LSE Grantham Research Institute on Climate Change and the Environment

Submission to the United Arab Emirates Just Transition Work Programme

Views of Parties, observers and other non-Party stakeholders on opportunities, best practices, actionable solutions, challenges and barriers relevant to the topic of the second dialogue

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About this submission

This report consists of a submission by the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science to a call for views by the United Nations Framework Convention on Climate Change (UNFCCC) on the dialogues mandated by Decision 3/CMA.5, para. 8. Read the decision here: https://unfccc.int/sites/default/files/resource/cma2023_16a01E.pdf

This submission also responds to the notice by the Chairs of the Subsidiary Body For Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), that the topic of the second dialogue under the United Arab Emirates (UAE) Just Transition Work Programme (JTWP) in 2024 is 'Ensuring support for people-centric and equitable just transition pathways with a focus on the whole-of-society approach and the workforce'. Read the notice here:
https://unfccc.int/sites/default/files/resource/message_to_parties_and_observers_uae_jtwp.pdf

The version presented here has been lightly edited since submission.

About the authors

This submission draws on work produced across the Grantham Research Institute, including the Climate Change Laws of the World project, the Just Transition Finance Lab, and the Centre for Economic Transition Expertise (CETEx). Tiffanie Chan led the preparation and consolidation of inputs for this submission, with review by Catherine Higham. The authors of each recommendation are listed below.

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Summary

This submission draws on research conducted at the Grantham Research Institute on Climate Change and the Environment to present eight key recommendations for Parties to the United Nations Framework Convention on Climate Change (UNFCCC). These address the priorities of the second dialogue of the United Arab Emirates (UAE) Just Transition Work Programme (JTWP) and relate to its three focus areas:

A. Approaches for empowering all actors and segments of the society for a fair and inclusive workforce transition to meet Paris Agreement goals.

B. Unpacking the full range of means of implementation (finance, technology and capacity building) for a just transition of the workforce: exploring current approaches, opportunities and gaps.

C. International cooperation and partnerships for people-centric and equitable just transitions.

The eight key recommendations, and the focus areas they are relevant to, are:

Recommendation 1: Proactively design policy and investment pathways to pursue both climate action and poverty reduction (areas B and C). Setting poverty reduction and climate action (mitigation or adaptation) against one another as competing priorities is misguided. Bolstering the fossil fuel status quo will ultimately be to the detriment of people living in poverty. Well-designed policy and targeted investment can deliver both positive climate outcomes and alleviate poverty. Policy design should focus on four critical areas: resource management; carbon pricing, fossil fuel subsidies and redistribution; green job creation; and social inclusion.

Recommendation 2: Support inclusive enterprise landscapes to deliver economic growth, employment opportunities, innovation and positive climate outcomes (areas A and B). Supporting and mobilising small and medium-sized enterprises (SMEs), including women entrepreneurs, is important for delivering people-centric and equitable just transition pathways. SMEs form a critical part of most economies and are often closely integrated into communities. They are often highly vulnerable to climate change, particularly those involved in agricultural production, but are also highly responsive to change, making them important strategic actors in economic transitions. Multi-stakeholder partnerships (MSPs) have the potential to support the scaling up of climate action among some of the most vulnerable private sector actors and to plug gaps in development finance.

Recommendation 3: Adopt an intersectional and gender-sensitive approach to climate action and climate finance (areas A, B and C). The consequences of neglecting gender considerations in climate policy are profound. Policies that overlook the gendered dimensions of both climate change and responses to climate change risk perpetuating existing inequalities and slowing down the transition to a green economy. This will undermine global efforts to achieve net zero emissions and a climate-resilient future. Parties should build consensus around the indicators used to measure progress and support the collection of data that captures the specific needs and contributions of women in climate action, thus enabling more targeted and effective interventions.

Recommendation 4: Use Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and Long-Term Low Emission Development Strategies (LT-LEDS) as vehicles and communication tools to support investment that is aligned with a just transition (area C). To enable the allocation of capital towards net zero, Parties need to send clear signals to investors, who may be invested directly in sovereign debt, and corporations operating in their territories that show their commitment to implementing just transition policies. Robust just transition policies indicate that a country is addressing the socioeconomic impacts of the transition, creating equal opportunities for communities and businesses and reducing potential resistance against climate action. The next round of NDCs, due in 2025, provides a timely opportunity for Parties to

communicate existing national frameworks (i.e. relevant legislation, regulation and strategies) along with concrete measures (e.g. impact assessment requirements, support schemes, upskilling or reskilling programmes).

Recommendation 5: Support the development and adoption of national sector pathways that consider just transition principles, especially for emerging markets and developing economies (EMDEs) (areas B and C). To facilitate a just transition, investors need clarity over which businesses and sectors align with emissions reduction pathways that are consistent with Paris Agreement goals. Global standards and pathways do not always consider the local realities and development priorities of EMDEs. Developing these pathways at a national level, guided by a national transition plan (NTP) or an enhanced NDC, can play a crucial role in guiding the required investments.

Recommendation 6: Mainstream just transition principles in national climate change legislation and policymaking (area A). The pathway to achieving the goals of the Paris Agreement through a people-centric approach will be unique to each country. National climate governance systems can be designed in a way that is tailored to the local context to support the mainstreaming of just transition principles in decision-making. Lessons can be learned from existing climate change policies and legislation, and from emerging just transition litigation cases. To help mainstream people-centric approaches in the private sector, financial regulations on climate change (e.g. disclosure, due diligence and transition planning) should also incorporate just transition principles.

Recommendation 7: Develop and implement climate policy based on inclusive stakeholder engagement and public participation processes (area A). The deep and rapid social and economic transformations required to address the impacts of climate change will significantly affect citizens' lives, choices and behaviours. It is necessary to meaningfully engage the public in decision-making to ensure a just transition. Climate assemblies are a potentially powerful tool that can be used to ensure just transition outcomes, increase ambition on climate policy and change the dynamics of climate governance.

Recommendation 8: Empower Ministries of Finance to drive forward a just transition and unlock the means to implement it (area B). Ministries of Finance have significant levers they can pull to increase the climate finance and accelerate the climate action needed to deliver a just transition towards low-carbon, climate resilient development. Parties should ensure Ministries of Finance have a strong mandate to act on climate and invest in climate capacity-building across government. The Coalition of Finance Ministers for Climate Action provides opportunities for peer learning and exchange.

The subsequent sections provide more detailed information on how each of these eight recommendations can be implemented, summarising the supporting evidence and identifying challenges along with opportunities to manage them.

Recommendation 1

Proactively design policy and investment pathways to pursue both climate action and poverty reduction.

Considering poverty reduction and climate action as competing priorities is misguided. Bolstering the fossil fuel status quo will ultimately be to the detriment of people in poverty. Well-designed policy and targeted investment can deliver both positive climate outcomes and alleviate poverty.

This recommendation is relevant to focus areas B and C.

Discussion of context and evidence

Climate change and poverty are closely interwoven issues. An effective response to both requires creating a new form of development that simultaneously mitigates climate change, manages its impacts, and improves the wellbeing of people in poverty (Lankes et al., 2023).

Climate change intensifies the conditions that lead to poverty by increasing the frequency of natural disasters, exacerbating health risks (Romanello et al., 2021; Mora et al., 2022), disrupting agricultural production (FAO, 2018; Ortiz-Bobea et al., 2021) and driving up food prices (Jafino et al., 2020). These impacts are most severe for poor communities, which often lack the resources to recover from such shocks (Birkmann et al., 2022). Unmanaged climate change could push an additional 32–132 million people into poverty by 2030, compared with a world with a stable climate (Jafino et al., 2020). Moreover, the impacts of climate change are not uniform: they are significantly worse for those at the intersection of poverty and other marginalised identities, such as women, Indigenous peoples and ethnic minorities.

There is a pervasive misconception that climate action must come at the expense of economic development and poverty reduction. However, well-designed climate policies can also drive economic growth, create jobs and enhance societal wellbeing. A sharp decline in the cost of low-carbon technologies has made fossil fuels less competitive, presenting opportunities for access to renewable energy and job creation (Goldman Sachs, 2023; IRENA, 2023). Additionally, addressing market failures and inefficiencies through climate action can lead to economic benefits through increased output and employment and improved wellbeing and health that far outweigh the costs – particularly for the poor.

To ensure that climate action benefits the poor, policy design must focus on four critical areas outlined below.

(i) Resource management: phasing-out of fossil fuels and extraction of critical minerals

Phasing out fossil fuel extraction and use presents challenges for developing countries that rely on these activities for access to energy, employment and revenue. However, fossil fuel dependency poses multiple significant risks:

- Climate and economic risks: Most fossil fuel reserves must remain unexploited to limit global warming to below 2°C (Welsby et al., 2021).
- Declining prices: The shift to low-carbon energy generation is reducing fossil fuel prices and their financial returns (Boer et al., 2023).
- Health and environmental impacts: Fossil fuel use contributes to pollution, displacement and ecosystem destruction (Saha and Carter, 2022; Du et al., 2023).
- The 'resource curse': Profits from fossil fuels often benefit foreign investors or powerful elites, leading to economic stagnation and political turmoil (Saha and Carter, 2022).

Similar risks arise with the extraction of energy transition minerals and renewable energy exports if they are not carefully managed (Månberger and Johansson, 2019; Leonard et al., 2022).

These challenges can be addressed through:

- Granular transition planning in just transition pathways, tailoring fossil fuel phase-out and economic transition strategies across regions and countries and over time to isolate the most concentrated impacts on poverty.
- Beginning the phase-out of coal-fired power sooner rather than later to reduce severe impacts on employment and the wellbeing of workers.
- Policymakers recognising and being sensitive to local vulnerabilities. Rapid phase-outs can severely affect communities dependent on fossil fuels, such as Madhya Pradesh in India (Pai, 2021).

However, weak social safety nets, informal labor markets, and limited state capacity can complicate the implementation of just transition policies in emerging market and developing economies (EMDEs) (Atteridge et al., 2022).

(ii) Carbon pricing and redistribution of fossil fuel subsidies

Carbon pricing can have a highly variable impact on wellbeing, poverty and inequality, depending on the effects it has through four channels: consumption; income; health; and potential recycling of revenues (Shang, 2023).

Removing regressive fossil fuel subsidies could release funds for poverty reduction, although careful management is needed to prevent adverse effects on the poorest households, through higher energy prices, for example (Damania et al., 2023).

Ways in which these challenges can be managed include:

- To address the impacts of carbon pricing, policymakers should consider the redistribution of carbon tax revenues to significantly reduce, or even reverse, negative impacts on low-income households. See for example the cases of South Africa (Altieri et al., 2016), Brazil (Grottera et al., 2017) and Peru (Malerba et al., 2021).
- Similarly, transferring subsidy savings directly to households has shown potential for poverty reduction (e.g. Dennis, 2016; Vandeninden et al., 2022; Klaiber et al., 2023), with impacts varying by region within countries (Rentschler, 2016).
- International support is needed to help compensate affected households in the poorest countries with limited domestic resources.
- Policy reform to carbon pricing and redistribution of fossil fuel subsidies must be customised according to regions: their effectiveness depends heavily on local conditions and existing social support structures.
- Comprehensive policy packages are needed. Successful reform likely requires combining subsidy removal with enhanced social safety nets, improved government services and active public engagement (Couharde and Mouhoud, 2020; Vidican Auktor and Lowe, 2022).

(iii) Green job creation

Too often in low-income countries, employment does not enable people to escape poverty. Over 6% of the global workforce lives in extreme poverty, with rates nearing 40% in low-income countries (ILO, 2022a). The effectiveness of job creation in alleviating poverty depends on the distribution of skills, labour market access and the geographical distribution of jobs.

Effects on labour often differ by gender. For example, technologies for the mechanisation of rice production or dairy intensification (i.e. increased milk output relative to input of feed, labour, land

or herd size) can lead to negative short-term impacts on women, despite the long-term income gains from increased productivity (Kabir et al., forthcoming). There is also a risk of replicating existing gender inequalities, such as the male-dominated workforce in the energy sectors, in green industries. On the current trajectory, women will hold only 25% of so-called 'green jobs' (Sqalli et al., 2021).

These challenges can be managed through:

- Ensuring quality of jobs, addressing regional disparities and embedding gender considerations are crucial to address multidimensional poverty (Garcia-Casals et al., 2019; Saget et al., 2020; Malerba and Wiebe, 2021).
- Tailored communication, training and incentives are essential to ensure women's full participation in the green economy (Janikowska and Kulczycka, 2021).
- Global policies and standards for technology supply chains – such as for lithium, which in Africa is mined in the Democratic Republic of Congo and recycled in Ghana (Otlhogile and Shirley, 2023).

However, more research is needed on how EMDEs can build human capital for economic diversification and capitalise on opportunities presented by low-carbon technology. Education policies must align with job opportunities in new sectors to avoid mismatches.

(iv) Social inclusion and local effects

Costs associated with transitioning to a low-carbon and climate-resilient economy are a significant barrier to climate action for the poorest countries and households. In contrast to clean energy solutions, low-carbon solutions in agriculture and land use are still more expensive than high-carbon options (IPCC, 2022). Further, while cheaper than fossil fuels, clean energy technologies face limited availability and high financing costs (Szabó et al., 2021).

Poorly designed climate projects can also harm vulnerable communities. Large-scale renewable projects in EMDEs may lead to the privatisation of land and displacement of poor and Indigenous groups (Lamb et al., 2020). High resource use for mineral extraction can cause environmental harm. Further, nature-based solutions can risk land grabs by large landowners.

These challenges can be managed by:

- Considering and upholding the needs and rights of vulnerable people and communities in climate action.
- Investing in people and places: economic diversification, connectivity and community regeneration are important for greater wellbeing in the long term.
- Designing programmes and interventions with the participation of affected communities.
- Implementing wider reforms of governance, markets and the international climate finance architecture.
- Using tools to assess whether specific projects and investments are aligned with macro pathways for decarbonisation and climate resilience.

Summary recommendations

- **Governments must implement a policy mix that addresses both climate and development objectives.** Effective climate policies should not only focus on reducing emissions but also on enhancing equity, supporting sustainable development, and protecting vulnerable populations. Principles of climate justice and the just transition need to be incorporated into policy design to ensure fair and equitable outcomes.
- **To ensure that climate action benefits the poor, governments should ensure that policy design focuses on four critical areas.** These are: (i) resource management (the phase-out of fossil

fuels and extraction of critical minerals); (ii) carbon pricing, fossil fuel subsidies and redistribution; (iii) green job creation; and (iv) social inclusion.

- **Scaling up investments in physical and natural capital is crucial for a just transition.** Achieving climate goals in EMDEs requires a substantial increase in investment, estimated at $2–2.8 trillion annually by 2030 (Songwe et al., 2022). These investments should target energy, nature, adaptation and resilience, loss and damage, and contribute to both economic and social development and climate action. Poorly planned investments could lock in high-carbon activities, exacerbating climate risks and undermining prospects for development.
- **Investments in education, gender-sensitive policies and social protection are crucial to integrate vulnerable populations into the formal economy and new green job sectors.** Strong social protection policies can help populations adapt to climate impacts and benefit from shifts in local economic development.
- **Ensuring that countries have ownership over their transition and engaging the private sector will be critical to unlocking the investment necessary for successful low-carbon transitions.** Effective climate action in EMDEs requires robust financial and technical support from advanced economies (Songwe et al., 2022). Current international financial systems are inadequate to facilitate the necessary investments: there is a need for stronger collaboration between countries and institutions to mobilise resources, share technology and build institutional capacities.

Recommendation 2

Support inclusive businesses environments to deliver growth and employment opportunities, innovation and climate outcomes.

Focusing on supporting and mobilising small and medium-sized enterprises (SMEs) is important for delivering people-centric and equitable just transition pathways.

This recommendation is relevant to focus areas A and B and includes actions related to both climate mitigation and adaptation outcomes.

Discussion of context and evidence

SMEs form a critical part of developed and developing country economies. They contribute to economic growth, provide most employment opportunities and are often the most realistic form of employment for women, youth and other disadvantaged groups. They are also strongly integrated into communities and play a prominent role in household poverty reduction and social welfare.

In developing countries, many SMEs are concentrated in sectors that are highly exposed to climatic extremes and the impacts of climate change, such as agricultural production.

However, SMEs are also highly responsive to climate change and can be strategic actors in climate transitions and deliver goods and services that support adaptation and mitigation of other private sector actors.

SMEs are important intermediaries between global climate governance frameworks and local action in just transition pathways. Against a background of shortfalls in climate finance and pressure to scale up efforts, increasing emphasis is placed on mobilising the private sector for climate action. Alongside the risks businesses face, climate change can provide opportunities for the private sector, including to create new products and services and develop new markets. To some extent, businesses will respond to these impacts and opportunities through self-interest, to manage their exposure to risks, minimise disruption to their operations, reduce costs and maximise opportunities. However, SMEs are often seen as able to be more agile and responsive than larger companies. The opportunity for private sector actors with strong connections to local communities to support the development of enabling conditions for climate action by businesses is promising, given increasing recognition that climate action and finance need to be delivered locally.

The role of smaller enterprises has typically been overlooked within the neo-liberal agendas on climate action via market-based mechanisms. Attention has tended to focus on large multi-national companies operating at global scales. But research shows that micro, small and medium-sized enterprises can – and do – participate in the private sector for climate adaptation and for delivering resources that support climate transition pathways. Indeed, even micro-SMEs in the informal sector can make important and wide-ranging contributions to increasing access to inputs, markets, knowledge, services and climate-smart technologies to support wider private sector climate transitions (Gannon et al., 2021).

Female entrepreneurship may have a particularly strategic role to play in supporting people-centric and equitable just transition pathways. Research conducted in sub-Saharan Africa found that SMEs with female leadership in their management or ownership structures were more likely to adopt a long-term perspective in their climate adaptation behaviour, and that female business leadership can support innovation in adaptation (Gannon et al., 2024). This aligns with findings in other regions that have linked female and mixed-gender business leadership with innovation and more equitable business outcomes.

This same research also found that receiving assistance and training may have a larger influence on business adaptation outcomes among businesses with female leadership than those with only-male leadership. This highlights the value of supporting women entrepreneurs in climate action, not only to deliver on climate justice goals but also to strategically enhance climate action on a larger scale.

Given that SMEs face multiple challenges, governments, development partners and finance providers have a key role to play in providing business-enabling conditions that support SMEs to realise their potential in climate action and help deliver a fair and inclusive transition. Both the vulnerability of SMEs and their potential to contribute to scaling up people-centric and equitable just transition pathways should be recognised. SMEs, including those in the informal sector, should be put at the heart of climate action.

As mentioned above, in developing countries, many SMEs are concentrated in agricultural production, which is highly exposed to climatic extremes. Some evidence suggests that women-owned businesses may be especially exposed to climate risks as a result of the types of enterprise, sector concentration, and the features of the land they are situated on (for example, they may have only been able to negotiate access to land in more flood-prone areas or on more degraded land).

Research has shown that even fairly moderate changes in climate conditions can produce significant, but under-recognised, consequences for SMEs that cascade across other sectors (Gannon et al., 2018a; Siderius et al., 2018). Impacts can be both direct, including damage to business infrastructure and disruption to production processes, and indirect, through disruption to supply chains and changes in regulation, product demand and business reputation.

A wide range of factors that are both internal and external to businesses can constrain or enable their ability to respond to climate pressures and opportunities. The ability of SMEs to adapt and respond effectively to climate change is highly influenced by their access to enabling resources in the external business environment (Crick et al., 2018). Lack of access to finance, inappropriate incentive structures and limited access to markets and technologies, for example, are all factors that decrease the probability of firms engaging in sustainable adaptation actions, such as changing to climate-resilient product mixes.

Climate and adaptation policies for businesses also tend to recognise only a limited range of businesses and production models. In particular, private sector adaptation policies have tended to focus primarily on the needs of larger and formal businesses, with less consideration given to smaller businesses operating in the informal sector, which often dominate the enterprise landscapes in developing countries. Informal enterprises, and those with more restricted access to formal land ownership, including women and other producers who farm land that is either communally owned or allocated through informal tenure (and thus who have little or no collateral), particularly struggle to access the support and especially the credit they require through formal channels.

Women often face notable additional barriers to resource access and economic participation in the business environment, shaped by strong sociocultural orientations around gender roles and resource use and access (Gannon et al., 2022). This is particularly problematic in light of the key role that female entrepreneurship plays in household poverty reduction and social welfare, and women's strategic potential to scale up inclusive innovation in climate action.

Many of the same factors that support business and people-centric development also support climate adaptation. Table 2 below highlights factors that show potential to simultaneously unlock SME action on climate change and business growth in developing countries. For example, access to tailored climate information services, information about adaptation options and general business support from public sources all increase the probability that businesses will engage in sustainable adaptation.

Table 2. Building blocks of enabling environments for private sector action on climate change

Policies and institutions	Data, information and capacity development
- Institutions, policies and regulatory frameworks on adaptation, mitigation and business development that are gender-sensitive and account for the diverse range of private sector actors. - Coordination and policy alignment between adaptation, mitigation and private sector development policies and institutions. - Support for climate smart action for private sector multipliers (e.g. business associations, farmers cooperatives). - Multi-stakeholder partnerships to overcome barriers to private sector investment (e.g. through market failures).	- Accessible, tailored and high-quality weather and climate information and early warning systems. - Climate sensitive extension and training services. - Tools to support adaptation and decision-making, and toolkits, such as costed business cases and scenarios. - Adaptation training and climate-smart technology research and development centres. - Websites and online portals providing climate change and market information. - Strong educational foundations for all.
Infrastructure, markets and information and communications technology	**Financial environment**
- Transportation, water, electricity and communication infrastructure and technologies. - Climate change considerations incorporated into all critical infrastructure. - Development of climate-focused market and business zones/centres. - Affordable and accessible climate-smart inputs and technologies.	- Economic and financial incentives for sustainable adaptation, climate-resilient business development and climate-smart goods and services. - Affordable, accessible and gender-sensitive business finance and climate insurance schemes. - Climate finance available to a wider range of SMEs with improved.

Source: Adapted from Gannon et al. (2018).

Multi-stakeholder partnerships (MSPs) have the potential to support the scaling up of climate action among some of the most vulnerable private sector actors. They may also present the opportunity to plug gaps in adaptation and development finance.

Governments often look to the private sector to deliver these enabling resources in the business environment. However, MSPs, which involve commitments and collaborative arrangements between at least one private organisation and one public or one civil society organisation, present a valuable opportunity for just transition pathways.

Research has shown the potential for governments and their development partners to remove barriers to private sector investment in climate action though MSPs, which support investment in areas such as research, data access, relationship-building, access to finance and business incubation. They can enable a wide range of private sector actors to deliver adaptation and mitigation resources to support wider climate action and resilience building, raising additional funding for adaptation. Similarly, beneficiaries can include micro-SMEs in the informal sector and in more marginalised regions that would otherwise fall outside of market inclusion (Gannon et al., 2021). Nevertheless, MSPs are not a panacea. Ongoing dependence on market-based mechanisms for delivering adaptation resources can expose businesses to new risks and still risk excluding the poorest groups and reproducing inequalities.

Although private sector involvement in MSPs, especially businesses in emerging markets, has increased since the launch of the Sustainable Development Goals, inclusiveness in partnerships remains limited (Higham et al., 2024). Marginalised groups such as women, youth and Indigenous Peoples are especially under-represented in MSPs for sustainable development, and partners remain largely clustered in the Global North. Partnerships may also have transparency deficits, hindering affected external stakeholders' and governments' ability to hold them accountable in the absence of established accountability mechanisms (ibid.).

MSPs also often remain heavily dependent on donor-led organisations for both resources and momentum, meaning they are generally not self-sustaining. These partnerships are also subject to the same vagaries of power and opportunities for corruption at the local level as other forms of adaptation and development action.

Summary recommendations

- **Parties should adopt inclusive approaches to providing enabling conditions for private sector enterprises to take climate action, harnessing the potential of the whole workforce.** This means making investments in the business environment that affect the full range of economic actors, including smaller, diversified and mobile businesses operating in the informal sector. These businesses dominate the enterprise landscapes across many developing countries and are essential for equitable development, but are often overlooked.
- **Climate finance opportunities for the private sector need to be broadened to more inclusively target the full range of private sector actors involved in delivering inclusive climate action.** SMEs and women entrepreneurs need to be supported to access these.
- **Companies need to be supported to develop equitable business linkages and partnerships with a wide range of other businesses,** including with those that do not have, for example, the formal land entitlements that larger companies seeking legislative protection and resource security often require.
- **Governments and their development partners should identify opportunities for scaling up access to enabling resources for private sector climate action through multi-stakeholder partnerships (MSPs).** Given the challenges of making such partnerships self-sustaining and ensuring ongoing inclusion, a move towards supporting such partnerships through longer-term funding and monitoring may be necessary.
- **Governments and their development partners should identify opportunities to target women entrepreneurs with business support that enables climate action,** recognising evidence that suggests their potential as strategic actors in upscaling innovation in climate action and enhancing climate resilience and equity outcomes.

Recommendation 3

Adopt an intersectional and gender-sensitive approach to climate action and climate finance.

Profound consequences will result if climate policy neglects gender considerations. Policies that overlook the gendered dimensions of both climate change and policy responses to climate change risk perpetuating existing inequalities and slowing down the transition to a green economy. This will undermine global efforts to achieve net zero emissions and a climate-resilient future.

This recommendation is relevant to focus areas A, B and C.

Discussion of context and evidence

The transition to a green economy presents an unparalleled opportunity to address the dual crises of climate change and social inequality. Addressing social disparities in climate policy is not just a matter of equity: it is crucial for the effectiveness of our global response to climate change. Climate change disproportionately impacts marginalised communities, particularly women, due to existing social structures and cultural norms that uphold gender inequality (and other forms od inequality). Despite growing recognition of the intersectional nature of climate impacts, climate policies and actions have often failed to integrate considerations of gender equality in a meaningful way. The UNFCCC Just Transition Work Programme has a pivotal role to play in driving forward this agenda, ensuring that climate action contributes to a more equitable and inclusive world for all.

Climate change is not gender-neutral. Women, especially those in marginalised communities, face heightened vulnerabilities due to their limited access to resources, decision-making processes and opportunities for climate adaptation and mitigation. The impacts of climate change, such as water scarcity, extreme weather events and displacement, disproportionately affect women, exacerbating existing inequalities (Rodrigues, 2022; Dunne, 2020; Winter et al., 2024). For example, women in developing countries are often responsible for water collection, making them more vulnerable to water scarcity and related safety issues (WaterAid, 2023). Furthermore, climate-induced economic instability has been linked to increased gender-based violence, as seen in the significant rise in domestic violence cases in Vanuatu following tropical cyclones in 2011 (Castañeda et al., 2020).

Neglecting gender considerations in climate policy will jeopardise a just transition and undermine the effectiveness of climate finance. Studies have shown that without proactive measures, women will continue to be underrepresented in green jobs (Sqalli et al., 2021; Fredman, 2023) and will remain confined to low-skilled roles in sectors that are highly exposed to climate impacts, like agriculture (Shayegh and Dasgupta, 2024), further entrenching gender disparities. Climate mitigation policies that overlook gender diversity also undermine green innovation as they leave a significant proportion of the global population's creative potential untapped (Lin and Yin, 2023). One estimate suggests that closing the gender gap in the green economy could reduce global emissions by 1.5 gigatonnes (Gt) per year and improve global annual GDP by nearly 2% (Sqalli et al., 2021).

In addition, failing to include gender equality considerations in climate and just transition finance can undermine the effectiveness and sustainability of climate investment and lead to interventions with inadvertent negative effects (Global Innovation Lab for Climate Finance, 2022). By contrast, interventions that address underlying gender inequalities can often be more cost-effective, not least by ensuring that women can serve as 'benefit multipliers' (Cichocka et al., 2024).

An intersectional approach to climate action recognises that women's experiences of climate change are shaped not only by their gender but also by other intersecting identities, including race, class, ethnicity, disability and age. This compounded vulnerability requires a comprehensive understanding of how different forms of oppression interact and how they can be addressed through targeted policies and actions. For instance, Indigenous women, who play a crucial role in biodiversity conservation, often face multiple layers of marginalisation (UNDESA, 2021). Climate policies that do not take into account the unique knowledge and needs of Indigenous women risk exacerbating their vulnerability while missing out on valuable insights that could enhance climate resilience.

Summary recommendations

- **Parties should ensure that gender and intersectional considerations are central to all stages of climate policy development, from planning to implementation and evaluation**. This includes ensuring that Nationally Determined Contributions (NDCs) and long-term low-emission strategies explicitly address gender inequalities and that commitments are translated into actionable plans.
- **Parties should enable women, particularly from marginalised communities, to have a seat at the table in all climate-related decision-making processes.** This includes ensuring gender parity in delegations to international climate negotiations, and in national and local climate planning and implementation bodies.
- **Parties should address disparities in education and employment to close the gender gap in green jobs and ensure women's full participation in the green economy.** This includes promoting gender-sensitive reskilling programmes and creating inclusive organisational cultures.
- **Parties should recognise the importance of care work – and reform it.** The majority of paid and unpaid care is still carried out by women. This unequal distribution limits women's opportunities for engaging in the green economy and means that climate strategies that fail to take this imbalance into account risk exacerbating women's workloads, further entrenching inequalities. Parties can refer to the International Labour Organization's '5R Framework for Decent Care Work and a Just Transition' (the 5 'R's stand for: recognise, reduce, redistribute, reward and represent), which highlights steps policymakers need to take.
- **Finance providers must ensure that climate finance mechanisms are designed to be inclusive and accessible to women and marginalised groups.** This includes prioritising funding for projects that directly benefit women, particularly at the local level, and ensuring that all climate finance is screened for impacts on gender equality (Patel et al., 2023).
- **Parties should invest in collecting and utilising data that captures the specific needs and contributions of women in climate action, thereby enabling more targeted and effective interventions.** The lack of gender-disaggregated data is a significant barrier to effective climate action. Efforts should build on the Call to Action launched by UN Women at COP28, together with the COP28 Presidency, which urged world leaders and policymakers to produce and use better gender–environment data to drive progress.
- **Parties should build consensus on the indicators of progress and targets to use.** There is a pressing need for comprehensive data, clear indicators of progress, specific targets and dedicated funding to achieve gender equality in climate action.

Recommendation 4

Use Nationally Determined Contributions, National Adaptation Plans and Long-Term Low Emission Development Strategies as vehicles and communication tools to support investment aligned with a just transition.

To enable the allocation of capital towards net zero, Parties need to send clear signals to investors that show their commitment to implementing just transition policies. Detailed Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs) and Long-Term Low Emission Development Strategies (LT-LEDS) which explicitly discuss existing or planned just transition strategies and concrete measures can help increase investor confidence.

This recommendation is relevant to focus area C.

Discussion of context and evidence

Robust national just transition policies bolster investor confidence. A national regulatory framework can enhance engagement with companies to support the implementation of policies to transition their workforce that are aligned with national efforts. Investors have two main levers to advance a just transition: dialogue with companies (their investees); and capital allocation. Investors have multiple leverage points to influence the actions of high-emitting companies to encourage them to proactively align their activities with just transition principles. Some sectors have especially high social risks related to the low-carbon transition. For example, the mining sector needs to undergo a just transition *out* of coal mining while responsibly scaling up production for a just transition *in* of mining for energy transition minerals (Scheer and Robins, 2024).

In addition to companies, investors can engage with national governments to advocate for the adoption of clear national just transition policies as this would provide the regulatory certainty needed to encourage corporate action while driving system-wide change. Investors holding sovereign bonds are increasingly scrutinising how countries plan to meet their net zero commitments while addressing transition and social risks. Tools are available to help investors better understand countries' just transition pathways, such as the ASCOR tool (see Box 1). Robust just transition policies indicate that a country is addressing the socioeconomic impacts of the transition, creating equal opportunities for communities and businesses and reducing potential resistance against climate action. This success can bolster investor confidence by preventing delays in debt payments, debt re-structuring and a country's risk profile being downgraded.

Box 1. The Assessing Sovereign Climate-related Opportunities and Risks (ASCOR) tool

ASCOR is an instrument that helps investors better understand countries' just transition pathways by enabling the integration of climate considerations into investors' decision-making processes on sovereign bonds. It also facilitates dialogue between investors and sovereigns by assessing countries on climate change with a transparent methodology (Scheer et al., 2023a).

The ASCOR methodology includes a dedicated area on the just transition which assesses countries' legal, institutional and regulatory capacity to address the social risks of the low-carbon transition. The first assessment results covering 25 countries shows that institutionalised just transition practices involving social dialogue is an emerging area (Scheer et al., 2023b). A forthcoming report will include analysis of the just transition approaches of 70 countries assessed against transparent and consistent indicators. The Transition Pathway Initiative Centre, based at the Grantham Research Institute at the London School of Economics and Political Science, is ASCOR's academic partner.

Although there is no universal formula to plan a just transition, existing just transition policies share some common components that can enable a robust planning and implementation framework. This includes social dialogue with workers (ILO, 2022b); systematic engagement with relevant stakeholders; dedicated governance mechanisms such as Just Transition Commissions (Heffron, 2021) or equivalent bodies; support measures for vulnerable communities (ILO, 2022c); promotion of green and decent jobs (ILO 2022d); and regular monitoring and reporting requirements. Box 2 sets out specific country examples.

Box 2. Country examples of just transition policies

ASCOR and Climate Change Laws of the World have identified an increasing number of just transition policies globally. For example:

- Austria's Federal Ministry for Climate Protection, in collaboration with relevant stakeholders, launched the national just transition process in 2020 and subsequently published the Just Transition Action Plan on Training and Education in 2023. This process includes a commission, the Just Transition Advisory Board, which involves representatives from employer organisations, trade unions, the private sector, research institutions and civil society. It provides high-level advice on guiding principles and monitoring of the implementation of policies. Additionally, the Just Transition Working Group on Education and Training convened sectoral workshops (e.g. construction, heat and electricity) to identify needs and measures of the labour market in the low-carbon transition.
- Chile's Just Transition Strategy focuses on achieving a just transition in electricity, industry, transport and residential energy sectors by phasing out coal in electricity generation. The strategy was developed with a participatory approach including workshops with workers, companies and civil society and a working group composed of the representatives of central and local government, workers unions, energy companies, international organisations and academia. The governance structure responsible for implementing and monitoring the strategy consists of the Interministerial Committee and a Technical Secretariat and social dialogue with workers and employers will be maintained through local roundtables. It also sets a place-based approach through 'local action plans' that are to be designed by local roundtables focusing on specific opportunities and challenges in relevant territories.

It is also crucial that the development of NDCs is consistent with just transition principles and are co-created with key stakeholders. There are emerging examples of countries engaging in inclusive processes. For example:

- Colombia has developed a participation strategy for the development of its enhanced NDC, using the just transition as an integrative framework (Cifuentes, 2024). This framework acknowledges that the just transition requires a cross-cutting approach across peace, human rights, and intergenerational, ethnic and territorial matters. The Ministry of Environment has identified strategic regions across Colombia, where stakeholder consultations will be held. By considering local and regional inputs, the participation strategy aims to facilitate a transformative and inclusive approach to determining each target and measure, ultimately committed to in the enhanced NDC.
- Panama's NDC development process involved representatives of NGOs, young people and the scientific community and active and participatory listening workshops with relevant actors (such as Indigenous Peoples, people of African descent, farmers and public and private institutions in different provinces). The Agenda for Energy Transition 2020–2030 also commits to carry out a participatory, fair and equitable transition and gives some details on dialogue tables organised with the stakeholders from the electricity and hydrocarbon sectors.

Despite current progress, more needs to be done to empower all actors and segments of the society in the transition. Limited understanding and ongoing engagement with diverse stakeholder groups acts as a barrier for inclusive just transition planning. Although many countries aim to establish governance mechanisms to coordinate government-wide action and

involve external stakeholders in the process, based on ASCOR's upcoming analysis of 70 countries, the majority fail to engage with the most vulnerable groups including workers, businesses, Indigenous peoples, local communities, women, youth and others.

While countries may organise dedicated standalone sessions with workers, employers and other stakeholders to address their specific needs, it is unclear to what extent these channels enable active participation of all relevant stakeholders for identifying actionable solutions to transition the workforce in a fair and inclusive manner.

One way of maintaining recurrent engagement is to establish permanent and dedicated institutional channels such as Just Transition Commissions that include representatives of affected parties. National policies regularly informed and monitored by such commissions enable greater transparency and participation.

The economy-wide nature of delivering a just transition often means that policy instruments to deliver a just transition are spread across multiple policy documents. Clear signposting in NDCs, NAPs, and LT-LEDS is particularly important for generating financial support and investment for policy agendas. Fragmented policies makes it difficult for external stakeholders to understand how different policies work together and thus poses challenges for where to channel appropriate resources. These complex regulatory frameworks reinforce the value of holistic investment plans that are co-created with affected stakeholders and synthesise the actions that countries are planning. See Box 3 for examples of how public finance instruments may be implemented outside of explicit just transition strategies.

Box 3. Examples of public finance instruments that facilitate a just transition at the national level

A stocktake of 159 policies found four prominent areas where policy instruments are being deployed to deliver a just transition: (i) public finance; (ii) institutions and strategy articulation; (iii) labour market policies and skills development; and (iv) public participation, stakeholder engagement and social dialogue (Chan et al., 2024). Here we focus on examples from the most prominent area: public finance.

A wide range of policy levers are being used to channel and redirect public finance towards addressing the impacts of transition policies. These levers can be broadly categorised into: direct provision of public finance; fiscal policies; and financial regulation. The Climate Change Laws of the World database shows examples of consumer tax rebates, tax green tax reform, public procurement policies and employment insurance systems. For example, Cyprus' National Energy and Climate Plan refers to increasing carbon tax on all non-emissions trading system sectors. It states that the revenues "can be recycled in the economy by reducing labour taxes and providing financial support to energy conservation and green transport policies" and that this reform "can have substantial economic benefits without harming low-income households or the competitiveness of firms".

However, targeted social protection interventions also often exist outside of climate – especially in welfare states. For external stakeholders to channel resources appropriately, it is important that countries communicate how any climate change-specific interventions will work together with existing social protection systems.

Transparent investment planning processes can support finance mobilisation. Such processes need to be adapted to countries' distinctive realities in terms of their fiscal circumstances, access to resources and capabilities, and climate ambitions. Signposting planning processes in Parties' NDCs, NAPs and LT-LEDS will provide clarity and confidence for financial institutions in structuring financial solutions. Countries can also use these documents to synthesise how they envision climate finance working together with existing social protection systems. NDCs should be co-created with affected stakeholders and consider impact assessments and data on existing socioeconomic inequalities.

Summary recommendations

- **Parties should use their NDCs, NAPs and LT-LEDs to promote their just transition strategies and send clear signals to investors and other international partners of their commitment.** They need to go beyond acknowledging the just transition as a vague concept and reference existing national frameworks (i.e. relevant legislation, regulation and strategies) and concrete measures (e.g. support schemes, upskilling or reskilling programmes).
- **There is a timely opportunity for Parties to use the next round of NDCs due in 2025 to signpost existing and planned strategies and measures to implement a just transition.** Comprehensive, time-bound just transition planning, communicated through vehicles such as NDCs, can provide essential information about where finance is most needed, the type of financing needed, and when.

For more on the use of NDCs and LT-LEDS in the specific context of emerging markets and developing economies, see Recommendation 5.

Recommendation 5

Support the development and adoption of national sector pathways that consider just transition principles, especially of emerging markets and developing economies.

To facilitate a fair transition of the workforce, investors need clarity over whether their investments are committed to emission reduction pathways that align with the goals of the Paris Agreement. Global standards and pathways do not always consider the local realities and development priorities of EMDEs. Developing these pathways at a national level, guided by a national transition plan (NTP) or an enhanced NDC, can play a crucial role by providing a systematic approach to guiding the required investment.

This recommendation is relevant to focus areas B and C.

Discussion of context and evidence

A lack of globally-agreed and Paris-aligned sectoral pathways at the national level may prevent investors from financing low-carbon projects, especially in EMDEs. Although global sectoral pathways can be applied to EMDE investments, they do not necessarily consider just transition elements such as the local realities and development needs of many EMDEs where emissions have not yet peaked, or where the net zero pathway extends beyond 2050.

High-emitting assets in EMDEs are often newer and therefore more expensive to wind down than in more advanced economies, where they are nearing the end of their investment lifecycle. Some of these assets, such as fossil-based power stations, also provide a comparatively large source of power generation and jobs. The need to finance decarbonisation may therefore be at odds with other development priorities, such as investment needs for climate adaptation, employment growth or biodiversity protection.

Investors need appropriate guardrails in place to ensure that effective transitions take place. This requires development of country-appropriate emissions reduction pathways, broken down by sector or sub-sector in EMDEs. Contextualised pathways and metrics would also enable both public and private investors to undertake transition planning in EMDEs (Transition Plan Taskforce, 2024) because existing global standards are ill-adapted to local realities.

EMDEs will face barriers to accessing finance if global standards for sustainable finance mechanisms (e.g. transition plans, mandatory disclosure of financed emissions) do not allow for the distinct characteristics and starting points of individual EMDEs. For example, some EMDEs lack access to granular data on current emissions (e.g. Scope 3) or face uncertainty over future emissions pathways. Mandatory requirements to disclose this information could therefore reduce EMDE access to global capital markets, leading to financial retrenchment and capital flight.

Credible national sectoral pathways need to be aligned with global Paris-aligned pathways and acknowledge the local context and starting points of EMDEs. The EU has already pledged to support EMDEs in their development of sectoral transition pathways by sharing its experience from the EU initiative for Transition Pathways for European industrial ecosystems (HLEG, 2024). Further support should:

- **Prioritise the development of pathways for the highest-emitting and urgent sector sectors in EMDEs (e.g. mining, agriculture, forestry and other land use [AFOLU], and manufacturing).** Pathways should be developed with globally recognised organisations as independent arbiters. The International Energy Agency (IEA) is frequently cited as a good example of an internationally recognised arbiter for the energy sector, and its decision to open a new office in Singapore offers an opportunity to support national and subregional sector pathway development by ASEAN countries.

- **Recognise the principle of common but differentiated responsibilities (CBDR).** While all countries have a shared responsibility to address climate change, they are not shared equally. The latest IEA Net Zero Emissions by 2050 Scenario projects year-on-year emissions reductions by advanced economies of 11.6%, compared with 6.8% for EMDEs between 2022 and 2035 (IIGCC, 2024).[1]
- **Recognition of local development needs and economic realities is critical to enabling action by governments.** This includes technological readiness, the relative immaturity of high-emitting assets in EMDE contexts, development needs such as poverty reduction, and retaining employment and a social license.
- **Establishing integrity benchmarks.** Considering the balance between standardisation and flexibility of sustainable finance standards, and how to apply them across diverse jurisdictions and sectors with varying transition pathways, is a particular challenge. Relevant guardrails include transparency, regular reporting and external audit and assurance over core metrics.[2]

As national sectoral pathways are developed, further efforts will be necessary to ensure that their fair share alignment with NDCs is transparently monitored and periodically updated. The global governance structure will need to expand to reflect the shift to more detailed planning and implementation of NDCs for the period to 2030. This should consider how national sectoral pathways interact with each other (in alignment with an overall global and Paris-aligned target) and how they can be translated into information flows that can be used for verification purposes (e.g. by Second Party Opinions [SPOs]). This could be achieved by ensuring that national sectoral pathways are reflected in the development of national and international planning efforts, including:

- **Enhanced NDCs.** As mentioned in Recommendation 4, NDCs are a key tool to plan investments or consider how a country's mitigation targets interacts with other social and environmental development goals. Corporates and financial institutions currently struggle to utilise NDCs as they are not granular enough to spell out sectoral or technological decarbonisation strategies. Furthermore, NDCs suffer from ambition and/or implementation gaps, with analyses showing that the full implementation of actions currently outlined in NDCs would only limit global temperature increases to 2.1–2.3°C (IRENA, 2023b). The upcoming update of NDCs serves as an opportunity to improve the quality and credibility of NDCs.
- **National transition plans (NTPs).** NTPs, and connected investment plans broken down by sector, can drive a systems approach to the transition, with government (or government-endorsed) plans at the centre, to direct, coordinate (for the purposes of NDC implementation), finance and incentivise climate action across each economy (Manning et al., 2024). This detail should facilitate financing, including through sovereign debt issuance connected back to NTP data. Box 4 below provides more guidance on NTPs.
- **International standards for transition finance could contain time-bound flexibility mechanisms for EMDEs until sectoral pathways, enhanced NDCs or NTPs are developed.** Global benchmarks need to acknowledge the different transition trajectories and starting point of EMDEs. Where national emissions reduction pathways are lacking or inadequate, investors or companies may apply global standards or targets that have adequate exemptions in place.
    - This would primarily involve the use of flexibility mechanisms or proportionality clauses that exempt transition-focused investments from elements of global

[1] Another approach is provided by ASCOR, which has developed an Equity Reference Calculator that allocates carbon budget according to historical emissions per capita, capability and equity.

[2] There is currently a significant capacity shortage in the market for Second Party Opinion (SPO) providers in EMDEs. However, defining requirements for SPOs would incentivise the emergence of such a market.

standards where they cannot be met due to constraints, such as lack of data availability or limited capacity to satisfy requirements.

  - Examples of such mechanisms or clauses include the prioritisation of foundational criteria (e.g. basic greenhouse gas data availability) over the adoption of more ambitious elements (e.g. transition plans) using a 'building block' approach, time-bound or voluntary requirements in EMDEs to allow firms and sovereigns to build capacity, or flexibility around certain thresholds at which standards apply (e.g. setting thresholds based on the size of an investor or corporate or allowing for longer timelines).

- **Long-Term Low Emissions Development Strategies (LT-LEDS).** Multilateral development banks (MDBs) have developed joint principles for Long-Term Strategy (LTS) support (2023). These principles help clients develop a macro-level view and engage the full range of relevant government stakeholders and non-state actors involved in these strategies. There has been a focus on supporting countries on aspects of the just transition, such as diagnostic tools showing where jobs will be lost. These strategies take a long-term view (e.g. to 2050) but includes plans in 5-year increments, setting out the investments, public loans and policies that need to be prioritised in these time periods.

Box 4. Five core functions of NTPs

NTPs represent a common global approach to developing, communicating and implementing net zero policy. They support multinational companies and investors to navigate their own net zero transitions. The UNFCCC and G20 are leading global efforts advocating for NDCs to be supported by NTPs. A recent policy brief to the G20 stated that NTPs should include "stronger strategic orientation; a deeper focus on whole-of-government planning; and coherent policies, pathways and investment plans that target a just, equitable, low-emissions, climate resilient economy". Five core functions of NTPs, according to Manning et al. (2024) are:

- Setting a clear strategic direction
- Providing a costed action and investment plan
- Acting as a coordination vehicle between government and the private sector
- Bringing together all relevant information into one coherent document, following the same structure as corporate transition plans
- Embedding commitment and accountability mechanisms along with the institutional frameworks to support them.

Capabilities to develop and implement NTP principles will vary between jurisdictions, and for some the administrative burden of developing such a plan will be significant. Advanced economies will therefore need to consider how they could support EMDEs to develop theirs.

There is significant potential for EMDEs to expand the use of sovereign sustainability-linked bonds. The potential for sovereign sustainability-linked bonds is especially relevant in EMDEs, where the issuance of sustainable debt instruments remains well below that of advanced economies (0.51% of total GDP versus 3.41%, respectively). Capacity for this asset class to grow appears strong, with sustainability-linked issuances already representing a larger portion of thematic bonds than sovereign green bonds (54% versus 39%) in EMDEs (Luxembourg Green Exchange, 2024).

The use of sustainability-linked bonds can signal to the market greater awareness and willingness to mitigate climate risks. They offer a way to upskill and educate government and domestic financial institutions about climate transition needs and targets, and to improve reporting and verification around climate targets (see e.g. NGFS, 2022).

Evidence to date suggests that although sovereign green, social, sustainable, and other labelled (GSS+) bond issuances have in general lagged behind corporate issuances, they have positive effects in terms of increasing the size of the market of corporate sustainable bonds, improving the quality of green disclosure and verification standards, and improving liquidity (Cheng et al., 2024). Eligible activities or sectors for such instruments can provide more clarity as to what falls under the scope of Paris-aligned climate finance, especially in EMDEs where regional nuances may be different from other markets.

Recent issuances have started to demonstrate a more strategic approach (see Box 5). Transition-focused Use-of-Proceeds (e.g. Japan's Sovereign Transition Bond) or sustainability-linked bonds (e.g. Chile's Sustainability-Linked Bond) have been issued where the bond framework is shaped by a NTP or NDC. These have potential to become an important tool for both advanced and developing economies looking to raise finance for their transition, providing a link between fiscal and climate planning: a signal of national commitment and a mechanism for transparency.

Box 5. Lessons from Uruguay's sustainability-linked bond (SLB)

Uruguay's SLB was issued in October 2022, attracting 188 investors of which 21% were new holders of Uruguayan debt (Kamil, 2024). Total demand for the bond was US$3.96 billion, nearly triple the amount that Uruguay decided to issue (US$1.5 billion). Its success is attributed to several factors, including (ibid.):

- Being directly linked to decarbonisation and nature-related goals set out in Uruguay's NDC.
- Its relatively short 5-year tenure (until 2027) and related short-term sustainability targets, including an interim 2025 target, which signalled more credibility than a long-term target. Follow-up issuances such as a separate US$350 million sustainability-linked loan are linked to updated goals under the sequential ratcheting up of Uruguay's ambitions under the Paris Agreement.
- Additional commitment to sustainability goals was provided by deliberately excluding a *force majeure* clause.
- Technical assistance from the World Bank and the Inter-American Development Bank (IADB), and from four commercial banks
- Strong governance and political will across four ministries, led by the Ministry of Economy and Finance (MEF). The step-up mechanism also provides a financial incentive for Uruguay's Government to meet its climate targets.
- Transparency of progress against targets, including annual reporting of KPI performance.
- Targeted engagement and strong buy-in from the market. The step-down mechanism is perceived as a sign of strengthened credit quality rather than significantly reducing interest payments, and the step-up mechanism provides policy certainty and stability to investors.

Summary recommendations

- **Parties can take steps to support the wider adoption of national sector pathways that incorporate just transition principles.** They can advocate for the establishment of suitable support and technical assistance for EMDEs seeking to assess and establish their own jurisdiction-specific sectoral emissions reduction pathways consistent with the principle of common but differentiated responsibilities under the Paris Agreement.

- **Parties can use the upcoming meeting of the Conference of the Parties to the UNFCCC (COP29) and G20 Summit in November 2024 to expand technical support available to EMDEs that are working on enhanced NDCs, Long-Term Strategies or National Transition Planning (NTP).** These strategies and plans can then cascade down to the investments, public loans and policies that need to be prioritised to support the transition.
    - The development of frameworks, standards and structures that acknowledge the challenges of EMDEs, their development priorities and differing starting points is also likely to assist with subsequent investment.
    - Lack of national sector pathways acts as a significant barrier to investing in just transition opportunities because it exposes investors to policy uncertainty and reputational risks.
- **Parties can support the development of international governance mechanisms with oversight of national sectoral emissions reduction pathways,** including regular monitoring of alignment with global Paris-aligned emissions goals, and the effective integration of this information into data ecosystems to enable use by verifiers and auditors.
    - As national sectoral pathways are developed, further efforts will be necessary to ensure that their 'fair share' alignment with NDCs (i.e. whether the pathway and contribution represents a fair share of the global effort) is transparently monitored and periodically updated.
    - The global governance structure will need to expand to reflect the shift to more detailed planning and implementation of NDCs for the period to 2030. This could be achieved by ensuring that national sectoral pathways are reflected in the development of national- and international planning efforts, including enhanced NDCs, NTPs, international standards, sovereign sustainability-linked bonds or LT-LEDS.

Recommendation 6

Mainstream just transition principles in national climate change legislation and policymaking.

The pathway to achieving the Paris Agreement goals through a people-centric approach will be distinct for each country. There are ways to design national climate governance systems, tailored to local context, to support the mainstreaming of just transition principles into decision-making. Lessons can be learned from existing climate change policies and legislation and emerging just transition litigation cases.

This recommendation is relevant to focus area A.

Discussion of context and evidence

Framing the just transition as part of the net zero debate can be a key differentiator of whether social pressure becomes a driver or a barrier to net zero. The failure of climate policy to address the disproportionate burdens placed on some parts of society and the potential social costs of net zero can create opposition and hinder the transition (Averchenkova and Chan, 2023). Mainstreaming the just transition in policy design and communication can strengthen public buy-in for climate action. Box 6 illustrates this in the context of Spain.

Box 6. Case study: using just transition narratives to encourage support for net zero policy in Spain

Research on drivers for net zero policy in Spain found that narratives around economic opportunities and a just transition were effective in strengthening political support and buy-in for climate action (Averchenkova and Chan, 2023).

In 2019, the Spanish Government launched a Just Transition Strategy with an urgent action plan to address the impacts experienced by the shutdown of power plants in coal-producing regions (ITJ, 2022). It drew on the '2018 Framework Agreement for a Just Transition for Coal Mining and the Sustainable Development of Mining Regions for 2019–2027', signed by the Government, trade unions and mining companies, which guarantees support for mine workers and mining areas. In 2020, the Just Transition Institute was created and work began on developing 'just transition agreements' to guarantee coordination, and support instruments to facilitate the reactivation of affected areas. Spain also allocated €301 million to the just transition in its National Recovery and Resilience Plan (Lázaro Touza et al., 2022; ITJ, 2023).

In Spain, framing the net zero commitment around a just transition helped to overcome opposition from economic sectors (e.g. the automotive industry and energy companies). Direct engagement between the Ministries and the affected communities around policies to phase out coal mining has also helped to build trust in the Government (Averchenkova and Chan, 2023).

However, communicating a general narrative of a just transition without understanding the specific injustices may result in vulnerable groups feeling alienated or disengaged. This may weaken credibility of climate policies and delay the transition. Our research on climate change laws, policies and just transition litigation illustrates that to secure public support and buy-in for the transition, policymakers first need to understand where and how injustices exist and may be exacerbated (Chan et al., 2024; Savaresi et al., 2024).

It is important to understand which groups are affected. Our analysis of 159 national just transition policies across 61 countries and the European Union found a wide range of stakeholders that can be impacted by climate policies, both positively and negatively (Chan et al., 2024). Of the 159 policies, we found that 98 refer to impacts on communities and 94 address workers. Some policies addressed multiple vulnerable groups and appear in both these counts. The concept of

'communities' included diverse vulnerable groups, with 26 policies addressing women, 19 addressing youth or children, 14 addressing low-income households, and 13 addressing Indigenous Peoples. The process of identifying key stakeholder groups and measures to support these groups in the transition should be influenced by contextual demographic characteristics and development priorities.

Adopting a human rights-based approach to *ex-ante* impact analysis for climate policies and projects may be one way to implement transformative transitions and secure credible whole-of-society support for climate policies. Policymakers need to understand how groups are affected by: (i) the current fossil fuel dependent economy; and (ii) how they may be affected by policies related to the transition to low-carbon and climate-resilient societies.

Analysis of 21 just transition litigation cases finds that concerns have been raised over the implications of inadequate climate action for different dimensions of justice, e.g. distributive, procedural and recognition justice[3] (Vélez Echeverri, 2024; Savaresi et al., 2024).

Just transition litigation has challenged the design and implementation of climate policies and projects that have negatively impacted the rights to land;[4] self-determination; free, prior and informed consultation; and cultural integrity of Indigenous Peoples.[5] Litigants have also claimed the protection of the rights to an adequate standard of living, food, housing, water and sanitation for impoverished urban populations,[6] particularly disabled people.[7] These are socioeconomic rights, closely linked to advancing development. Other cases reflect the failure to consult workers,[8] local communities,[9] Indigenous Peoples[10] and local governments[11] in climate policies, agreements and projects, which impact their rights to access information and participation.

The court cases referenced above also reveal that injustices faced by local communities in the context of the low-carbon transition are not considerably different from the ones raised within a fossil-fuel-dependent economy. Distributive, procedural and recognition justice dimensions are commonly used by those assessing harms and justice claims in the context of fossil fuel extraction (Schlosberg and Carruthers, 2010). This is why a 'transformative' understanding of the just transition is needed – one that is not limited to shifting from a 'dirty' to a 'clean' energy source but instead demands a social transformation that eradicates the unjust socioeconomic structures and practices that have caused the climate crisis in the first place, and builds a fair society for all. To ensure a people-centric and equitable just transition pathway, Parties thus need to recognise existing types of injustices raised within a fossil fuel dependent economy.

To strengthen social support and buy-in to climate policy from stakeholders, policymakers should collect information *ex ante* to identify which injustices need to be redressed or addressed in a given situation before devising the policy instruments for intervention. Our stocktake of 159 just transition policies finds some encouraging developments by national policymakers (Chan et al., 2024): most assessed policies (128) refer to the concept of distributive justice, i.e. the fair distribution of risks and opportunities of climate policy, cognisant of gender, race and class

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[3] Distributive justice refers to how benefits and burdens are allocated among different stakeholders. Procedural justice concerns the fairness and inclusivity of the processes through which decisions are made. Recognition justice looks at whose interests and lived experiences are considered and who can contribute to decision-making processes.

[4] *Mulhern Gas Co. v. Rodriguez*; *Association of Contracting Plumbers of the City of New York v. City of New York*; *Communication to Thailand on forced evictions for climate mitigation measures*.

[5] *Pirá Paraná Indigenous People v. Ministry of Environment and Sustainable Development and others*; *"Gran Cumbal" v. SVP Business SAS and others*; *Communication to the government of Colombia about the humanitarian and environmental crisis suffered by the Afro-descendant Raizal people*.

[6] *Communication to Pakistan concerning the ongoing forced evictions and home demolitions along Karachi's waterways (nullahs)*.

[7] *R (Friends of the Earth Ltd, Mr Kevin Jordan and Mr Doug Paulley) v Secretary of State for Environment, Rood & Rural Affairs*.

[8] *Company Workers Union of Maritima & Commercial Somarco Limited and Others v Ministry of Energy*; *Association of Contracting Plumbers of the City of New York v. City of New York*

[9] *Consórcio Norte Energia (re Belo Monte dam in Brazil)*; *Statnett SF et al. v. Sør-Fosen sijte*

[10] *ProDESC and ECCHR v. EDF*; *Consórcio Norte Energia*; *Pirá Paraná* and *Cumbal* cases

[11] *Regional Government of Atacama v Ministry of Mining and Other*; *County of Cape May v. United States*

inequalities. However, while procedural justice features relatively strongly across 63 policies, there remains a gap in policies articulating how stakeholders are included in policy design and how feedback from these stakeholders is subsequently integrated into the decision-making process. More work also needs to be done to independently monitor and evaluate implementation of these policies.

Impact assessments to identify affected groups requires careful data collection and substantial resources. Just transition issues are rooted in the specific characteristics of a given place, and how a country shapes its pathway to net zero emissions is based on many factors, including their nationally defined development priorities, historical contributions to climate change, vulnerabilities, key economic sectors and demographic characteristics. Parties, especially developing countries, need support and resources to collect data on existing social determinants of health and wellbeing, and forward-looking data on how a proposed climate policy may worsen existing inequalities or create new injustices (e.g. cultural loss from planned relocation measures). NDCs can signpost the financial and human resources required to enable data collection on socioeconomic impacts (Chan et al., 2024). For example, Vanuatu's NDC states that US$1.8 million is required to implement its commitment to expand the use of culturally relevant and comprehensive indicators to track progress towards achieving sustainable development and climate action goals.

Enshrining just transition principles in national climate change legislation and financial regulations are important ways to facilitate a whole-of-society approach. There is evidence that incorporating the just transition into climate framework laws as an overarching principle can facilitate its mainstreaming across government. Climate framework laws establish the strategic direction for national climate change policy and often contain medium- and long-term objectives or targets, institutional arrangements and accountability mechanisms (Climate Change Laws of the World, 2024). See Box 7 for examples from different countries.

To help mainstream the just transition in the private sector and provide clarity for investment decision-making, Parties should also ensure that financial regulations on climate change, for example around mandatory disclosure, due diligence and transition planning, incorporate just transition principles. To develop these, Parties can look to the proliferation of existing voluntary guidance relevant to the just transition (e.g. Transition Plan Taskforce Just Transition Working Group, 2024; Roth et al., 2024). Real economy policy on the just transition should be aligned and integrated with these developments in voluntary non-state action.

Summary recommendations

To ensure an inclusive whole-of-society response to climate change and avoid backlash against climate policies, the transformative and place-based nature of the just transition should be reflected in policymaking and the development and interpretation of legal frameworks. To implement this, Parties should:

- Invest time and resources to understand where and how injustices currently exist in fossil fuel-dependent economies, and how injustices may be exacerbated or created by low-carbon transition policies.
- Adopt a human rights-based approach to *ex-ante* impact analysis for climate policies and projects.
- Collaborate with experts and civil society in the analysis and mapping process, as lived experiences and contextualised realities shape how justice applies to and is perceived by diverse stakeholders.
- Review climate change legislation and public sector mandates to ensure that fairness, equity and inclusivity are given substantial weight in decision-making processes. Embedding just transition principles into climate framework laws is one way to implement this.

Box 7. Examples of just transition in climate framework laws

Our recent study on Ireland's climate framework laws, the Climate Action and Low Carbon Development Act, found that several interviewees linked the Government's support for the just transition in the Midlands region (which they considered a success) to this legislation and the national climate action plans (Averchenkova et al., 2024). The Act requires the Minister of the Environment, Climate and Communications and the Government to "have regard" to, amongst other principles, the requirement for a just transition to a climate-neutral economy which endeavours, in so far as is practicable, to: (i) maximise employment opportunities, and (ii) support persons and communities that may be negatively affected by the transition.

A number of countries are starting to incorporate the just transition as an overarching principle in these laws. Some examples from the Climate Change Laws of the World database include:

- Spain's Law 7/2021 on Climate Change and Energy Transition, which requires the Government to approve a just transition strategy every five years.
- South Korea's Carbon Neutral Green Growth Framework Act, which requires the Government to conduct a regular survey on the impacts of the low-carbon transition on employment and to prepare retraining measures.
- South Africa's new Climate Change Act, which defines a just transition as a "shift towards a low-carbon, climate-resilient economy and society and ecologically sustainable economies and societies which contribute toward the creation of decent work for all, social inclusion and the eradication of poverty". The principle of a just transition guides the application of the Act.

The just transition may also be integrated through sectoral legislation. For example, Canada's Sustainable Jobs Act establishes relevant instruments and governance mechanisms including requiring Sustainable Jobs Action Plans to outline support measures for job creation and skills development every five years. It also establishes a Sustainable Jobs Secretariat to coordinate government-level action, and a Sustainable Jobs Partnership Council. The latter is an advisory body composed of representatives of key stakeholder groups such as Indigenous Peoples, workers, industry and civil society.

Recommendation 7

Develop and implement climate policy based on inclusive stakeholder engagement and public participation processes.

The deep and rapid social and economic transformations required to address the climate change will significantly affect citizens' lives, choices and behaviours. It is necessary to meaningfully engage the public in decision-making to ensure a just transition.

This recommendation is relevant to focus area A.

Discussion of context and evidence

Public participation is increasingly mandated under international, regional and national legal frameworks. Public participation in decision-making on matters related to sustainable development has been mandated internationally through the fundamental access rights of Principle 10 of the 1992 Rio Declaration, which specifies that states "shall facilitate and encourage public awareness and participation by making information widely available" (Rio Declaration, 1992). In Europe, the 1998 Aarhus Convention highlights the right of the public to participate in environmental decision-making. The 2018 Escazu Agreement does the same in Latin America and the Caribbean. The Paris Agreement also notes the importance of climate justice, public awareness, participation, transparency and access to information.

Taking the European Union as an example, under the EU Governance Regulation (Article 10), EU member states must ensure that public is given early and effective opportunity to participate in preparation of the National Energy and Climate Plans (NECPs) before their adoption. The same applies to the Long-Term Strategies. Requirements for public participation on climate change are also being included in national and local climate change laws and regulations (e.g. in Spain). Some jurisdictions are considering including recurring climate assemblies among the core mechanisms of national climate governance. This has already occurred in some municipalities (e.g. Brussels and Milan).

Climate assemblies is one potentially powerful area in which steps to ensure a just transition can be taken, ambition on climate policy can be increased, and the dynamics of climate governance can be changed. In recent years, citizens assemblies have become a popular and high-profile approach to citizen participation, to the extent that the OECD refers to this as a "deliberative wave" and the Council of Europe has adopted a set of international standards. At the crest of that wave are climate assemblies, i.e. citizens' assemblies commissioned to make recommendations on the climate and ecological crisis.

Climate assemblies differ from other forms of public participation because of the way they recruit a diversity of participants that share the characteristics of wider society, and facilitate learning, deliberation and collective recommendations. This combination of diversity and deliberation make climate assemblies a powerful tool to facilitate a just transition:

- **Diversity:** climate assemblies use stratified random selection to ensure that members of the assembly share similar sociodemographic and attitudinal characteristics as the wider population. Climate assemblies reflect the diversity of the public in a country, region or city. There has also been a global climate assembly.
- **Deliberation:** climate assemblies facilitate learning from a range of experts and advocates, the exchange and interrogation of ideas in a context of mutual respect and the development of collective recommendations.

See Table 3 below for examples of impact created by previous climate assemblies.

Averchenkova (2024) shows that when organised well, climate assemblies promise to:

- **Increase the robustness and ambition of climate policy that reflects the insights of everyday people.** Citizens bring a way of looking at policy that is different to those who work within climate governance communities. They can offer new ways of approaching problems and articulating solutions that are attuned to their interests, needs, attitudes and lived experience.
- **Challenge social and climate injustices.** Citizen involvement and deliberation can redress existing power imbalances by enabling policies and practices that privilege vested interests to be confronted.
- **Break political deadlocks on climate action.** Citizen participation can show that citizens are clear on and supportive of what needs to be done to address climate change, giving political leaders the confidence and willingness to take action.
- **Reduce polarisation around climate action.** Polarisation occurs in contexts where people have little or no direct contact with those that are different from themselves, and those with extreme views can spread fear among society. Participation can have a very different effect: working alongside those who are different from ourselves can breed mutual respect and understanding.
- **Increase the legitimacy and public acceptance of social action on climate.** As the transition to low-carbon societies unfolds, the everyday lives of people will be increasingly more directly impacted. Knowing that fellow citizens have been part of the decision-making processes increases public confidence and builds consent in dealing with change.
- **Promote a more climate-aware and politically confident citizenry.** Through participation in political decision-making processes, members of the public can learn more about the climate crisis and develop the skills and confidence to participate more fully in climate action at individual and collective levels.

Table 3. Examples of the impacts of climate assemblies

Type of impact	Examples
Impact on policy	• The Irish Climate Action Bill (2020) incorporated the majority of the recommendations from the Citizens' Assembly 2016–18. • The Climate and Resilience Bill (2021) in France translated a number of the National Convention measures into law, although many were in a modified form. • A number of the recommendations of the Luxembourg Climate Citizens' Council have been translated into the redrafted National Energy and Climate Plan submitted to the European Commission in 2023.
Impact on institutions and climate actors	• The UK Climate Change Committee used the recommendations from Climate Assembly UK to frame its Sixth Carbon Budget and has integrated deliberative methods into its work. • In Ireland, the Joint Parliamentary Committee on Climate Action, established to consider the Citizens' Assembly's recommendations, is now a permanent body. • The Danish Climate Assembly has been given the same status as (sectoral) social partnerships.
Impact on public discourse	• The French Convention stimulated extensive public debate on climate transition that raised its salience among politicians. • Media attention on the Austrian Citizens' Climate Assembly resulted in a relatively high level of public knowledge about the assembly. • The Irish Citizens Assembly on Biodiversity Loss has elevated the importance of the nature crisis in political and public debate and garnered increased media attention.
Impact on participants	Strong and consistent effects on members' attitudes and behaviours towards climate action can be found across almost all citizens assemblies, with evidence from the UK that this is sustained and even enhanced over time.

Note: For more information on findings on how to organise climate assemblies and their impact see:

Summary recommendations

To improve the quality of climate policies and minimise social backlash, governments should ensure that climate targets and the mitigation and adaptation policies underlying them are developed and implemented based on ongoing inclusive stakeholder engagement and public participation processes. These may include:

- Requiring stakeholder engagement and public participation in the key stages of a policy's development and implementation.
- Defining the mechanisms through which stakeholder engagement and public participation will be implemented (e.g. establishing which entity is responsible for convening the process and how follow-ups on outcomes will happen).
- Convening citizens' assemblies, panels or other forms of citizens participation in areas that are particularly vulnerable to the impacts of the low-carbon transition, conducting focused stakeholder engagement and ensuring public participation in the just transition.
- Strengthening and improving transparency around the follow-up stage of stakeholder engagement and public participation processes.

Recommendation 8

Empower Ministries of Finance to drive forward a just transition and unlock the means to implement it.

Ministries of Finance have significant levers they can pull to accelerate the climate action and climate finance needed to deliver a just transition towards low-carbon and climate-resilient economic development.

This recommendation is relevant to focus area B.

Discussion of context and evidence

Finance Ministries need to be at the heart of driving the economic transformation needed to build a net zero and climate-resilient economy. From their position at the centre of government, Ministries of Finance coordinate economic strategy and fiscal policy, regulate the financial system, and collectively control, either directly or indirectly, well over US$30 trillion in government expenditure – over one-third of global GDP. They are shareholders in state-owned enterprises, development banks, and the multilateral system (Coalition of Finance Ministers, 2023).

There is a major opportunity for Ministries of Finance to step up their leadership, including by more actively supporting other government agencies as part of a whole-of-government approach to climate action. Finance Ministries are not yet fully using all the levers at their disposal. For example, many Finance Ministries can play a much greater role in the upcoming NDC enhancement process, contributing to ambitious, credible and investment-ready NDCs. A recent technical note lays out the ways in which Ministries can get involved across NDC development, implementation and financing (COFM, 2024).

Stepping up action will not only benefit the climate – it is essential for achieving Finance Ministers' core priorities of macro-stability, growth and responsible management of the public finances. It will bring at least four major benefits: helping to avoid escalating risks with macro-critical consequences; driving significant growth and development opportunities; creating economic, social and environmental benefits, especially for the most vulnerable members of society; and delivering clean, secure and affordable energy for all (COFM, 2023).

In terms of potential challenges and barriers, Finance Ministries may have a weak institutional basis for involvement in the government's climate agenda, including a lack of explicit mandates that formalise their role in driving climate action and a lack of clarity on their role in inter-ministerial climate coordination mechanisms. They also often have limited expertise and technical capacity, including a limited number of staff with climate-specific expertise, and limited access and ability to use relevant tools and models to inform decision-making.

Box 8. Coalition of Finance Ministers for Climate Action

The Grantham Research Institute coordinated the production of a guide by the Coalition of Finance Ministers for Climate Action that sets out a framework for action showing how Ministries of Finance can mainstream climate into their work. It describes how Finance Ministries can integrate climate action into their three typical core functions: economic strategy and vision; fiscal policies and budget management; and financial policy and oversight of the financial system – and the three capabilities needed to do so: leadership; coordination; and human and analytical capability. Cutting across these functions and capabilities is the critical need for Ministries of Finance to drive forward a just transition to sustain public support and inform effective policy design.

Many Finance Ministries around the world are stepping up their climate action. The guide contains over 140 in-depth case studies and shorter country examples from around the world. Actions include strengthening their involvement in NDCs and aligning fiscal incentives with climate action, developing internal strategies on climate change, and setting up climate units.

Summary recommendations

- **Parties should ensure that Ministries of Finance have a strong mandate to act on climate.** This includes building inter-agency coordination mechanisms on climate action that have a strong role for Ministries of Finance, enabling them to take part in the development of national climate strategies and policies and facilitating alignment between climate strategies, national development and sectoral plans and other economic priorities.
- **Parties should invest in capacity-building relating to climate in Ministries of Finance and across government, and support ministries to develop and use the analytical tools and models needed to drive a just transition towards net zero emissions,** including by encouraging membership and active participation in the Coalition of Finance Ministers for Climate Action (COFM), which provides opportunities for peer learning and exchange (see more in Box 8).

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