition Mechanism and Just Transition Fund

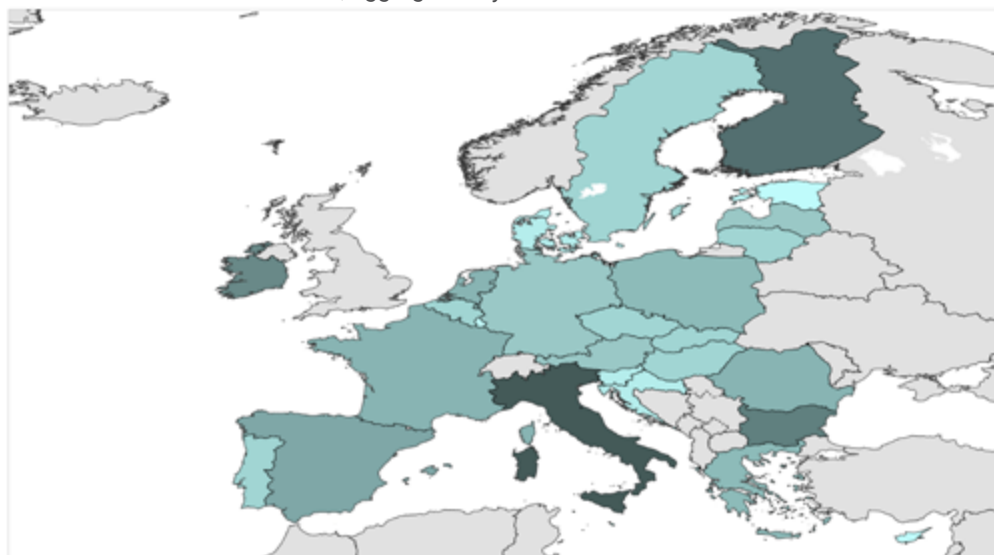
The Just Transition Mechanism (JTM) is a policy framework developed by the European Union as part of the European Green Deal to ensure that the transition towards a climate neutral economy happens in a fair way, leaving no one behind. One of the key pillars of financing within the Just Transition Mechanism is the Just Transition Fund.

With an overall budget of €17.5 billion, the Just Transition Fund (JTF) is designed to provide targeted financial assistance to the most affected territories and workers (2021/1056; Gouardères, 2025). To access the fund, Member States must submit a Territorial Just Transition Plan (TJTP) identifying impacted regions, outlining objectives, and specifying envisaged interventions and governance mechanisms. Access to 50% of a Member State's allocation is contingent upon their commitment to achieving a climate-neutral EU by 2050, in line with the Paris Agreement (2021/1056). The remaining 50% becomes accessible once this commitment is made (2021/1056).

Regulation (EU) 2021/1056 establishing the Just Transition Fund encourages a focus on projects that contribute to a sustainable, climate-neutral, and circular economy, emphasizing resource efficiency. These projects may include the renaturation of sites, the development of green infrastructure, and water management as part of broader land restoration efforts. Additionally, the regulation supports initiatives aimed at reducing energy poverty, particularly through improving the energy efficiency of housing. The JTF also focuses on upskilling and reskilling workers affected by the transition, supporting education, social inclusion, and the development of social infrastructure such as childcare and elderly care facilities. Additionally, the fund promotes gender equality, ensuring that projects benefit diverse communities.

The first implementation phase of the Just Transition Mechanism began in 2022 with funds being deployed for approved projects aimed at economic diversification, renewable energy, and worker reskilling. As of 2024, the Mechanism is actively funding projects in various regions across Europe. The final phase, from 2025 to 2027, will focus on continued implementation, monitoring, and evaluation of the initiative's effectiveness. After 2027, the success of the JTM will be assessed in relation to the EU's long-term goals for climate neutrality.

Figure 7: Just Transition Fund, 2021-2027. Number of JTF territories/zones included in approved Territorial Just Transition Plans, aggregated by Member Stateⁱⁱ.



Map created by UNEP using data from "Just Transition Platform," European Commission. Accessed: 20 September 2024.

mechanisms through which funding may be paused, reduced or redirected if financing conditions are not met. Integrating the consideration of just transitions into national budgets and development plans is key to ensuring strategic allocation of financial resources (UNFCCC, 2023). While private-sector financing can play a role in just transition, government leadership and regulation is indispensable (Bolton et al., 2024; ILO, 2023; UNEP FI, 2023).

3.3.4. Clear and coordinated mandates and roles, across and within institutions for just transition

Achieving just transition will require cooperation across a wide range of fields, including environment, human rights, labour, energy, transport, health, finance and planning, among others (ILO, 2015; UNDESA, 2022). This will involve unprecedented institutional coherence and consistency (ILO, 2015; McCauley and Heffron, 2018). The institutional coordination necessary to navigate multiple sectors and interests will raise logistical, political, even interpersonal issues as working relationships and avenues of communication may not exist.

Environmental rule of law demands effective institutions with clear mandates and sufficient capacity, including the necessary technical expertise. With multiple agencies involved, clear mandates maintain coherency, manage conflicts and establish institutional ownership, but creating such mandates can be politically fraught. Ensuring adequate capacity can be even more complicated, as just transition issues are multidisciplinary and highly technical. Institutional actors and other stakeholders need to communicate across disciplines and translate technical concepts and language. Environmental groups and agencies must be able to work with labour constituencies and communities dependent on fossil fuels, and vice versa (Lo and Wang, 2021).

This need for coordination must be balanced against the urgency of the transition. Additional procedural checks can create bureaucratic delays, but they also often save time and effort in the longer term by preventing inefficient and costly disputes and mistakes.



Press conference held on 12 March 2025 as part of the Future Ministry of Just Transition, an event organized by 50 communities across the United States to discuss their collective vision for a just transition to a green economy. Photo: Yhanson Photography. Licence: CC BY-NC-SA 2.0. Flickr.

3.3.5. Accessible, fair, impartial, timely and responsive dispute resolution mechanisms in just transition

Courts and other judicial mechanisms will play a key role in achieving just transition. A growing body of just transition litigation challenges the impacts of transition, often in the climate and energy context (Savaresi and Setzer, 2022; Tigre et al., 2023). Claims are diverse, ranging from the impact of renewable energy projects on local communities and Indigenous Peoples to potential human rights violations in critical mineral supply chains and procedural deficits in allocating mining concessions (Savaresi and Setzer, 2022; Savaresi et al., 2023). It can be hard to distinguish legitimate lawsuits from those intended to delay climate action, and even valid claims may have the effect of deterring strong climate action (Tigre et al., 2023). However, litigation remains one of the strongest avenues for maintaining accountability and access to justice (see section 4.5., below).

Where just transition involves trade-offs among interests, it will be important to ensure that the impacts are carefully assessed and balanced, and that benefits are used to compensate for the losses. It is also important to ensure that the urgency of transition is not used as an excuse to overturn environmental and social safeguards. Access to justice can be a mechanism for redistribution of benefits and costs by allowing those affected to seek compensation, and imposing accountability on decision makers (Savaresi et al., 2023; Tigre et al., 2023).

3.3.6. Recognition and protection of environmental rights in just transition

Environmental rights are deeply connected with the protection and promotion of economic, social and cultural rights, particularly the rights of marginalized or vulnerable groups. Environmental quality affects human health and productivity, at home and in the workforce. Environmental degradation reduces the availability and quality of natural resources relied on across industries, from agriculture and fishing to energy generation and computing. Climate-related disruptions, including floods, droughts, fires and extreme storms, are expected to cause significant property damage and human migration, as well as job losses and insecurity (IPCC, 2023). In just transition, recognition and realization of environmental rights can reinforce and support economic, social and cultural rights, including labour and Indigenous rights, and ensure that affected communities and individuals are heard.

In July 2022, the UN General Assembly (UNGA) recognized that everyone has the right to a clean, healthy and sustainable environment, following a resolution by the Human Rights Council the previous year. The UNGA resolution calls on States, international organizations, business enterprises and other relevant stakeholders to work to ensure a clean, healthy and sustainable environment through policies, international cooperation and capacity-building (A/RES/76/300). As of June 2025, 165 states recognize the right to a healthy environment in their constitutions, through national legislation or by ratifying regional or international treaties (UNEP, 2025). This recognition can support economic resilience to climate change and other threats. By bridging siloed approaches to people and the planet, it creates a policy and operational space for rights-based just transition.

Environmental rights can support and reinforce workers' rights and labour rights, including the right to work and rights at work (see box on right to work, below). Environmental rights protect workers' health and can implement the right to safe and healthy working conditions. Occupational health and safety standards protect both environmental rights and workers' rights, which can work together to ensure stronger and more complete protection (Doorey, 2017).



Action: Just transition. Photo: Habib Samadov / UN Climate Change. Flickr.

3.3.7. Just transition adapted and contextualized to the national context

Different countries, regions and communities face unique challenges in achieving just transition (Rosemberg, 2010). Climate-vulnerable developing countries where large swaths of the population lack access to affordable and reliable energy will have different priorities than developed countries with high-carbon footprints (UNDESA, 2022; UNCDP, 2023). The international community has recognized a need for a tailored approach to developing just transition plans and policies (Lee, 2022; UNFCCC, 2022). This is connected to the concept of common but differentiated responsibilities.

In practice, developing individual just transition policies that are appropriate for each jurisdiction but amount to sufficiently ambitious action to meet global goals is a daunting task. Policies adopted in one country inevitably affect others, not just through contributions to global climate change and transboundary pollution, but through impacts on international trade (UNDESA, 2022).

Distinct legal and governance structures, such as federalist systems or situations of legal pluralism where Indigenous or traditional laws and authorities operate alongside statutory systems, can create complexity but also opportunities for nuanced and inclusive approaches to just transition (see case study India, below).



Just transition requires safe working conditions, effective safeguards, and decent work. Photo: Tanes. Adobe Stock.

Box 5: Right to work

The Universal Declaration of Human Rights states: “Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment” (art. 23). This right to work is reiterated in the International Covenant on Economic, Social and Cultural Rights, which states that the right to work “includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts” (art. 6.1). The ILO has elaborated the right to work through the Employment Policy Convention (No. 122) mandating members pursue policies to promote full, productive and freely chosen employment; the Employment Service Convention (No. 88) on assisting workers in finding suitable employment; and the Human Resources Development Convention (No. 142) on the development of policies and programmes of vocational guidance and training.

The right to work does not constitute an absolute right to a job (E/C.12/GC/18). Instead, it consists of: 1) the right to decide freely to accept or reject work; 2) the right not to be unfairly deprived of employment, including the right to be free from discrimination in accessing work; and 3) the right of access to a system of protection, as well as technical and vocational guidance, policies and training programmes designed to achieve full and productive employment (ICESCR, art. 6.2; E/C.12/GC/18). It also includes the right to organize and engage in collective bargaining (Mundlak, 2007; ILO and OHCHR, 2023). States are obligated to create conditions conducive to the realization of the right to work. This includes elimination of discrimination in access to employment, ensuring access to technical, vocational and educational training for all job seekers, monitoring the realization of the right to work at the national level, providing support in the event of loss of employment, and adoption of a national employment policy designed to reduce unemployment (E/C.12/GC/18; Stephenson, 2010; ILO and OHCHR, 2023; Twiss, 2023).

In addition to the right to work, the International Covenant on Economic, Social and Cultural Rights (ICESCR) recognizes rights at work, including the right to safe and healthy working conditions (art. 7(b)). The ILO has elaborated these rights in the Occupational Safety and Health Convention, 1981 (No. 155) and its 2002 Protocol, and the Convention concerning the Promotional Framework for Occupational Safety and Health, 2006 (No. 187). The right to work and rights at work are often combined in the framing of a right to decent work.



Meghalaya, India: coal demand drives “rat-hole” mining, reshaping livelihoods and waterways amid a tribunal ban and economic disruption. Photo: Environmental Change and Security Program. Licence: CC BY-NC-ND 2.0. Flickr.

Case Study: India: Addressing rat-hole mining in an environment state

The Northeast Indian State of Meghalaya has a coal reserve of approximately 580 million tonnes (MT) (Ministry of Coal, 2023) and exports an estimated 50 to 80 MT to Bangladesh annually (Economic Times, 2020). All of this coal is extracted through rat-hole mining, a uniquely unsafe method involving three-to-four-foot tunnels (Saha, 2018), often employing children aged 10 to 14 (TERI, 2023). Rat-hole mining has been linked to exploitation of migrant labour (Bhuyan and Sitlhou, 2019), increased child trafficking (Human Rights Now, 2010) and significant pollution (Ghosh, 2018).

In 2014, the National Green Tribunal imposed a complete ban on rat-hole mining (State of Meghalaya v. All Dimas Students Union). Although Meghalaya challenged the ban, the Tribunal maintained it, permitting only transportation of already extracted coal (Chakravartty, 2014). Despite this, 1,156,743 MT of coal was exported in the year following the ban (Majaw, 2016), and 477 violations were reported between 2014 and 2018 (Majaw, 2019), leading to a 100-crore penalty on the State (DTE, 2019).

Meghalaya’s governance is distinct due to its dominant tribal and Indigenous population (Government of India, 1950). Traditional systems and Autonomous District Councils exercise judicial, administrative and legislative powers (Pathak, 2016), and central mining statutes do not apply (Nomani et al., 2021). Coal reserves are therefore privately or community owned by local tribal people (Vakkayil, 2021).

Against this backdrop and the growing threat of climate change, Meghalaya has announced its transformation into an “environment state”, integrating nature into economic planning through nature banking, forest personhood, conservation-based livelihoods and public awareness initiatives (Climate Group, 2023). Complementary efforts include India’s first climate change museum, a “conservation basic income”, a travelling climate change Panchayat and a State carbon market (Climate Group, 2023). The State emphasizes a shift from a “legacy fossil fuel and deforestation-based economy” to a “green frontier model” (Sangma, 2021), and in January 2025 signed escrow agreements with the Union Government to initiate scientific mining in two districts (PTI, 2025).

While nature-based solutions are increasingly promoted in India’s just energy transitions (Majumdar et al., 2023), Meghalaya’s proposed transition seeks to embed these directly into governance. Although enforcement of the rat-hole mining ban has been weak, the State’s climate-centric legislation and conservation-linked job creation may help local communities realign with Meghalaya’s new priorities.

3.4. Key takeaways

- Elements of environmental rule of law are strongly aligned with and complementary to elements of just transition
- Environmental rule of law is essential for effective implementation of just transition; a transition gone wrong undermines environmental rule of law.
- Just transition laws and policies must be fair, clear and feasible to implement. Environmental law and other laws (from energy to tax) will need to consider and support the economic, social and cultural goals of just transition.
- Just transition involves a disparate range of institutions, necessitating clear mandates and mechanisms for coordination, as well as accountability and transparency measures.
- Just transition calls for a rights-based approach that considers environmental, economic, social and cultural rights.
- Meaningful participation, access to information and access to justice are needed to ensure valuable expertise is taken into account and no one is left behind in the transition to sustainability.
- Regional, national and subnational circumstances vary widely and must be considered in designing and implementing transition systems.
- Justice systems and the courts provide accountability, address grievances and resolve conflicts.
- Environmental rule of law can help ensure that financial mechanisms for just transition are adequate, fair and accountable.



Tokyo, Japan (2023): Azabudai Hills integrates green public space and energy-efficient design, illustrating urban decarbonization measures that can support a just transition. Photo: Dale Cruse. Licence: CC BY 2.0. Flickr.

04

Trends in making just transition work through environmental rule of law

4.1. Introduction

While the need for just transition is clear, realizing it is rarely straightforward. Making just transition work in practice is complicated, nuanced and situation-dependent. Just transition laws, policies, projects and commitments are relatively recent phenomena, so it can be difficult to assess their effectiveness and level of success. However, examining case studies and relevant literature reveals emerging trends in incorporating environmental rule of law within just transition frameworks.

This chapter describes trends identified through a review of laws and policies, court cases, and case studies sourced from around the world. It examines: 1) laws and institutions related to just transition; 2) the role of rights and human rights defenders; 3) civic engagement and involvement of diverse groups and stakeholders; 4) justice and the role of the courts; and 5) financing just transition.

4.2. Laws and institutions

4.2.1. Several countries have adopted specific just transition laws and policies

Laws and policies explicitly and entirely focused on the concept of just transition have started appearing in recent years. The European Union established the Just Transition Fund through Regulation 2021/1056, in line with the European Green Deal of 2019 (see case study EU Just Transition Mechanism, above). The European Green Deal propelled the adoption of just transition provisions in climate change laws and policies across Europe. For example, in 2021, Spain adopted Ley 7/2021 on Climate Change and the Energy Transition. In 2021, Slovenia adopted the National Strategy for Coal Mining and Restructuring in accordance with the Principles of a Fair Transition, which sets out a strategy to phase out coal-powered electricity while mitigating impacts on mining communities and supporting access to electricity. The strategy acknowledges that a proactive role of stakeholders and social dialogue are key to just transition, ensuring that no one is left behind at all stages of the transition (para. 5–6).

Not all just transition legislation is viewed positively or enacted in good faith. In 2022, Brazil adopted Law 14.299 on a Just Energy Transition. This law creates the Just Energy Transition Programme to prepare the coal region of Santa Catarina for the phase-out of coal-fired power generation by 2040, including by subsidizing thermal coal plants. The law was challenged in court as undermining the concept of just transition (*Rede Sustentabilidade v. Brazilian Congress*, 2022; Chan et al., 2024). The case illustrates the inherent tensions in applying just transition in practice.



Tuvalu's Coastal Adaptation Project is strengthening coastal protection and institutional capacity across Funafuti, Nanumea and Nanumaga to build resilience to sea-level rise and climate impacts. Photo: TCAP / UNDP.

4.2.2. Just transition provisions are increasingly included in climate, energy and mining laws and policies

Most references to just transition in law and policy focus on climate change and energy, reflecting the prominence of the just transition discussion in this context. The urgent need – and, in some jurisdictions, the rapid pace of action – to address the climate crisis has made just transition a particularly pressing concern.

Dozens of jurisdictions have included just transition provisions in climate change, energy and mining policies (Chan et al., 2024). The Tuvalu Climate Change Resilience Act of 2019, which incorporates the goal of just transition in its subtitle, includes provisions for public engagement, good governance and gender-inclusive climate action. The Colombian Law 2169 of 2021, which sets forth the national climate strategy, provides for the just transition of the labour force through development of green jobs and education and training.

The Korean Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis includes just transition as a key principle for protecting workers, farmers, small and medium entrepreneurs ... in regions or industries that could suffer direct or indirect damage in the course of transition to a carbon-neutral society (art. 2.13). It provides for identification of social groups and districts vulnerable to climate change and impacts of the energy transition, and special measures to build resilience and sustain livelihoods such as support for attracting investment and tax benefits. The Act addresses provisions of administrative and financial support to enable public participation in establishing and implementing climate policies and the need for State and local governments to take public opinion into account in policymaking.



Plave, Slovenia (28 December 2022): The Plave hydroelectric dam on the Soča River, part of Slovenia's renewable power system underpinning its 2050 climate-neutral target. Photo: Taljat. Adobe Stock.

Case Study: Slovenia: A vision of inclusion and justice

In July 2021, the Slovenian National Assembly adopted the Resolution on the Long-term Climate Strategy until 2050, setting a clear goal of achieving net-zero emissions and becoming climate-neutral by 2050 (Slovenia, 2021). The Resolution was developed by the Ministry of the Environment and Spatial Planning, building on Slovenia's international commitments under the Paris Agreement, the Slovenia and the Healthy Planet Framework, and the EU's Regulation on the Governance of the Energy Union and Climate Action (2018/1999). Public participation played a role early in the strategy's development, including an online consultation where stakeholders were invited to help shape the direction of the climate strategy.

The transition to a climate-neutral society is framed around principles of inclusivity and justice. The Resolution emphasizes that:

The transition to a climate-neutral society will be inclusive, and the principles of climate justice will be taken into account. The costs and benefits of the transition will be distributed fairly, as even the most vulnerable population groups will be able to implement mitigation and adaptation measures (2018/1999, p. 3).

The Resolution introduces several mechanisms to support just transition. For instance, Slovenia pledges to develop regional plans for areas most affected by the shift away from fossil fuels and energy-intensive industries, drawing on EU Just Transition Fund grants, domestic financial incentives, and targeted tax policies. It asserts, the transition will be fair, i.e., linked to a programme to preserve and develop new jobs in the most affected regions and areas (2018/1999, p. 39).

Measures are designed to avoid worsening the financial situation of low-income groups, using instruments such as increased social benefits, reductions in social security contributions, and programmes to prevent energy and mobility poverty. At the local level, municipalities are central to implementing the strategy. Slovenia plans to strengthen local and regional capacity through support points housed in existing institutions like regional energy agencies. The government will also issue a handbook to help municipalities develop local climate strategies aligned with national goals.

Since passing the Resolution, Slovenia has strengthened institutional oversight of its climate policies. Under the 2022 Environmental Protection Act, Slovenia established the Climate Council, an independent advisory body charged with monitoring implementation of the long-term climate strategy, among others (Slovenia, 2022; European Parliamentary Research Service, 2025).



Informal plastic waste recycling zone lining the banks of the Buriganga River in the Sadarghat area of Dhaka, Bangladesh. Photo: Muhammadamdadphoto. Adobe Stock.

4.2.3. Just transition provisions address impacts across a broader range of sectors and goals

Within climate and energy laws and policies, just transition provisions can address impacts related to a wider range of sectors, including agriculture, biodiversity and water. For example, the 2020 South African National Strategy for Climate Change Adaptation recognizes the role of nature-based solutions in just transition. The Climate Change Act of Northern Ireland (2022) establishes a just transition Fund for Agriculture, while the Irish Climate Action and Low Carbon Development Act of 2021 calls for pursuing the transition to a climate resilient, biodiversity rich and climate-neutral economy.

While many just transition provisions focus on employment and labour issues, some address additional economic and social goals, such as energy access. The phase-out of fossil fuels creates anxiety that energy prices will rise or energy security will be threatened. In practice, building infrastructure for renewable energy can support expanding electricity grids and innovative energy access initiatives such as micro-grids and community energy projects. Legal frameworks for just transition can enable these projects (see case study Scotland, below; case study Colombia, above).

Laws and policies aimed at addressing biodiversity and pollution often consider economic and social impacts and justice without using the explicit term “just transition”. For example, in Peru, the Law on Integral Management of Solid Waste (Decree 1278) applies the principle of circular economy to production and recycling of solid waste, while considering economic, social and environmental impacts of the transition to a circular economy, including environmental rights and public health (see case study Peru, below). Invoking this concept in these contexts could support legal consistency, clarity and political will.

Case Study: Peru: Mining and the circular economy

Peru is a producer of critical energy transition minerals (Observatorio Nacional de Prospectiva, 2023). However, the mining sector's expansion poses risks to Indigenous lands and ecosystems (EarthRights International, n.d.). Experts have warned that relying solely on new mining operations to meet this demand is neither sustainable nor economically viable at acceptable environmental and social costs (McMaster, 2024). Circular economy principles offer an alternative path by promoting the recovery and reuse of minerals from mine waste and discarded products (Zuloeta, 2022).

Peru has recognized the importance of circular economy principles in its environmental protection framework (Zuloeta, 2022) and as a strategy to respond to climate change (Perú Produce, n.d.). In 2016, the country adopted the Law on Integral Management of Solid Waste, explicitly incorporating circular economy as a guiding principle (Legislative Decree 1278). The law acknowledges the need to minimize the production of solid waste and encourages the use of solid waste as input for other production processes through recycling (Legislative Decree 1278). It further emphasizes efficient resource use, waste prevention and material recovery across all productive sectors. In this context, the Ministry of Energy and Mines established the Mining-Energy Best Practices Convergence Center (Rimay) in 2019. This multi-stakeholder platform promotes dialogue and best practices for sustainable resource management in mining operations.

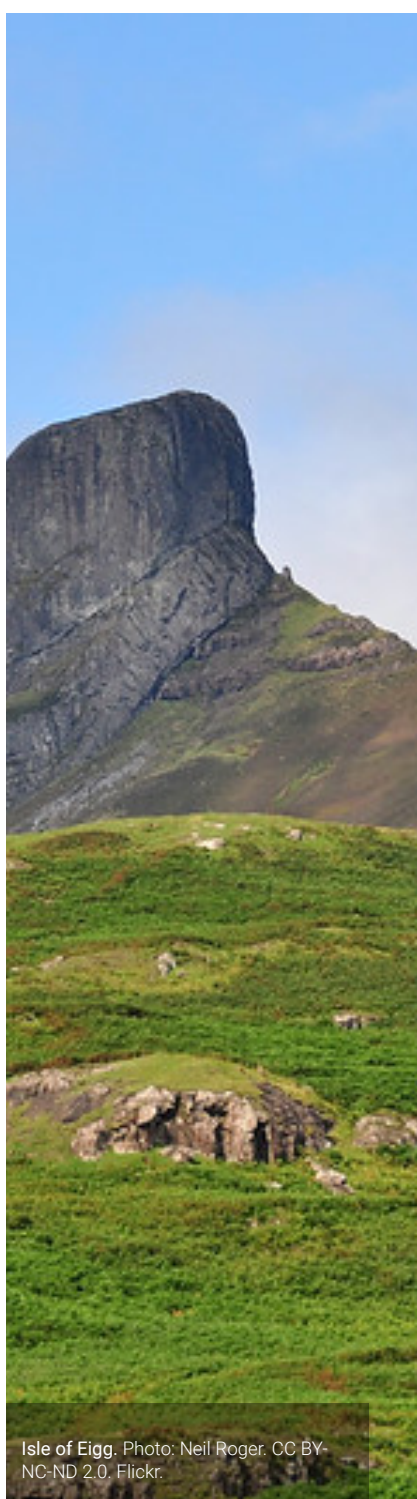
In line with these norms, the circular economy emerged as a cornerstone of environmental regulation in 2021, when the National Environmental Policy 2030 made it a national priority to boost environmental performance in both production and consumption through circular economy strategies (Government of Peru, 2020; Government of Peru, 2021a) ⁴. A significant step in this direction is the Peruvian Pact for a Circular Economy, launched in 2021 (Zuloeta, 2022). The Pact acknowledges that a circular economy contributes to achieving greater social benefits through capacity-building, changing production and consumption patterns, and the creation of new alternative business models that generate employment (Government of Peru, 2021b). This multi-sectoral platform brings together public institutions, private sector actors, academic institutions and international organizations to promote responsible production and consumption.

In 2025, Peru adopted its National Roadmap Towards a Circular Economy. The document is set to guide the implementation of existing norms and policies, as well as the design of future instruments. The roadmap establishes that, to ensure a fair transition to a circular economy, its benefits must be distributed equally and inclusively. The roadmap is guided by several cross-cutting principles, including a gender perspective, inter-cultural approach, human rights-based approach, disability-inclusive approach, and intergenerational and gerontological perspectives. It recognizes the importance of implementing effective social and economic inclusion policies to support vulnerable populations – particularly women – who might otherwise be left behind or negatively impacted (Government of Peru, 2025).

⁴ This plan explicitly highlights the need to improve sustainability by integrating economic, social, and environmental dimensions into production processes. Other relevant norms – including regulatory mechanisms such as extended producer responsibility – require industries to manage the full life cycle of their products, including collection and recycling.

4.2.4. Land and resource tenure plays a key role in just transition

Ownership of and access to land and natural resources play a significant role in just transition. Inequitable ownership and access, often a result of historic injustice and discrimination, can leave communities particularly vulnerable to impacts of transition policies as well as those of climate change and environmental degradation. Traditional and communal tenure may lack legal recognition, particularly among nomadic and pastoralist communities (Davies et al., 2018; FAO, 2021). This can be vital for Indigenous Peoples, who have often suffered dispossession and displacement in violation of their rights to free, prior and informed consent (Declaration of Indigenous Peoples' Participants in the Conference on Indigenous Peoples and the Just Transition, 2024). Land and tenure reform that empowers communities can catalyse just transition (see case study Scotland, below).



Isle of Eigg. Photo: Neil Roger. CC BY-NC-ND 2.0. Flickr.

Case Study: Scotland: Land Reform and the Isle of Eigg

Carbon offsetting in Scotland has generated criticism in recent years for failing to include, protect or benefit the people who live and work on the land (Boyle, 2025). Some of this relates to landlord-tenant models of tenure shaped by ancient systems of aristocracy, as well as recent acquisition of land by large conglomerates (Boyle, 2025).

Land reform laws in the 21st century have established a legal framework that can help address these issues (Ross, 2020). For example, the Scottish Land Reform Act of 2003 allows communities to buy the land they live and work on through a community trust (Ross, 2020). The subsequent Land Reform Act of 2016 gives community bodies a right to buy land if they can show that doing so aligns with the goals of sustainable development, including environmental, economic, social and cultural rights (Land Reform (Scotland) Act 2016). Communities can exercise the right to purchase land through this process even if it is not actively for sale. These reforms have been the subject of multiple legal challenges, particularly by landlords seeking to protect the right to property. However, there have been some striking examples of success.

The Isle of Eigg was purchased by the community after decades of landlord neglect resulting in high unemployment, poor housing conditions and the absence of infrastructure, including the lack of an electrical grid (Community Buyout – The Isle of Eigg, n.d.). The Isle of Eigg Heritage Trust, after raising funds for the buy-out from the public with the support of the Highland Council and the Scottish Wildlife Trust, set up participatory forums for residents to make decisions on all public matters, such as infrastructure development and housing (BBC Travel, 2023). Through the Trust, islanders set up an electricity system powered entirely by renewable sources: hydro, solar and wind. The island has also launched a reforestation project to meet the need for fuelwood as well as wildlife habitat.

The population of the island is now the highest it has been for around 100 years. While the Eigg buy-out precedes the 2003 and 2016 land reforms, it serves as a model for community buy-outs under the new legislation.

4.2.5. Institutional governance of just transition is fragmented but coordination mechanisms show promise

Institutions charged with implementing climate action may not have the mandate or authority to address social or economic considerations or coordinate with sectors other than the energy sector. Some specific just transition institutions exist, often with localized or specific focuses. For example, Australia's Net Zero Economy Authority brings together labour representatives, civil society leaders, financial advisors and academic experts to coordinate policies and investment to achieve a sustainable transition (Government of Australia, 2024; Government of Australia, 2025).

Institutional coordination mechanisms that can cover a broad range of rights and interests are scarce.

In the climate change context, there are instances of cross-sectoral coordination mechanisms that support just transition. For example, the Climate Change Directorate of the Ministry of Environment of Panama works across sectors from green financing, technology and employment to water and wildlife. The Directorate is charged with strategically planning and organizing national climate action in an integrated and cross-cutting manner, in order to enable the ecological, social and economic transition. It conducts research and modelling, provides technical advice and capacity-building, secures financing and evaluates initiatives, and develops public policies, strategies and regulations (Government of Panama, 2017).

In 2018, Spain established the Interministerial Commission for Climate Change and Energy to enhance the coordination and implementation of policies addressing climate change and the transition to a more sustainable economy (Decreto 958/2018). The Commission coordinates the development of key legislation and strategic frameworks, such as the Climate Change and Energy Transition Bill, the National Integrated Energy and Climate Plan, and the 2050 Decarbonization Strategy. Additionally, it ensures just transition for communities and informs the government on the economic implications of climate and energy policies.

The state of Jharkhand in India created a truly cross-sectoral Task Force on Sustainable Just Transition including 17 different state departments covering forests, mines, health, finance, agriculture, rural development, urban development, Scheduled Tribes, Scheduled Castes and more (Government of India, Jharkhand, n.d.). The task force develops policy recommendations on issues related to energy transition (CEED India, 2023). Since its constitution in 2022, the task force has organized a series of consultations with varied stakeholders for the sharing of ideas, learning, challenges and opportunities on relevant issues of carbon budgeting, identification of transition pathways, and building climate resilience of the state (Government of India, Jharkhand, n.d.).

4.2.6. Implementing just transition will require building capacity and adapting existing institutions

The complex, interconnected nature of just transition requires institutions to engage in new projects and areas where they may lack expertise. For example, introduction of ecological taxes and renewable energy subsidies may trigger action from finance ministries and tax departments. Setting reporting obligations around private transition projects, transition finance, and even supply chains can bring in financial, corporate and securities regulatory authorities. Technology transfer, agritech innovation, and geo-engineering schemes can invoke jurisdiction of patent offices, as well as risk assessment and regulation bodies. These agencies may not be accustomed to working with these new types of projects and activities, and may lack in-house capacity to understand

the technical requirements. Conversely, introducing consideration of economic impacts and human rights in environmental decision-making may require adaptation of existing mandates and institutional structures.

4.3. Rights

4.3.1. Transition projects around the world affect human rights

The United Nations Human Rights Council has adopted several resolutions on human rights and climate change, affirming that the adoption of a human rights-based approach (HRBA) is instrumental for enabling development that leads to more sustainable human development outcomes (UNEP, 2023b). However, wind farms, solar farms, hydropower dams, critical mineral mining operations and other projects related to environmental transitions are frequently challenged for violating human rights. In some cases, these projects create environmental harm that implicates the right to a healthy environment (UN Human Rights Council, 2024). They may implicate property rights either by appropriation of private or communally held land without compensation or by creating conditions that interfere with rights-holders' use of their property or resources, such as noise, smells, pollution or degradation. Transition-related projects may affect rights to health, including through hazardous waste, air pollution or water pollution (UN Human Rights Council, 2022).

In 2023, the Supreme Court of Panama determined that the National Assembly's authorization of the Cobre Panama copper mine violated the constitutional right to a healthy environment, as well as other constitutional rights including rights to life and health and rights of children. In doing so, they held that private investment interests cannot override the fundamental rights enshrined in the constitution (Callejas v. Law No. 406, 2023). This case involved a balancing of environmental and economic impacts characteristic of just transition, but held that fundamental rights always take priority.

Rights of women, older persons, children, Indigenous Peoples and other individuals and groups in vulnerable situations may be particularly at risk of rights violations. For example, in Indonesia a group of women farmers brought a case challenging the issuing of an environmental permit for Dairi Prima Mineral's zinc mine, claiming that environmental impact assessment procedures were not correctly followed and the mine risked releasing toxic waste and destroying their livelihoods. The Supreme Court of Indonesia ordered the permit to be revoked (Business and Human Rights Resource Centre, 2025).

Just transition can also be an opportunity for addressing human rights and historic injustice.

When approached through inclusive and participatory frameworks, transition can foster economic self-determination and help address past and present injustice (see case study Canada, below).



The BC government's First Nations Clean Energy Business Fund is ready to help First Nations participate in the renewable energy business.
Photo: Shannon Halliday (nee Miles).
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Case Study: Canada: Reconciliation through energy transition

To address past wrongs and current human rights challenges, the federal government of Canada expressed their commitment to building a renewed relationship with First Nations, Inuit and Métis, guided by the principles of reconciliation and respect for Indigenous rights, promoting self-determination and incorporating Indigenous leadership in decision-making processes (Government of Canada, n.d.; The Canadian Encyclopedia, 2023). A key milestone in this effort was the ratification of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and adoption of the UN Declaration Act on 21 June 2021.

The government conducted a two-year consultation process with First Nations, Inuit and Métis to develop an Action Plan that aims to ensure federal laws align with UNDRIP and uphold Indigenous rights in practice (Government of Canada, 2023a). The Action Plan sets priorities that include promoting the economic inclusion of Indigenous Peoples and their communities in natural resource development, fostering economic reconciliation through engagement on key factors influencing Indigenous economic growth while supporting self-determination, and enhancing Indigenous participation in projects and regulatory matters under the jurisdiction of the Canada Energy Regulator (CER) (Government of Canada, 2023a).

Against this backdrop, in December 2021, the Prime Minister directed the Minister of Energy and Natural Resources to advance just transition and develop a National Benefits-sharing Framework to guarantee that Indigenous communities directly benefit from major resource projects within their territories. The mandate explicitly framed just transition as an opportunity to advance reconciliation. Following this mandate, the Ministry of Natural Resources embarked on a consultation process to develop the Framework identifying opportunities to improve the quality and consistency of benefits that Indigenous communities derive from natural resource projects (IEA, 2021).

The 2023 Federal Budget included budgetary allocations aimed at enhancing Indigenous participation in major projects as equity partners and designated funding for the Canada Infrastructure Bank (CIB) to establish loan programmes that enable Indigenous communities to acquire equity stakes in CIB infrastructure projects (Government of Canada, 2023b). As a result, the CIB launched the Indigenous Equity Initiative to provide loans to Indigenous communities to buy into projects related to clean power, green infrastructure, public transit, broadband, and trade and transportation (Canada Infrastructure Bank, n.d.a). Indigenous communities can participate through community-owned economic development entities, ensuring local control over investments. Currently, this initiative is being developed through the \$138.2 million Nova Scotia energy storage project, aimed at enhancing clean energy infrastructure in Indigenous territories while transitioning Nova Scotia towards renewable electricity (Canada Infrastructure Bank, n.d.b).

4.3.2. Environmental human rights defenders play a critical role in just transition

Environmental human rights defenders (EHRDs) safeguard the rights of communities and groups affected by environmental degradation. The UN Special Rapporteur on human rights defenders stressed that just transition must be rights-based, participatory and protect those defending the planet (Lawlor, 2025). EHRD contributions shape legal standards in emerging areas such as climate justice and biodiversity conservation (Garavito, 2018; A/76/222). Their expertise and perspectives can assist governments in developing policies that are both equitable and sustainable. They expose violations that might otherwise remain hidden, often at great personal risk. EHRDs are playing a pivotal role in the effective implementation of norms and policies and ensuring that legal frameworks uphold both human rights and environmental protection. For example, EHRDs have led efforts to secure renewable energy access while protecting human rights, from Southeast Asia to the United States of America (Madden, 2023; MHP Project – IBEKA, n.d.).

Land disputes linked to wind, solar and hydropower projects have sparked conflicts, and defenders working to raise awareness face increasing threats (Global Witness, 2024). The extraction of critical energy transition minerals has reproduced patterns of environmental harm and human rights violations historically seen in mining (Allied Data Working Group, 2023). Critical infrastructure laws enacted to protect energy projects may further restrict civic space and prevent defenders from exposing social and environmental injustices linked to the transition (International Center for Not-for-Profit Law, 2019).

4.4. Civic engagement

Ensuring that the transition is just will require negotiating the often conflicting interests of diverse stakeholders and groups (McCauley and Heffron, 2018). Transition measures that produce global benefits may harm specific regions or sectors, and different actors will have different ideas of what is just (Eisenberg, 2019). Even within a generic group, such as coalitions of labour unions, there may be conflicts in perspectives and priorities (Thomas, 2021). Public engagement will be essential in moderating these interests, but implementation will not be easy. Different stakeholders have different capacities to participate, based on literacy, education, access to technology, social standing, visibility, political leverage and time availability. This can particularly affect key actors and sources of knowledge including women, Indigenous Peoples, communities involved in relevant industries – such as mining towns – and those highly affected by climate change and environmental degradation.

4.4.1. Engaging diverse groups leads to positive outcomes for transition policies and projects

Labour interests, including unions, have long been recognized as important actors in sustainable development, and involving them in environmental decision-making will be key to ensuring a successful transition (Olsen, 2010). However, efforts at improving engagement in the context of just transition have been criticized as focusing on a narrow class of male workers in energy and mining sectors (Lee, 2022). This narrow focus ignores the myriad economic, social and environmental impacts both broad and acute on communities, consumers and employers as well as workers across industries, including in the informal sector, subsistence workers, and those who provide caregiving and other unpaid domestic labour. It risks exacerbating existing inequality.

Engaging diverse groups in leadership of just transition projects and initiatives can contribute to success on multiple levels. For example, a project on feminist electrification in Haiti has supported



Enèji Pwòp shop expands access to clean energy products as part of EarthSpark's Feminist Electrification approach to addressing energy poverty.
Photo: EarthSpark International.

poverty alleviation, energy access, climate mitigation and economic development as well as gender equality (McManus and Archambault, 2015). In 2024, the ILO held a Global Dialogue on Just Transition with Indigenous and Tribal Peoples, bringing together representatives from governments, corporations, workers and Indigenous leaders from 21 countries (ILO, 2024c).

Around the world, trade unions and advocacy organizations such as Action Aid Cambodia and the Just Transition Institute in Spain promote women's participation in just transition (Casert and Simon, 2023). Many European countries have noted in their just transition plans the need to promote women's increased participation in the labour market such as through improving access to childcare, but most do not include actionable measures on gender equality (Casert and Simon, 2023). More than 80 countries signed the Gender Responsive Just Transitions and Climate Action Partnership at UNFCCC COP28 (2023). The Partnership commits to incorporate rights of women and girls in just transition efforts, encourage gender-responsive strategies on mitigation and adaptation and economic empowerment, encourage development of sex-disaggregated data, and promote measures to value unpaid care and domestic work, including by promoting equal sharing of responsibilities between women and men.

4.4.2. Mechanisms and initiatives exist to involve stakeholders in just transition policymaking

Processes and requirements for public consultation are now standard in environmental and administrative law around the world (UNEP, 2019; UNEP, 2023d). Mechanisms for involving multiple stakeholders in policy development are rarer but are starting to appear in different contexts.

Committees that bring together multiple stakeholders can facilitate informed and effective policymaking. For example, the Green Economy Committee in France – comprising representatives

from lawmakers, local government, business organizations and trade unions, and environmental organizations – issues opinions and policy recommendations on concerns ranging from taxation and market tools to mobilizing financial resources for a green economy. By seeking consensus, it fosters an inclusive approach to making policy (Government of France, 2019). Similarly, the Citizens’ Green Seoul Committee brought together government, industry and civil society to help develop a vision and action plan to improve public transportation and reduce energy use and emissions in The Republic of Korea’s capital (see case study The Republic of Korea, below). In Estonia, civil society was actively involved in developing Territorial Just Transition Plans.



Case Study: The Republic of Korea: Citizen engagement in the Promise of Seoul

Linked to Seoul’s energy initiative, One Less Nuclear Power Plant, that reduced energy consumption equivalent to 2 million tons of oil between the years 2012 and 2014, the “Promise of Seoul” is a community-driven project that sought to reduce CO₂ emissions by 25% by the year 2020 (Larsen, 2018). The project’s goals included reducing the use of public transportation to 66.5% while saving the equivalent of 5 million tons of oil by 2030 through practices of energy efficiency and conservation (C40 Cities, 2015). The initiative institutionalized citizens’ participation through the creation of the Citizens’ Green Seoul Committee, consisting of civic groups, industry experts and bureaucrats. This Committee along with the Citizens’ Committee for One Less Nuclear Power Plant and the Promise of Seoul Execution Committee also played an instrumental role in the write-up committee that designed the programme’s vision and action plan. The State also established an administrative body for the implementation of the 11 promises under the programmes, where citizens were integrated into the programme through a collection of public opinions (online and offline). Throughout the programme, 8,000 individuals spread across 25 districts, citizen action groups, SMG and the Citizens’ Green Seoul Committee have participated in the efforts to achieve the targets set out in the promise (Seoul Metropolitan Government, 2017).



Thermal power generation infrastructure in Mejillones, Chile—illustrative of the generation assets addressed under Chile's power-sector decarbonisation pathway, including coal phase-down and closures. Photo: Victorodd. Wikimedia Commons.

Case Study: Chile: Workers' rights to participate

In 2019, the Chilean government signed an agreement with energy companies to gradually close coal-fired power plants as part of its Energy Sector Decarbonization Plan. As part of the agreement, the government launched a process to elaborate their Just Energy Transition Strategy, including the development of local action plans to assist communities affected by the closures and safeguard the rights of workers during the transition process. In December 2020, the Ministry of Energy issued Supreme Decree No. 42, ordering the implementation of a plan that ensured the reinsertion or reconversion of workers in the labour market. However, this plan was made without consulting the workers who would be directly impacted by the closures.

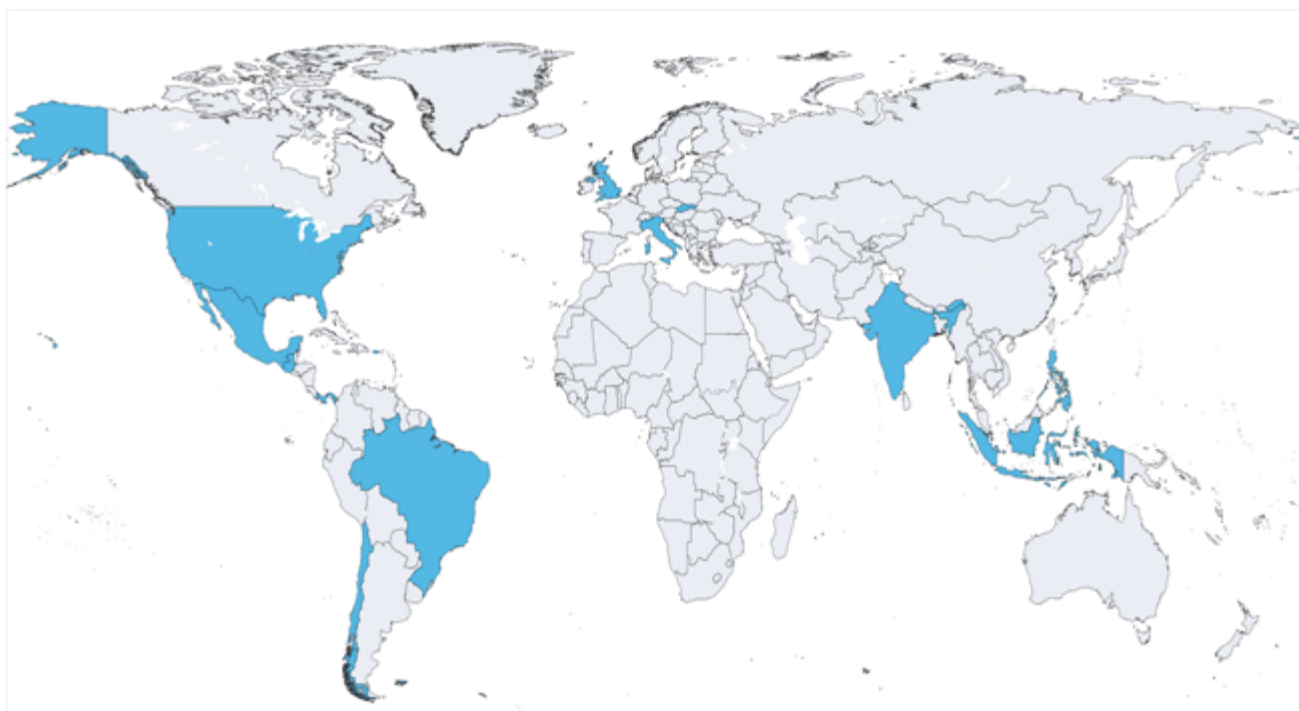
In January 2021, three union workers from a coal mine in Antofagasta filed a lawsuit against the Ministry of Energy, arguing that the lack of consultation violated their constitutional rights under Article 19, including the right to equality before the law, freedom of labour, freedom of association and property rights. The Court of Appeals of Antofagasta initially dismissed the case on procedural grounds. However, in August 2021, the Chilean Supreme Court overruled the Court of Appeals, ruling in favour of the workers. The Court emphasized that while the closure of coal plants is crucial for achieving carbon neutrality, the government must ensure that workers and communities affected by these policies have the opportunity to participate in their development. The Court stated, "despite the fact that the challenged act stands as the 'cornerstone' of the decarbonization process at the national level, the rights of the workers linked to the coal-based energy production industry are threatened due to their exclusion from the development of just transition strategy for energy" (Company Workers Union v. Ministry of Energy, p. 5).

The ruling ordered the government to implement a plan to reintegrate the affected workers into the labour market, this time ensuring that affected workers had the opportunity to participate in its development. In 2022, the appellants asked the court to issue an order requesting a compliance update from the defendant. To date, there is no record of compliance (Tigre et al., 2023).

4.4.3. The justice system acts as a guardian of procedural rights

Procedural justice is a key focus in many cases challenging projects or policies related to just transition. Courts address participation in agency permitting decisions that relate to just transition. In 2023, a group of women farmers sued the Ministry of Environment and Forestry in Indonesia, claiming that it did not follow correct environmental impact assessment procedures in permitting a zinc mine. The Supreme Court of Indonesia described the problematic lack of civic engagement in the project's development, finding that it violated principles of good governance (Business and Human Rights Resource Centre, 2025). Indigenous peoples are frequent champions of action to address environmental impacts of mining and energy projects. In 2023, the Inter-American Court for Human Rights (IACHR) ordered Guatemala to stop nickel mining in the territory of the Maya Q'eqchi' Agua Caliente community, finding that the government had failed to recognize the property and procedural rights of the community and to undertake appropriate consultation (Caso Comunidad Indígena Maya Q'eqchi' Agua Caliente v. Guatemala, 2023). The Supreme Court of Chile invalidated a lithium mining contract for failure to adequately consult with the Atacameña community whose traditional lands would be impacted by the project. Workers and other groups affected by transition policies are also asserting their participation rights through litigation (see case study Chile, above).

Figure 8: Map of selected just transition cases.ⁱⁱⁱ



4.5. Justice

The concept of justice is at the forefront of both environmental rule of law and just transition. Where there is environmental rule of law, justice is backed by an accessible and efficient judicial system that maintains accountability, redresses grievances and resolves disputes. This can involve litigation in courts, or other mechanisms such as administrative tribunals, claims commissions or alternative dispute resolution.

Litigation on issues related to just transition is prevalent around the world (Savaresi et al., 2023; Tigre et al., 2023). These include cases at the national, subnational and international levels.

4.5.1. Courts are called on to balance environmental and economic impacts

Across a range of sectors, plaintiffs are bringing cases against environmental and energy projects and policies on the basis of economic, environmental or social harm.

Some of these are brought by companies affected by environmental and energy policies. When the State of Rio de Janeiro established an Energy Compensation Mechanism to support climate mitigation, the Brazilian Thermoelectric Association (ABRAGET) brought legal action arguing that it imposed an excessive burden on energy companies, in conflict with national policies and beyond the competence of the State to legislate. The Rio de Janeiro state court dismissed the case, determining that the decree was in accordance with the national commitment to preservation of the environment for current and future generations, including through combating climate change (ABRAGET v. State of Rio de Janeiro, 2015).

A cement company in the United Kingdom of Great Britain and Northern Ireland brought an action in 2006 against an agency rule change concerning allocation of emission budget. The company claimed that the new rule gave it a disadvantage against its competitors. The court dismissed the case on the basis that the agency had acted appropriately and the rule was not discriminatory, although it negatively affected the particular plant in question (Cemex v. DEFRA, 2006).

In 2019, a Mexican plastic bag manufacturer challenged amendments to the Solid Waste Prevention and Management Law in the State of Oaxaca, which banned distribution of non-recycled plastic bags. The plaintiff argued that this infringed on their right to conduct business. In 2023, the Mexican Supreme Court upheld the ban, balancing the company's business interests against the environmental harm caused by plastic pollution (Supreme Court of Justice of the Nation (Mexico), 2023).

Other cases are brought by environmental organizations, communities and Indigenous Peoples against projects with negative environmental impacts. In these cases, judges are balancing the urgency of climate change with other environmental interests. In *MK Ranjitsinh v. Union of India*, the Supreme Court of India considered the tension between upgrading energy infrastructure and conservation of biodiversity (2022). In a previous judgment, the court had restricted the use of overhead transmission lines to protect the critically endangered Great Indian Bustard. The court weighed the necessity of upgrading infrastructure to facilitate the transition to renewable energy against the importance of protecting the species. The judgment stated:

It is imperative to recognize the intricate interface between the conservation of an endangered species, such as the Great Indian Bustard, and the imperative of protecting against climate change. Unlike the conventional notion of sustainable development, which often pits economic growth against environmental conservation, the dilemma here involves a nuanced interplay between safeguarding biodiversity and mitigating the impact of climate change (para. 53).

Cases challenging energy and mining projects for failing to adequately consider environmental impact have been decided in Chile, Indonesia, Panama, the Philippines and the United States of America, to name a few (*Corporation for the Development of Aysen v. Environmental Evaluation Service of Chile*, 2018; *Municipality of San Felipe v. SEA*, 202; *Callejas v. Law No. 406*, 2023;

Residents of Sibuyan Island, 2023; Business and Human Rights Resource Centre, 2025). These cases typically allege violations of environmental impact assessment requirements and are brought against government permitting agencies or project proponents themselves.

The common thread across these cases, whether brought by corporations or communities, is the need for courts to undertake a balancing test, weighing diverse and often competing interests. Judges are often required to consider complex technical evidence, ranging from scientific evaluations of environmental impacts to engineering requirements, efficiency factors, and economic data and models. Such balancing exercises inevitably involve engagement with subjective values, which, in the context of just transition, often intersect with strongly held beliefs. Consequently, judicial independence and impartiality remain central to maintaining the legitimacy of these decisions.

4.5.2. Environmental rights are the basis of diverse legal challenges to projects and policies

Litigants on all sides are using environmental rights arguments in cases related to environmental transitions. Climate litigation more broadly is linked to environmental rights (Peel and Osofsky, 2018; Savaresi and Setzer, 2022; UNEP, 2023c). Recent cases related to climate change and other sectors incorporate elements of just transition, such as concerns about the allocation of costs and benefits among individuals and groups and across time, as well as the balancing of environmental and economic impacts.

In *Nuestros Derechos al Futuro y Medio Ambiente Sano v. Mexico*, civil society organizations argued that amendments to Mexico's Electric Industry Law violated the constitutional right to a healthy environment, because they prioritized fossil fuels over renewable energy, which would delay the transition (2022). The plaintiffs further argued that using fossil fuels today puts a higher cost on future generations, both in terms of climate-related damage and higher costs of mitigation to maintain a liveable planet. This reflects a concern for distributive justice, specifically in the fair allocation of transition costs across time. The District Court found that the Amendments violated the right to a healthy environment for present and future generations (UNEP, 2025). An appeal is pending at the time of writing.

Regional courts and tribunals with jurisdiction over human rights violations can provide a forum for protecting environmental rights. In 2023, the ECOWAS Court of Justice determined that Cote d'Ivoire violated Articles 1, 16 and 24 of the African Charter on Human and Peoples' Rights and article 12 of the International Covenant on Economic, Social and Cultural Rights in relation to the mining of manganese in Similimi (*Adou Kouame v. Cote d'Ivoire*, 2023). The Court found that Cote d'Ivoire failed in its obligation to respect the property rights of the inhabitants of Similimi by allowing a mining company to appropriate their land without demonstrating public interest, and depriving the inhabitants of their means of subsistence. The State also failed to protect the rights to a healthy environment and health by allowing the mining company to cause environmental damage with impunity (UNEP, 2025).

4.6. Finance

One of the three core goals of the Paris Agreement highlights the need to make "financial flows consistent with a pathway toward low greenhouse gas emissions and climate-resilient development" (art. 2.1(c)). This means financing the transition to low emissions in a way that also supports development (Robins et al., 2024a). Achieving this will require clear political



China Supreme People's Court. Photo: Russell Neches. Licence: CC BY 2.0. Flickr.

Case Study: China: The role of People's Courts in just transition

Courts across China have balanced economic development and environmental protection in judging cases related to transition. In 2023, People's Courts at all levels concluded more than 50,000 civil cases involving contract disputes over the supply of electricity, water, gas and heat; more than 3,000 criminal cases regarding illegal mining; almost 500 administrative cases related to geology and minerals; more than 350 civil cases over mining rights; and 85 civil cases on marine development and utilization (News Bureau of Supreme People's Court, 2023).

New cases have brought disputes over land use and ecological impacts of renewable energy projects to the courts. For example, in the case of Hydropower Station v. Development and Reform Bureau Yingjing County, Sichuan Province, a hydropower project demanded compensation when the site where it was operating was designated as a protected area, and it was forced to stop operating. The court ordered the compensation, and worked with the administrative agency to ensure that it was paid and the hydropower station withdrew. In other cases, courts have protected rights and interests of workers in polluting and high emission industries affected by new environmental and energy policies (News Bureau of Supreme People's Court, 2025)

Courts also protect procedural rights in the transition. In the case of Zhang Xiaoyan et al. v. Jiangsu Provincial Department of Ecology and Environment, citizens Cai Fusheng, Zhang Xiaoyan and Chen Xiaoxiang from Zhenjiang believed that the area where a substation was located was in the ancient Grand Canal scenic belt, which was an area with cultural relics and a dense population. However, the Jiangsu Provincial Department of Ecology and Environment issued the Environmental Impact Assessment Approval to approve the construction of this batch of projects by Zhenjiang Power Supply Company without holding a public hearing. They considered the administrative procedure to be illegal and requested the court to revoke the above-mentioned approval granted by the provincial department of ecology and environment. Although the final judgment of this case determined that the administrative act was legal, the second-instance court paid particular attention to safeguarding citizens' right to know environmental information during the trial. The second-instance court held that, although the challenged administrative approval was legal and appropriate, the environmental protection department should strengthen information disclosure. It further urged Zhenjiang Power Supply Company to place electromagnetic field monitoring display screens in more prominent locations, enabling the public to access real-time data promptly and ensuring their right to environmental information.

Chinese courts have established special environmental resource tribunals, issued judicial documents to strengthen adjudication guidelines, explored the establishment of innovative mechanisms for evaluation of transition projects, and built a multi-dispute resolution mechanism.

support, as well as effective means of implementation through sufficient institutional capacity and accountability (UNFCCC, 2023). Given the centrality of Article 2.1 (c) to aligning financial flows with low emission and climate resilient pathways, this section primarily focuses on climate-related literature, offering the evidence base for understanding how finance can enable a just transition within the broader context of environmental rule of law.

4.6.1. Existing financial resources and commitments are insufficient

Despite recent growth in climate finance, trillions in annual investments will be required to prevent the worst impacts of climate change (Naran et al., 2022). A 2024 report by the Climate Policy Initiative estimates that climate finance flows must increase by at least sixfold from 2021/2022 levels, reaching nearly \$8.5 trillion per year between today and 2030, and more than \$10 trillion per year from 2031 to 2050 (Strinati and Baudry, 2024). Global adaptation costs are estimated as high as \$310–\$365 billion annually by 2035, yet the pace and scale of action remain insufficient (UNEP, 2025).

Determining whether these costs are primarily financed by governments, financial institutions, businesses or taxpayers is a crucial policy challenge. The issue is especially relevant on the international stage, where developed countries (which have historically been the largest emitters) face growing pressure to finance transitions in emerging markets. Emerging markets and developing economies (EMDEs) often lack financial resources to decarbonize rapidly while sustaining growth in the absence of external support. Without fair financing mechanisms, a large-scale economic transition risks replicating and deepening the global financial divide.

Despite the widespread benefits of financing the transition for both developing and developed economies, scaling up financial solutions has proved challenging (Bolton et al., 2024). Donor countries hesitate to provide funding unless they can ensure recipient countries implement supportive policies to manage the social and economic costs of shutting down or phasing out whole industries or sectors (Bolton et al. 2024). Lack of trust is a significant barrier.

4.6.2. Innovative just transition financial instruments and tools are appearing across public, private and blended finance

Just transition finance is emerging as an approach across various financial instruments and funding channels. Just transition financial instruments and mechanisms include grants, carbon credits, public-private projects and partnerships, loans, bonds, insurance, and just transition platforms and funds (UNFCCC, 2023). Innovative financial products and services are being used to reduce climate-related risks for vulnerable populations, improve access to green technologies, and facilitate workforce adaptation (ILO and UNEP, 2023). As legal and reputational risks increase for institutions that fail to consider social justice in their transition finance, these tools are increasing in popularity (ILO and UNEP, 2023).

Just transition finance can refer to public, private or blended finance instruments (Robins et al., 2024b). Public finance is government-led and can include tax incentives for workforce reskilling (e.g. the United States Inflation Reduction Act), fossil fuel subsidy reforms (e.g. Morocco's investment in clean energy), and central bank refinancing for green industries (e.g. Bank of Korea's preferential lending rates) (Robins et al., 2024b). Governments can also allocate funds for social programmes that assist communities impacted by decarbonization or through the provision of subsidies supporting the accessibility of financial solutions that foster community resilience (UNDP, 2024; IIED, 2025; OECD, 2025). Revenue-sharing arrangements combine financing with



OCP Group's Khouribga phosphate mine. Photo: Bertrand Soubeyrand. Wikimedia Commons.

Case Study: Morocco: Revenue sharing with local communities

In recent years, Morocco has undertaken a series of reforms to align its natural resource governance with its energy transition goals. As part of a broader push to expand the share of renewable energy in its national mix, targeting 52% by 2030, Morocco has also revisited the institutional and fiscal frameworks governing extractive sectors to facilitate more equitable outcomes at the local level (IEA, 2019).

One key reform was the Mining Code of 2015, which introduced a new revenue-sharing mechanism whereby 50% of mining taxes are allocated to communes, with the remaining half going to regional governments (Law No. 33-13; Rignall, 2023). Previously, tax revenues paid on extraction were reserved solely for regional governments (Rignall, 2023). This change reflects an important step towards recognizing the contributions and needs of communities living in resource-producing areas. While there has been some disagreement and confusion among local residents and officials regarding implementation timelines and mechanisms, the reform has opened new channels for local engagement and benefit sharing (Rignall, 2023).

The Implementing Decree of the 2015 law tasked the Ministry of Energy, Mines, Water and the Environment as well as the Ministry of Economy and Finances with execution. In 2021, government restructuring resulted in the creation of the Ministry of Energy Transition and Sustainable Development, with a focused mandate on the transition (Government of Morocco. n.d.). This reorganization allowed for a more specialized institutional focus across energy and water sectors. Alongside these Ministries, key actors in the renewable energy sector also include MASEN, a public limited company coordinating large-scale solar project development and investment, and ONEE, the national utility responsible for electricity transmission and grid management (Benbba et al., 2024). Going forward, effective coordination between these institutions will be key to accelerating the implementation of Morocco's energy transition.

Following the Mining Code reform, community groups continued to raise concerns about limited local benefit from mining operations. In response, then-Minister Abdelazziz Rebbah acknowledged that many communes had not yet seen a direct fiscal return. "Our role," he noted, "is to ensure a fair distribution of the revenues generated from this extraction" (Les Éco, 2018). These concerns prompted discussions on potential further reform to strengthen the tax-sharing system. While progress on that front has been limited to date, new leadership in the Ministry offers an opportunity to revisit, and build upon these initial steps.

community engagement, ensuring that benefits are shared with potentially affected communities (see case study Morocco, above)

Private finance is market-driven and can include financial institutions setting their own transition plans, assessing companies' just transition commitments, and proactively addressing specific just transition needs. This can be achieved through innovative products, responsible practices and partnerships that maximize positive social outcomes, such as corporate and social impact bonds for workforce retraining, as well as sustainable lending and microfinance for green investments (UNEP FI, 2024, Robins et al., 2024b).

Blended finance combines public and private capital to lower investment risks and encourages larger financial commitments. It can include public-backed guarantees, transition credits to fund early fossil fuel retirement, climate and environmental funds, and public-private partnerships (PPPs) that direct investments towards just transition projects (Robins et al., 2024b). Blended finance, in particular, can help bridge funding gaps by channelling philanthropic or government funds into programmes like worker training or community revitalization, which may not yield immediate financial returns but are essential for just transition. By absorbing a portion of the financial risk, such programmes reduce the risk for private investors.

Green, social, sustainability and sustainability-linked bonds (GSS+ Bonds) help direct investment towards just transition projects. Sustainability-linked bonds (SLBs) stand out by tying financial terms (such as interest rates) to the issuer's achievement of predefined targets. The Coalition of Finance Ministers for Climate Action recommended that finance ministers develop sustainable bond frameworks and taxonomies to reduce transition-washing risks and improve market transparency. The Climate Bonds Initiative and LSE's Just Transition Finance Lab are working to develop standards that explicitly link bond markets to just transition goals. Likewise, the World Bank's Just Transition Taxonomy for coal provides a model for guiding investments and just transition themed-bonds (Coalition of Finance Ministers for Climate Action, 2024).

4.6.3. Companies are adopting due diligence practices addressing just transition for investment and financing

Financial institutions and other private sector firms in different jurisdictions are strengthening their due diligence practices to address human rights and environmental risks in relation to transition projects.

Some financial institutions apply more stringent safeguards to sectors where there are environmental or human rights risks. Deutsche Bank's Environmental and Social Policy Framework requires that any transaction involving mining undergo enhanced environmental and social review. This review covers water and soil contamination, waste management, impacts on local ecosystems, workplace and community health and safety and community consultation (Deutsche Bank, 2024). Goldman Sachs Environmental and Social Due Diligence Guidelines set out enhanced due diligence approaches for transactions in sectors where there are potentially significant effects on local communities; these sectors include infrastructure and transportation, and water and hydroelectric power. In sectors with the potential to directly impact Indigenous Peoples, Goldman Sachs requires alignment with the objectives and requirements of IFC Performance Standard 7 on Indigenous Peoples, including free, prior and informed consent (Goldman Sachs, 2023).



The Just Energy Transition Partnership (JETP) was launched at COP26. Photo: Dati Bendo. Wikimedia Commons.

In some cases, allegations of human rights abuse trigger a company to review its standards. In 2020, the Society for Threatened People filed a complaint against Swiss energy company BKW for investing in a Norwegian wind farm project on a site used by Indigenous Sami People as winter pasture for reindeer herds. They claimed that the project would force the Sami herders to give up their culture and way of life. In response, BKW updated its code of conduct, strengthened human rights due diligence practices and updated its complaint mechanisms. BKW also added a clause to its contracts allowing it to withdraw from commitments if human rights allegations are found and not satisfactorily addressed by its contracting partners (Business and Human Rights Resource Centre, 2020).

In 2021, Australia's ANZ Bank adopted a Human Rights Grievance Mechanism to evaluate complaints regarding adverse human rights impacts associated with its institutional or corporate lending customers. The grievance mechanism is overseen by a dedicated team that ensures compliance with internal policies and international human rights standards. Regular reviews and audits are conducted to maintain the effectiveness of the mechanism (ANZ, 2021).

Box 6: Just Energy Transition Partnerships

The Just Energy Transition Partnership (JETP) initiative was launched in 2021 at UNFCCC COP26, offering collaborative financing deals in which groups of donor countries and development banks provide packages of grants and loans to help developing countries transition to clean energy (Shai, 2024). JETPs aim to accelerate emissions cuts while supporting economic alternatives and worker support programmes in those countries. The first JETP was established for South Africa in partnership with its International Partners Group (IPG) including France, Germany, the United Kingdom of Great Britain and Northern Ireland, the United States of America and the European Union (Seiler et al., 2023). The IPG agreed to mobilize \$8.5 billion to facilitate South Africa's decarbonization. This deal was followed by additional partnerships for Indonesia, Viet Nam and Senegal. JETPs have been heralded as "new models with potential to serve as accountability mechanisms in states' efforts towards decarbonization" (Earsom, 2024). However, JETPs have also been criticized for failing to live up to finance commitments and justice aspirations (Shai, 2024).

However, political and financial shifts can pose a challenge to maintaining long-term international commitments. In early 2025, the USA left the JETP leading to a funding shortfall (Chime, 2025). Countries relying on grants or loans may need to seek alternative funding sources, otherwise renewable energy projects could face delays or be downsized.

4.7. Key takeaways

- Just transition provisions are becoming more common in laws and policies particularly in the climate, energy and mining contexts. Some provisions address a broader range of sectors and issues. There may be opportunities to introduce similar provisions in other sectors to improve consistency and coordination.
- Just transition requires unprecedented institutional capacity and coordination. Coordination mechanisms, bodies and processes can play a role, while existing organizations may need to adapt to support effective implementation.
- Just transition projects often have human rights implications. Environmental human rights defenders play a key role, but often face significant threats.
- Civic engagement is recognized as an important aspect of just transition. Processes and bodies for bringing together stakeholders can be useful, while the justice system protects procedural rights.
- Courts must balance environmental, economic and social rights and interests in deciding cases related to just transition.
- Innovative just transition financing measures, such as direct revenue sharing, green bonds and blended finance can help close the financing gap, but more is needed.

Conclusions and recommendations

5.1. Objectives, challenges and opportunities

Environmental rule of law is both a catalyst and a necessary prerequisite for achieving just transition across stakeholders and sectors. The framework of environmental rule of law shares principles, objectives and priorities with just transition; both take a people-centred approach to solving environmental challenges. While there is no globally accepted definition of just transition, in the environmental context it can be understood as *“a fair, inclusive and rights-based transformation towards environmentally and socially sustainable and resilient economies and societies that respects environmental rule of law and ensures no one is left behind in addressing environmental challenges across all sectors”* (Chapter 2).

Countries worldwide are adopting policies and measures to facilitate just transition. Viewing these measures through the lens of environmental rule of law provides clear guidance on ensuring they are fair and effective, structured around seven key elements:

“

Environmental rule of law is both a catalyst and a necessary prerequisite for achieving just transition across stakeholders and sectors. The framework of environmental rule of law shares principles, objectives and priorities with just transition”

- 1) Fair, clear and implementable laws and policies; 2) Access to information, public participation and access to justice; 3) Accountability and integrity of institutions and decision makers; 4) Clear and coordinated mandates and roles across and within institutions; 5) Accessible, fair, impartial, timely and responsive dispute resolution mechanisms; 6) Recognition and protection of

environmental rights; and 7) Strategies adapted and contextualized to national realities (Chapter 3).

Case studies, including just transition laws, policies, judicial decisions and projects, highlight certain trends in implementing just transition through the framework of environmental rule of law. Just transition provisions can be integrated into sectoral laws or exist as standalone cross-cutting plans or strategies. In either case, they require cross-sectoral coordination, a holistic vision and institutional capacity. Human rights challenges brought against just transition projects globally demonstrate the importance of recognizing and protecting environmental, social, cultural and economic rights, as well as the key role of environmental human rights defenders. Inclusive engagement of diverse stakeholders and civil society as active partners leads to effective, informed and equitable outcomes. Courts and justice systems are increasingly called upon to protect rights while balancing environmental, economic, social and cultural interests. Just transition finance is an emerging and innovative field, in which environmental rule of law serves as a powerful tool to ensure accountability and integrity (Chapter 4).

5.1.1. Objectives and challenges

Just transition faces significant challenges across multiple dimensions and levels in achieving its core objectives, including the protection of the environment, the realization of human rights, the empowerment of affected communities and sustainable development.

Objectives

- Ensuring that environmental protection is at the core of transition efforts, in line with environmental and human rights frameworks.
- Maintaining energy and resource security and managing economic disruptions, through adequate planning and policies.
- Fostering circular patterns of production and consumption that meet the needs of current and future generations while protecting the environment. This includes creating circular economy policies across various sectors that are consistent with the overarching objectives of just transition.
- Leveraging new jobs and new employment opportunities created by the transition to support those in vulnerable situations and living in poverty.
- Advancing gender equality, including addressing structural inequalities and ensuring that new employment opportunities and transition measures benefit women and men equally. This requires complementary investments in literacy, education and vocational training, while also considering the effects on the unpaid care economy as women increasingly participate in the workforce.

Challenges:

- Entrenched ways of doing things create path dependency, much like driving the same path every day creates a rut in the road, making it hard to change course. Global economies and societies are similarly entrenched, making transformative change challenging.
- The interconnectedness of economies, ecosystems and societies means that transition requires reform of a vast array of laws, policies and norms across multiple sectors. For example, energy reform will affect food prices, transportation and other basic needs, with direct implications for poverty and inequality.
- Historical and persistent structures of discrimination based on gender, religion, race, age and other factors make it hard to ensure equitable opportunities during transition, as existing legal, economic and social foundations remain uneven and fractured.
- Economic disruptions created by transition may exacerbate existing inequalities and create pushback. They may disproportionately affect low-income and marginalized populations. States must therefore proactively design and implement social protection policies to mitigate these risks.
- Ensuring inclusive and effective participation of all stakeholders carries the risk of generating excessive bureaucracy, delaying decision-making, or allowing undue influence or capture of the process.



Brooklyn Grange, a rooftop farm in Brooklyn, grows produce atop industrial buildings while demonstrating green-roof benefits such as stormwater retention and urban heat reduction. Photo: Justin. Licence: CC BY 2.0. Flickr.

- Fiscal revenues from unsustainable activities such as fossil fuel extraction, including royalties and taxes, often finance social investment in communities near extractive sites. States may need to develop alternative revenue streams to sustain essential public services.
- Transition will require significant resources and technical capacity, particularly in the current complex geopolitical and financial context. Just transition requires building institutional capabilities and enhancing coordination, which may in turn require reforming existing institutional structures and operational modalities.
- Economic disparities within and between countries may be exacerbated if wealthier nations and sectors benefit disproportionately from transition-related opportunities, while others are left to bear the brunt of costs and disruptions.
- Competing interests and objectives can be difficult to balance in a way that is fair. These overarching challenges are expressed differently across the three main dimensions analysed in this report: the stakeholder, sectoral and temporal dimensions.
 - Just transition must balance the rights and interests of different stakeholders. This includes reconciling the right to a clean, healthy and sustainable environment with the rights of future generations, as well as environmental rights with economic and labour rights, such as the right to work and the right to development of individuals working in polluting, high-impact or high-emissions sectors.
 - Just transition must balance interests across sectors, ensuring, for example, that changes in the energy sector do not undermine transitions in mining, agriculture, fishing, construction, manufacturing or forestry. It must also consider indirectly related sectors, such as plastics, transport and healthcare.
 - Just transition must balance short-term gains with long-term environmental and social goals, ensuring intergenerational equity and sustainability. It must respond to the urgency of the three environmental planetary crises – the crisis of climate change, the crisis of nature, land and biodiversity loss, and the crisis of pollution and waste – without compromising the integrity, inclusivity or fairness of the process. Policies and measures should be designed not merely to deliver short-term political or economic gains, but to align with long-term goals of environmental protection, rights realization and systemic transformation.

Just transition cannot become a rhetorical label for measures that undermine environmental or social justice. Achieving this demands robust monitoring, transparency and accountability mechanisms to assess not only what is done, but how it is done and for whose benefit.



Industrial materials sorting at a recovery facility, linked to environmental protection and jobs. Photo: Urban Greendom. Licence: CC BY-NC-ND 2.0. Flickr.

5.1.2. Opportunities

A time of transition presents both opportunities and challenges. The urgent need to address the three planetary environmental crises provides a strong impetus to transform existing systems into ones that are more effective, equitable and sustainable.

The transition to more sustainable societies and economies can be used to create decent jobs, improve living standards and address social inequities (Guardiancich et al., 2022). For example, as countries develop their nationally determined contributions under the Paris Agreement, we are seeing integration of just transition principles, which can spur wider adoption of policies that advance social, environmental and economic justice (Lee, 2022). National plans and commitments under the Convention on Biological Diversity, the UN Convention to Combat Desertification and other international frameworks could play a similar role. These instruments can help to foster coordination across different sectors and stakeholders. The economic disruption linked to the three planetary environmental crises can create opportunities to rebuild around a development model that prioritizes sustainability, health and well-being (A/75/181/Rev.1).

The just transition concept can bring together disparate stakeholders, which introduces complexities, but also fosters the development of new social and political coalitions and the exchange of perspectives and ideas. It helps break down siloed thinking and enables a whole-systems approach to sustainable development. Just transition unites various strands of environmental, climate, energy and social justice movements (Heffron and McCauley, 2018; Harry et al., 2024), and provides a lens for examining intersections among biodiversity loss, climate change, clean water, cultural heritage, social injustice, poverty, gender and human rights issues (Savaresi and Setzer, 2022). Just transition is also bringing together unions and environmental justice advocates, industry interests and environmental activists, as well as policymakers across the spectrum (Thomas, 2021; Harry et al. 2024).

Just transition highlights how social, environmental and economic sustainability are mutually reinforcing. Neglecting any of these pillars can destabilize all three, whereas applying the tools of environmental rule of law to address them together paves the way for sustainable development.

The infrastructure we build today will last for decades, sometimes even centuries. This is as true of legal infrastructure as it is of physical infrastructure. From framework treaties to local ordinances, the legal instruments adopted during this time of transition will need to function amid unprecedented environmental risks and uncertainties. Environmental rule of law will be critical in designing and implementing this legal framework.

5.2. Actions to catalyse just transition anchored in environmental rule of law

One of the key principles shared by both environmental rule of law and just transition is the need to tailor measures to specific social, cultural, political and environmental contexts. It is therefore impossible to prescribe with certainty which just transition measures will be appropriate in every country or jurisdiction. Instead, by examining the case studies, examples and trends described throughout this report, several common practices and approaches that support just transition can be identified. These practices may offer guidance for States, the private sector and international financial institutions (IFIs).

5.2.1. States

States can support just transition through the following actions:

- **Ensure a comprehensive and consistent just transition policy framework.** This could involve adopting a comprehensive just transition policy or integrating enabling provisions into sectoral and other policies. Design these policies with meaningful participation from civil society and other stakeholders, ensuring they consistently adhere to environmental and human rights norms, and uphold intergenerational equity by safeguarding the rights and interests of current and future generations. Apply just transition provisions across all relevant sectors, including climate, energy, mining, agriculture, and biodiversity, to ensure coherence, legal clarity, and effective implementation.
- **Secure coordinated implementation** of environmental, human rights, and labour laws, aligning national frameworks with global commitments such as the Paris Agreement, the Kunming-Montreal Global Biodiversity Framework and other relevant multilateral environmental agreements. Incorporate just transition priorities into key international instruments, such as nationally determined contributions (NDCs) and national biodiversity strategies and action plans (NBSAPs).
- **Strengthen institutional capacity** by mandating, resourcing, and coordinating relevant institutions across governance levels and sectors, with clearly defined roles and accountability mechanisms.
- **Guarantee meaningful participation** of all stakeholders – especially marginalized and vulnerable groups – through inclusive and transparent decision-making processes. Support their inclusion in the development of relevant projects and initiatives by providing enabling conditions such as capacity-building, direct financial support and legal empowerment.
- **Create an enabling environment for civil society**, including legal reforms that safeguard the rights to freedom of opinion, expression, peaceful assembly, and the defence of environmental and human rights. Recognize and protect environmental human rights defenders (EHRDs) through robust legal safeguards, enabling civic spaces and accessible remedy mechanisms.
- **Prevent and respond to gender-based violence and harassment** linked to transition policies and projects, including in mining, construction, infrastructure, resettlement, consultation processes, transport and workplaces.
- **Promote benefit-sharing frameworks**, especially for communities in rural and traditional territories, ensuring these are legally protected and equitably implemented.



Wind Park near Kavarna, Bulgaria. Photo: Ivelina Taushanova / World Bank.

- **Recognize and redress historical harms to Indigenous Peoples** and other ethnic and racial groups that have suffered oppression or discrimination. Address legacies of dispossession, environmental degradation, and rights violations through measures such as restitution or compensation where appropriate, legal recognition of land and resource rights, and guarantees of non-repetition.
- **Recognize, respect and integrate traditional knowledge** in just transition strategies, in full partnership with knowledge holders. This includes establishing protocols to protect against misappropriation, ensuring benefit-sharing and supporting intergenerational knowledge transmission.
- **Advance environmental rights**, including access to information, public participation and access to justice. Remove barriers to justice, and support accessible, fair and responsive dispute resolution systems. Ensure effective grievance and remedy mechanisms to address environmental and human rights harms associated with transition. Adopt policies for mandatory environmental and human rights due diligence, in alignment with international standards, including free, prior and informed consent where applicable.
- **Collect and publish disaggregated data** on the environmental, economic and social impacts of transition measures. Institutionalize social and environmental impact assessments as well as rights-based due diligence processes, to capture both intended and unintended, direct and indirect impacts of policies and projects.
- **Support education, training and awareness-raising** to allow all stakeholders to participate in and benefit from just transition. Where necessary, redesign educational systems to match new opportunities, improve access to education and information through enhanced digital infrastructure, and build awareness of the social and human rights dimensions of just transition policies and measures.
- **Balance present and future needs** through a forward-looking analysis of the costs and benefits of transition measures combined with science-based policymaking that leverages evidence-based approaches and future risk assessments. Strengthening accountability mechanisms by establishing legal obligations for states and businesses to consider long-term impacts contributes to building more resilient and equitable societies.



Emerging recycling technologies are designed to make plastics easier to break down and remanufacture into new products. Photo: Sandia Labs. Licence: CC BY-NC-ND 2.0. Flickr.

5.2.2. Private sector

Private actors can contribute to just transition through the following actions:

- **Respect human rights and environmental rights** by aligning strategies with national frameworks and international standards, including the UN Guiding Principles on Business and Human Rights and UNEP's Core Human Rights Principles for Private Organizations and Funders.
- **Conduct comprehensive environmental and due diligence**, including assessments of risks and impacts across operations and value chains, with particular attention to workers, Indigenous Peoples, women, and other groups experiencing marginalization, risk, or vulnerability. **Ensure transparency and accountability** in due diligence processes, including by meaningfully engaging affected stakeholders and ensuring access to effective remedies.
- **Invest in sustainable business models and technologies** that support biodiverse economies and advance environmental objectives while advancing social inclusion and creating decent, inclusive employment. Support locally driven innovation by co-developing solutions with Indigenous Peoples and local communities, and by valuing traditional knowledge and local expertise.
- **Strengthen or create independent grievance mechanisms** and ensure they are accessible, transparent, responsive and rights based. Adopt a zero-tolerance approach to threats and attacks against Indigenous Peoples, environmental defenders and other rights holders.
- **Adopt and implement equitable benefit-sharing mechanisms**, especially where business activities affect natural resources and traditional territories.

5.2.3. International financial institutions

International Financial Institutions (IFIs) play a key role in shaping global finance mechanisms to support just transition, ensuring fair access for countries and regions as well as communities. To enable and support just transition, IFIs can undertake the following actions:

- **Embed just transition, human rights and environmental standards** into all safeguards, financing instruments and policies. Ensure funding mechanisms are equitable, accessible and transparent, with robust oversight and accountability structures.
- **Apply gender-lens investment criteria and gender-responsive results frameworks** to just transition finance, including targets for women's employment, enterprise development, access to finance, participation in governance, social protection, care infrastructure and prevention of gender-based violence.
- **Prioritize financing for inclusive, low-emission development pathways** that directly share benefits with or are developed by affected communities or peoples, particularly those in vulnerable or historically underserved regions.
- **Foster multi-stakeholder engagement** in the design, implementation, and oversight of financed activities, ensuring the meaningful inclusion of Indigenous Peoples, women, youth, workers, and local communities.
- **Provide technical support and capacity-building** to finance recipients, to strengthen institutional readiness, inclusive governance, and capacities to respect and adhere to human rights and environmental norms and standards.
- **Monitor, evaluate and report on human rights and environmental outcomes** using participatory and transparent methodologies, and ensure that findings are used to strengthen safeguards and guide future financing decisions.

Kristalina Georgieva, IMF Managing Director, spoke about a resilient planet and the green transition during her remarks at the Plenary Meeting of the 2022 IMF–World Bank Annual Meetings. Photo: World Bank.



06

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ENDNOTE

i. Parties represented in the map: Albania, Antigua and Barbuda, Argentina, Austria, Belgium, Belize, Bolivia (Plurinational State of), Bulgaria, Canada, Chile, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czechia, Denmark, Dominica, Dominican Republic, Egypt, Estonia, European Union, Finland, France, Germany, Greece, Guatemala, Haiti, Hungary, Iceland, Indonesia, Ireland, Italy, Kenya, Latvia, Lebanon, Liberia, Lithuania, Luxembourg, Malta, Mauritania, Mauritius, Montenegro, Namibia*, Netherlands (Kingdom of the), North Macedonia, Norway, Oman*, Pakistan, Paraguay, Philippines, Poland, Portugal, Republic of Korea, Romania, Serbia, Slovakia, Slovenia, South Africa, Spain, State of Palestine, Suriname, Sweden, Türkiye, Ukraine, United Kingdom of Great Britain and Northern Ireland, Uruguay, Viet Nam, Zimbabwe.

ii. EU Member States represented in the map: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands (Kingdom of the), Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

iii. Countries represented by the selected cases: Brazil, Chile, Guatemala (IACHR), India, Indonesia, Italy, Mexico, Panama, Philippines, Slovakia / Court of Justice of the European Union, United Kingdom of Great Britain and Northern Ireland, United States of America.

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