- The Just Transition: Shaping the
- delivery of the Inevitable Policy Response



Report prepared by Nick Robins

April 2022



Executive Summary

- The just transition is increasingly recognised as a key strategy for delivering ambitious climate action.
 By responding to the needs of workers, communities and consumers, governments can accelerate
 the shift to a net-zero economy: first, by mitigating concerns about downside social risks, and
 second, by realising social opportunities in terms of the creation of decent work for all, social
 inclusion and the eradication of poverty.
- The 2021 COP26 climate summit elevated the just transition as critical enabling factor, not least in terms of the phase out of fossil fuels and ramp up of clean energy. Alongside a string of policy commitments, public and private financial institutions along with business made a series of announcements that point to how the just transition could become a reality.
- The ways that governments, business and investors now incorporate the just transition into their climate policies will be a key factor shaping how the Inevitable Policy Response (IPR) forecasts play out. Climate policies that anticipate and address the distributional dimension of net-zero will have a greater chance of success, and it could well make the difference between achieving or failing to achieve a net-zero economy by 2050.
- The global crisis sparked by Russia's invasion of Ukraine has added energy security to climate change as a driver for phasing out dependence on fossil fuels and spurring clean energy investment. It has also highlighted the social vulnerabilities of the current energy system (not least in terms of high and volatile fossil fuel prices). Making a just and inclusive transition a reality will be key to the success of national and international policy decisions in 2022 as well as the effectiveness of corporate and finance sector actions.



Contents

1. The Just Transition: critical for speeding climate action	4
2. Moving centre stage at COP 26	
3. Just Transition and the Inevitable Policy Response	
4. Just Transition in a time of crisis	12
Acknowledgements	14
References	15
List of tables	
Table 1 A just transition lens on IPR policy levers	10



1. The Just Transition: critical for speeding climate action

At the heart of the 2015 Paris Agreement and Sustainable Development Goals is a theory of change which sees the delivery of critical environmental targets (such as the net-zero economy) as intrinsically connected with wider social objectives such as ending poverty, cutting inequality and achieving decent working conditions across the world. The result needs to be a 'just transition,' one that recognises the fundamental injustices of the current fossil-fuel based energy system, the ways in which climate change exacerbates many inequalities (notably in the developing world) and the opportunity of shaping the drive to net-zero so that it helps to overcome these structural failings. This report updates a 2019 IPR report on the just transition in light of growing policy and market action (notably around COP26), as well as the crisis sparked by the war in Ukraine.

The shock of Russia's invasion of Ukraine in February 2022 is deepening existing energy inequalities through the sharp rises in energy and other commodity prices, worsening the livelihoods for large sections of the global population. It could also accelerate the shift to the net-zero economy by once again adding security to decarbonisation as key drivers for accelerated deployment of resource efficiency and renewable energy. This makes the just transition a strategic issue for investors and policymakers in 2022.

Moving into the Mainstream

Almost six years after it was included as a single line within the Paris Agreement, the just transition emerged at the 2021 COP26 climate summit in Glasgow as a critical factor for enabling a successful shift to a net-zero and resilient economy.

For the Inevitable Policy Response (IPR), a 'just transition lens' is an important way of evaluating the expected feasibility and effectiveness of government measures to deliver a net-zero emission economy before 2050. The disruptive nature of the transition means that incorporating consideration of the implications for workers, communities and consumers is increasingly central to political acceptability and practical delivery. There is now growing acceptance in governments, business and civil society that the distributional and participatory implications of net-zero need to be consciously incorporated into policy and market frameworks. If net-zero is the what, then the just transition is the how.

Net-zero can deliver significant social gains, but this needs conscious design: The 2015 Paris Agreement committed governments to incorporate "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities." Originating in the trade union movement, the just transition is a strategy to ensure that the greening of economies generates positive social impacts for workers and communities and no-one is left behind. A comprehensive set of just transition guidelines were also agreed at the ILO by governments, business and trade unions in 2015, covering key policy areas (such as tax, skills and regional policies) as well as critical mechanisms (such as social dialogue between workers and company management).

Forecasts invariably conclude that the net-zero economy will not only have higher levels of employment, but also produce wider socio-economic benefits. For example, the IEA's Net Zero by 2050 Roadmap estimates that the transition could create 30 million jobs across the energy system, with around five million job losses, as well as provide clean energy to 785 million people without electricity and 2.6 billion people without clean cooking solutions. The quality of these additional green jobs is a critical factor in the just transition.

Transitional issues can also be highly concentrated in terms of sector and region, often reinforcing existing inequalities and economic imbalances.



Right, necessary and smart

The strategic rationale for the just transition is three-fold. First, it is the right thing to do. The just transition applies established social, labour and human rights standards to the delivery of a net-zero and resilient economy. It points to the critical importance of fairness in policy design and delivery. Although fairness (equity) has been a longstanding principle of good climate policymaking, it has often been relegated behind efficiency and effectiveness. The just transition seeks to overcome this longstanding marginalisation of social factors in climate policy and climate action.

More than this, the second driver for the just transition is that it is necessary to address the fundamental political economy of net-zero. Without conscious strategies to manage the process of change then political backlash could follow, slowing the process of decarbonisation. By contrast, active anticipation of change and shaping net-zero pathways to include social factors will accelerate delivery of environmental targets.

Finally, the third strategic reason for the just transition is that this is the smart way of building a strong and resilient net-zero economy by developing essential skills, capabilities and social institutions. In the business world, the just transition addresses the 'human capital' and 'social capital' required for net-zero. But it goes further by taking a people-centred approach. At the heart of the just transition is the core principle that those affected by change need to be involved in shaping it, whether in the workplace, in communities or in national policy.

After policy shocks, governments responded with an increased focus on equity

The consequences of the absence of a just transition strategy was highlighted in the 2016 election of President Trump, who pulled out of the USA out of the Paris Agreement, citing concern for job losses. In France, the 2018 'yellow vest' protests against carbon tax increases on transport reinforced the importance of integrating wider social justice issues into climate policy, extending the scope from workers to consumers. These shocks have triggered policy responses.

Overall, nearly 50 governments (around a quarter of the total) refer to the just transition in their Nationally Determined Contributions (NDCs) for 2030. Progress has been greatest within post-industrial economies. In the EU, the just transition is central to the Green Deal programme with a dedicated Just Transition Mechanism and Fund for high-carbon regions. A new 'social climate fund' has been proposed to respond to the social impacts of rising carbon prices. European countries such as Scotland and Spain have also been taking dedicate measures.

In the USA, President Biden made jobs the centrepiece of US climate policy, stressing the importance of "good-paying union jobs," an "equitable clean energy future" and delivering "environmental justice"; individual states such as Colorado are introducing plans.

The just transition is also rising in importance in major emerging economies, which can now have higher per capita emissions than many high-income countries due to their economic structure and dependence on fossil fuels. Here, investment requirements for climate action are greatest, and significant development needs remain in terms of poverty, inequality and livelihoods. South Africa is furthest advanced in developing a just transition framework, which will include attracting international public and private finance.

The financial sector is becoming a key change agent: Public financial institutions, such as national and multilateral development banks, have started to incorporate the just transition into their Paris Alignment activities. Institutional investors have also stepped up their action on the just transition. It is being integrated into routine investor practice as well as into assessment and shareholder engagement exercises such as the Climate Action 100+ initiative.



2. Moving centre stage at COP 26

This growing momentum was deepened at the COP26 climate summit in November 2021. Indeed, the Glasgow conference can be seen as the moment that the just transition became a core part of the net-zero policy, corporate and financial toolbox.

In the run-up to the event and at COP itself, over 10 initiatives were launched, all of which will shape the way in which the IPR's Forecast Policy Scenario (FPS) and 1.5C Required Policy Scenario (RPS) will play out in the years aheadⁱⁱ.

Just Transition: Policy and Public Finance Initiatives at COP26

- 1. IEA Global Commission on People-Centred Clean Energy Transitions: Hosted by the International Energy Agency, the Commission crystallised global best practice in putting people at the heart of clean energy policy. The Commission made 12 recommendations to prioritise universal access to clean energy for all, maximise the delivery of decent jobs and worker protection, provide government support for skills and training, incorporate gender, equality and social inclusion in climate and energy policy and use social dialogue and stakeholder engagement so that people are active participants in the process of change.
- 2. The Glasgow Climate Pact: Agreed by consensus by 190 states, the Glasgow Climate Pact deepened the commitment of governments to the just transition. The Pact included the first reference to fossil fuels in a UNFCCC agreement, which was explicitly linked to "providing targeted support to the poorest and most vulnerable in line with national circumstances and recognizing the need for a just transition."

A strong connection with financial alignment was also made with the Pact stating "the need to ensure just transitions [...], including through making financial flows consistent with a pathway towards low greenhouse gas emission and climate-resilient development."

- **3. Government Declaration on Just Transition:** A smaller group of 15 industrialised country governments along with the EU issued a declaration on Supporting the Conditions for a Just Transition Internationally. The declaration set out five principles including supporting workers, social dialogue, economic strategies, decent work, supply chains and reporting. The reporting principle means that the signatories will include the just transition in the biennial disclosure on policies and measures to achieve their (NDCs).
- **4.** The South Africa Just Energy Transition Partnership: One of the most substantive outcomes of Glasgow was the new Partnership between South Africa, the EU, France, Germany, the UK and the USA. The Partnership will provide USD8.5 billion to support "a just transition to a low carbon, climate resilient society that promotes employment and livelihoods" through a mix of grants, concessional instruments and risk sharing mechanisms to crowd-in private investments. The funds will be used to support workers and communities and to create high quality green jobs.

Details of how the Partnership with operate will be finalised in 2022. The relevance of Partnership extends beyond South Africa and could provide inspiration for other emerging economies seeking to finance their net-zero plans.

5. High-Level Principles from Development Banks: Development banks are crucial institutions to help governments and markets deliver a just transition, and public finance institutions such as ADB, CDC, EIB, EBRD and the World Bank have often been leading the practical application of just transition.



At Glasgow, eight multilateral development banks (MDBs) released a joint set of high-level principles, focusing on connecting climate action with the sustainable development goals, delivering long-term economic transformation, mobilising public and private finance, mitigating negative socio-economic impacts and increasing opportunities as well as ensuring inclusive and transparent planning.

Turning these principles into practice will need to involve responsiveness to country-driven priorities as well as social dialogue with business, workers and communities.

MDB action could also catalyse private finance efforts through credible blended finance initiatives. The ADB's Energy Transition Mechanism is a leading example of this, aiming to accelerate the phase-out of coal assets through a just transition.

6. Phasing Out Coal through a Just Transition: As COP26 President, consigning coal to history was one of UK's key policy priorities in Glasgow. Alongside the first of its kind reference to phasing down coal in the formal Glasgow Climate Pact, over 40 national governments along with regional authorities and other organisations supported a 'coal to clean' transition statement prioritising the end of unabated coal in the 2030s in industrialised countries and in the 2040s in developing countries.

A specific commitment was made to "provide a robust framework of financial, technical, and social support to affected workers, sectors and communities to make a just and inclusive transition away from unabated coal power in a way that benefits them and expands access to clean energy for all."

The Climate Investment Funds (CIF) also launched a USD2.5 billion investment programme designed to achieve a just transition from coal to clean energy in emerging economies. Pilots are set to kick off in India, Indonesia, the Philippines and South Africa. The role that private finance institutions can play in supporting a just transition from coal was also profiled in an investor briefing from the Powering Past Coal Alliance and the LSE.

Just Transition: Finance, Industry and Business initiatives at COP26

Alongside governments, a number of business, industry and finance sector initiatives were also announced at COP26, pointing to how voluntary action could make the just transition could come to life in both the real economy and financial system.

7. The Glasgow Financial Alliance for Net Zero: One example of this came in the form of the Glasgow Financial Alliance for Net Zero (GFANZ). This has boosted the number of financial institutions with net-zero targets from just 30 in early 2020 (with less than 2% of global assets) to more than 450, representing around 40% of global assets at USD130 trillion.

Members of GFANZ have committed to net-zero financed emissions by 2050 at the latest, delivering their fair share of the 50% emission cut by 2030 and drawing up detailed five-year reduction plans, reported on annually. In its progress report, GFANZ highlights the importance of including the just transition in both the real economy as well as financial sector transition plans that now need to be designed and implemented.

8. Shipping - Multi-Stakeholder Collaboration: The Just Transition Maritime Task Force launched in Glasgow highlighted the potential for multi-stakeholder collaboration between a specific industry sector, trade unions and others. The Task Force brings together the International Chamber of Shipping (ICS), representing shipowners, the International Transport Workers' Federation (ITF), representing seafarers and port workers, and the United Nations Global Compact.

The International Labour Organization (ILO) and the International Maritime Organization (IMO) will also join the task force as partners. The Task Force aims to support the decarbonisation of shipping while ensuring workers and communities are protected and have access to the opportunities created in the transition.



9. A Business-led Framework for Energy: For the first time, a corporate sector presented its own strategy for delivering a just transition. The Council for Inclusive Capitalism with the Vatican, working with CEOs from ACEN, Anglo-American, BP, ENI, Reliance, Repsol and SSE, produced a just energy framework.

The framework has four pillars: universal net-zero energy access, evolving the energy workforce, community resilience, and collaboration and transparency. The framework defines 20 "building blocks" for driving forward a just transition, applying case studies to illustrate best practice.

10. Assessing Corporate Practice: On the corporate accountability side, the World Benchmarking Alliance (WBA) launched the first assessments of corporate just transition performance. The evaluation covers issues such as human rights, social dialogue, just transition planning, job creation, retaining and retraining, social protection, and policy advocacy.

Looking at 100 oil and gas, 50 electric utility and 30 automotive manufacturing companies, the WBA found that "the vast majority of high-emitting companies are failing to demonstrate efforts towards a just transition." Only nine companies scored over 50 out of 100 in the benchmark.

The WBA concluded that people most at risk are being left out of decisions that affect their future and argued that companies must commit to reskilling workers or risk a stranded workforce. In addition, the assessment showed that businesses are still not using their influence to protect people, manage social impacts and advocate for a just transition. In particular, the WBA underlined that the just transition needs to be underpinned by companies' respect for human rights.

11. Country Focus - the UK's Financing a Just Transition Alliance: The UK's Financing a Just Transition Alliance, convened by the LSE, is the first country-level initiative focusing on the role that banks, investors and other institutions can play in delivering net-zero with positive social impact. At COP26, the Alliance presented its first-year findings of its collaboration with over 40 members from across the country.

Key priorities have included making the just transition a core part of financial sector climate action, using shareholder engagement to improve corporate practices, focusing on place-based investment strategies and encouraging government to introduce just transition policies in the real economy and financial system. The next phase of the Alliance will focus on turning increasing financial sector commitment into specific commitments and transactions.



3. Just Transition and the Inevitable Policy Response

Influencing IPR Policy Levers

Based on the results of COP26, it is clear that the design and delivery of the policy levers that underpin the IPR's Forecast Policy Scenario and Required Policy Scenario will increasingly be influenced by just transition factors.

In particular, the just transition will feature prominently in the design of carbon pricing, the phase out of fossil fuels as well as the phase up of clean energy and electric vehicles.

It will also become a core part of international climate cooperation, not least to provide critical financial resources for winding down major fossil fuel industries in emerging markets.

Here, the South Africa Just Energy Transition Partnership and the ADB's Energy Transition Mechanism are early-stage examples of what could become mainstream by 2025.

To date, the focus of just transition efforts have been almost exclusively on the energy system. Efforts to develop just transition strategies for agriculture and land-use will intensify: these sectors are potentially more socially sensitive than energy, with more people dependent (particularly in developing countries) and often with weak social performance.

COP26 marked a step forward in policy, market and civil society recognition of the importance of the just transition in the shift to net-zero. As governments, business and investors focus on turning to their pledges into action, there will be increasing focus on how this will be delivered in terms of jobs, skills, regional implications and overall fairness among workers, communities and consumers.

The reality remains, however, that the just transition remains at the commitment level for those who recognise its importance and is still not recognised by most governments, businesses and financial institutions.

For investors, it is important to assess how the just transition is being included by governments at a granular level.

Climate policies that anticipate and address the distributional dimension of net-zero will have a greater chance of success, and the just transition could well make the difference between achieving or failing to achieve a net-zero economy by 2050.

The ways that governments, business and investors incorporate the just transition into their climate policies will therefore be a key factor shaping how the Inevitable Policy Response (IPR) forecasts will be realised.

Simply taking a policy lever at face value without understanding how it is managing social risks and realising social opportunities could result in policy surprises, both positive and negative for climate action.

Investors therefore need to include a 'just transition' lens in the way they assess and respond to emerging climate policy measures such as those contained in the IPR Forecasts.



Illustrations of how the 'just transition lens' can be applied by investors to assess the robustness of country policy is included in the table 1 below, along with policy, business and other examples. An additional policy lever – Public Finance – is included: public finance is a fundamental lever for climate action in its own right and particularly important for the social dimensions of the net-zero transition.

Table 1 A just transition lens on IPR policy levers

IPR Levers	Just Transition Lens	Examples
1. Net-Zero Targets	 Include just transition in NDCs Establish just transition stakeholder dialogue Introduce just transition policies and financial packages for sectors and regions 	- South Africa's 2030 NDC ⁱⁱⁱ - Scotland's Just Transition Commission ^{iv} - EU Just Transition Mechanism ^v - Canada's Just Transition Consultation ^{vi}
2. Carbon Pricing & Fossil Fuel Subsidy Reform	- Assess distributional implications (income, sector, region)- Allocate funding to vulnerable social groups	- EU's proposed Social Climate Fund ^{vii} - Peru's Social Inclusion Fund ^{viii}
3. Fossil Fuel Phase Out	 Design sector and place-based plans for workers and communities Finance reskilling, social protection & regional development 	- Denmark's Oil & Gas Phase Out Plan ^{ix} - Spain's Just Transition Agreements for Coal ^x
4. Clean Power	- Design expansion of renewable energy to provide decent work, expand skills and positive community benefits	- India's Skills Council for Green Jobs ^{xi} - UK Green Jobs Task Force ^{xii}
5. Internal Combustion Engine (ICE) Phase Outs	 Assess social risks of ICE phase-out Introduce bridging policies for workers and communities Maximise jobs and community benefits of sustainable transport (including public transport) 	- France: fund to retrain foundry workers for EV ^{xiii}
6. Low Carbon Buildings	- Build the skilled workforce with decent working conditions for renewables and energy efficiency - Focus on low-income households to end energy poverty	
7. Industry Decarbonisation	- Ensure workers and communities are included in plans for steel, cement and chemicals	
8. Low Emission Agriculture	- Shape net-zero plans to help eliminate poverty and reduce inequality in food and agriculture ^{xiv}	
9. Land Use and Forestry	- Shape net-zero plans for land-use and forestry to help eliminate poverty and reduce inequality ^{xv}	
10. ADDITIONAL Public Finance	 Deliver public finance to support a just transition (including for skills, social protection, regions, sectors) Mobilise development banks to enable economies to deliver 	- ADB Energy Transition Mechanism - CIF Accelerating Coal Transition programme



Investors also have important roles and responsibilities in supporting the just transition: Investors and banks are moving from signalling the importance of the just transition to expecting tangible action from the companies they hold.

In 2022, financial institutions both as members of GFANZ and beyond will need to set out how they intend to make the just transition a key part of their net-zero transition plans, across business lines and asset classes, dialogue with key stakeholders and through commitments to accountability. Banks and investors also have an important role in ensuring that the companies they finance also adopt credible transition plans with just transition inside (for example, through shareholder engagement).

The financial sector role in the just transition also extends to dialogue with policy makers and support for comprehensive net-zero plans that are efficient, effective and equitable.

Governments have the primary responsibility to put in place the policy and financial frameworks to accelerate the just transition across macro-economic and fiscal strategy, industrial, sectoral and regional policies, employment and skills development, as well as labour rights and social dialogue.

Financial sector institutions can support the development of these frameworks through their interaction with policymakers, something that is already starting to take place with the G20.



4. Just Transition in a time of crisis

The global crisis sparked by Russia's invasion of Ukraine has once more added energy security to climate change as a driver for phasing out dependence on fossil fuels. It is important to remember that the 1970s energy shocks were the stimulus for the first global efforts to increase energy efficiency and develop a renewable energy sector as a way of reducing oil and gas consumption. For European industrial economies such as the UK and the EU, this was also the decade when carbon dioxide emissions peaked, two decades before climate action started to take off.

Russia's war on Ukraine challenges the net-zero agenda in a similar way to the COVID pandemic. It forces policymakers, business and investors to work towards an energy system that meets the 'triple lock' of being secure, clean and fair.

The 2022 energy crisis has also highlighted the acute social vulnerabilities of the current energy system, not least through extreme increases in energy prices for consumers. A key consequence of the crisis will be to send large numbers of the global population into energy poverty. Added to this, high energy prices will threaten output and employment across industrial sectors.

In many ways, energy security can best be achieved by accelerating net-zero strategies, notably by ramping up energy efficiency across the economy, accelerating renewable energy deployment, moving further with the electrification of the economy, building up 'green hydrogen' for industrial uses and reinforcing a modal shift to public transport. These efforts can also be shaped so that they consciously deliver the social cobenefits of the just transition. Increasing the energy efficiency of housing and transport would be major gain for low-income households, for example.

Efforts to accelerate the transition to net-zero in key jurisdications will also be most effective if accompanied by ambitious just transition actions for the workforce (for example, retraining and redeploying workers in the gas value chain).

So far, the invasion of Ukraine has prompted a number of countries, particularly in Europe, to pledge to bring forward renewable energy and energy efficiency measures; it has also triggered actions to revive domestic fossil fuel output and diversify international sources of supply. The April 2022 IPR Ukraine War paper has further detail on this.

Against this backdrop of the intersecting geopolitical, economic and climate crises, questions of justice will rise to the top of the agenda in the rest of 2022 and beyond. Key dimensions of this include:

1. Combining Energy Security, Net-Zero and Social Inclusion: A critical task will be developing coordinated policy and market responses that realise the evident synergies between net-zero, energy security and social inclusion.

Net-zero strategies can directly help to drive down fossil fuel energy costs for vulnerable households and businesses and can be deployed relatively quickly compared with fossil fuel alternatives. If these positive social linkages are not made, however, then there is a risk of a backlash against the net-zero agenda.



2. Harnessing Global Policy and Financial Flows: The crisis will highlight the need to accelerate global financial flows for climate action in emerging markets and developing economies. With Indonesia chairing the G20 and Egypt hosting COP27, the macro-dimension of achieving an inclusive and just transition in low- and middle-income countries will be at the forefront of major policy forums in 2022. As the latest IPCC sixth assessment report on mitigation has concluded "climate finance in support of a Just Transition is likely to be a key to successful low-carbon transition globally"xvi

This will focus minds on how to confront rising debt burdens and the need to meet at the very least the longstanding \$100 bn climate finance commitment in 2022. This macro-dimension of the just transition will lead to increased attention on achieving transformational outcomes from measures such as the IMF's planned increase in special drawing rights.^{xvii}

3. Strengthening National Strategies and Public Finance: All governments are required to produce updated climate commitments for 2030 – known as Nationally Determined Contributions – by COP27 in November 2022. This is the moment to make sure these incorporate credible just transition measures for workers, communities and consumers attuned to the needs of the global crisis. To be effective, these will need to be backed by credible financial packages, including phasing out fossil fuel subsidies and switching support to low-income households in the deployment of net-zero solutions in housing, energy, transport and agriculture.

Overall fiscal space for governments is being constrained by rising interest rates, but the strategic case for public investment in a just transition to net-zero remains strong and could be financed by a coordinated issuance of green and social bonds from sovereign borrowers as well as public finance institutions, such as national and multilateral development banks.

4. Embedding Social Inclusion in Real Economy and Finance Sector Transition Plans: Producing and implementing net-zero transition plans is now top of the 2022 climate agenda for real economy and financial sector businesses and institutions. In light of the crisis, these plans will need to strengthen the links between energy security and decarbonisation in the phase-out of fossil fuel dependence.

These transition plans will also need to include just transition factors in line with GFANZ and incorporate the implications for workers, communities and consumers in the allocation of capital. Here, real economy firms as well as banks and investors can draw from the experience of pioneering companies that have started to operationalise just transition principles. These will inevitably be first generation efforts, but ones that can then be built upon in further iterations in the coming years.



References

ⁱ Nick Robins and James Rydge for IPR (2019) https://www.unpri.org/inevitable-policy-response/why-a-just-transition-is-crucial-for-effective-climate-action/4785.article

ii Nick Robins and Sabrina Muller (2021) Lessons from COP26 for financing the just transition, https://www.lse.ac.uk/granthaminstitute/publication/lessons-from-cop26-for-financing-the-just-transition/The references to the initiatives cited in the rest of this section can be found in this document.

iii Presidential Climate Commission (2021) Recommendations on South Africa's Draft Updated NDC, https://www.climatecommission.org.za/just-transition-framework

iv Scottish Government (2021) Just Transition Commission, https://www.gov.scot/groups/just-transition-commission/

^v EU (2019), Just Transition Mechanism, https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/just-transition-mechanism_en

vi Government of Canada (2021) Just Transition, https://www.rncanengagenrcan.ca/en/collections/just-transition

vii European Commission (2021) Increasing the ambition of EU emissions trading, https://ec.europa.eu/clima/eu-action/european-green-deal/delivering-european-green-deal/social-climate-fund en

viii OECD & IEA (2021) update on recent progress in reform of inefficient fossil-fuel subsidies that encourage wasteful consumption 2021, https://www.oecd.org/g20/topics/climate-sustainability-and-energy/OECD-IEA-G20-Fossil-Fuel-Subsidies-Reform-Update-2021.pdf

^{ix} State of Green (2020) Denmark set to end all new oil and gas extraction in the North Sea by 2050, https://stateofgreen.com/en/partners/state-of-green/news/denmark-set-to-end-all-new-oil-and-gas-extraction-in-the-north-sea-by-2050/

^{*}WRI (2020) Spain's National Strategy to Transition Coal-Dependent Communities, https://www.wri.org/just-transitions/spain

xi India Skills Council for Green Jobs (2022), https://sscgj.in/

xii UK Government (2021) Green Jobs Task Force Report, https://www.gov.uk/government/publications/green-jobs-taskforce-report

^{xiii} France Ministry of Economy and Finance (2021) The support fund for employees in the automotive sector officially established, https://www.economie.gouv.fr/fonds-accompagnement-salaries-filiere-automobile-etabli

xiv Action Aid (2019) Principles for Just Transition in Agriculture, https://actionaid.org/sites/default/files/publications/Principles%20for%20just%20transition%20in%20agriculture.pdf

xv See Just Rural Transition (2022), https://justruraltransition.org/

xvi IPCC (2022) IPCC Sixth Assessment Report - Climate Change 2022: Mitigation of Climate Change, https://www.ipcc.ch/report/ar6/wg3/

The Just Transition: Shaping the delivery of the Inevitable Policy Response

xvii Nick Robins and Danae Kyriakopoulou,

The road away from the abyss: 10 climate promises the financial system needs to keep in 2022, https://www.lse.ac.uk/granthaminstitute/news/the-road-away-from-the-abyss-10-climate-promises-the-financial-system-needs-to-keep-in-2022/

Acknowledgements

This paper was written by Nick Robins for the <u>Inevitable Policy Response (IPR)</u>. Nick Robins is Professor in Practice for Sustainable Finance at the Grantham Research Institute on Climate Change and the Environment. For this report, he writes in his personal capacity and is solely responsible for any errors. The views in this report do not necessarily reflect the views of the IPR research consortium.

IPR is a climate transition forecasting consortium commissioned by the Principles for Responsible Investment (PRI) whose aim is to prepare investors for the portfolio risks and opportunities associated with accelerating policy responses to climate change. The key outputs of IPR consist of the Forecast Policy Scenario (FPS) and the 1.5°C Required Policy Scenario (RPS).

Both the FPS and the RPS are intentionally designed to be long-term, running out to 2050 and beyond. Both scenarios assumed emissions rose slightly out to 2025/6 when published last October 2021.

PRI commissioned the Inevitable Policy Response in 2018 to advance the industry's knowledge of climate transition risk, and to support investors' efforts to incorporate climate risk into their portfolio assessments.



This report is funded in part by the Gordon and Betty Moore Foundation through The Finance Hub, which was created to advance sustainable finance.







A research partnership led by Energy Transition Advisers and Vivid Economics undertakes IPR policy research and scenario modelling and includes Kaya, 2Dii, Carbon Tracker Initiative, Climate Bonds Initiative, Planet Tracker and Quinbrook Infrastructure Partners.

Leading financial institutions joined the IPR in 2021 as Strategic Partners including BlackRock, Fitch Ratings, Nuveen, BNP Paribas Asset Management and Goldman Sachs Asset Management.