Climate change and the just transition

A guide for investor action















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The Initiative on Responsible Investment was established in 2004 and is now part of the Hauser Institute for Civil Society at the Harvard Kennedy School. The Initiative supports the social purpose of finance through research and multi-stakeholder dialogue, with the goal of catalysing leadership and action that creates long-term, values-driven wealth. The IRI serves as a research centre on fundamental issues and theories underlying the ability of financial markets to promote wealth creation across asset classes, while creating a stronger society and a healthier environment. The IRI accomplishes its mission by developing and presenting original research, providing a platform for dialogue, and taking practical action around issues of importance to the responsible investment community.

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Acknowledgements

The authors would like to thank the Investing in a Just Transition initiative's Advisory Committee for their insights and encouragement: John Adler, Amal-Lee Amin, Colin Baines, Marcel Barros, Sharan Burrow (Co-Chair), Helen Chin, Katie Grace Deane, Cuong Hoang, Anne-Catherine Husson-Traore, Rachel Kyte, Rita Mallia, Flavia Micilotta, Isaac Ramputa, Fiona Reynolds (Co-Chair), Rathin Roy, Therese Shets, Lucia Silva, Anne Simpson, Kirsten Spaulding, Nick Stern, Nigel Topping, Mario Tremblay, Nadine Viel Lamare, Steve Waygood and Philippe Zaouati. They also thank the following for valuable inputs, discussions and feedback: Murray Birt, Tatiana Bosteels, Emma Howard Boyd, Maria Carvalho, Sagarika Chatterjee, Eleni Choidas, Christina Cobourn Herman, Diletta Giuliani, Andrew Gouldson, Fergus Green, Tamara Herman, Claudia Kruse, Ritu Kumar, Hugues Létourneau, Adam Matthews, Mike Musuraca, Katherine Ng, Richard Perkins, Bettina Reinboth, Samantha Smith, Laetitia Tankwe, Alison Tate, Kevin Thomas, Sophia Tickell, Helena Vines Fiestas, Bob Ward, Peter Webster, Helen Wildsmith and Marguerite Young.

The authors would also like to thank William Irwin and Matthias Täger for research assistance, Kayla Cameron for project coordination, and Georgina Kyriacou for editing and producing this guide. Additional design work by RF Design.

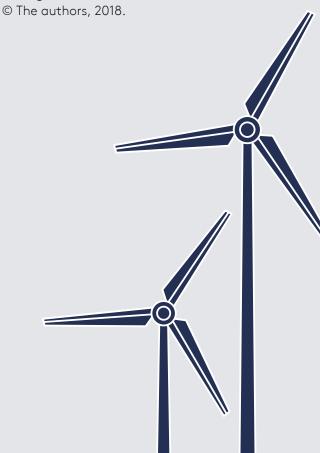
Declaration of conflict of interest

The authors declare: Nick Robins, Vonda Brunsting and David Wood have had financial support from the Principles for Responsible Investment for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or activities that could appear to have influenced the submitted work.

About the authors

This guide was written by **Nick Robins, Vonda Brunsting** and **David Wood**. Nick Robins is
Professor in Practice for Sustainable Finance at the
Grantham Research Institute. Vonda Brunsting is
Program Manager for the Just Transition initiative
at the Initiative on Responsible Investment and
David Wood is the Initiative's Director.

This guide was published in December 2018 by the Grantham Research Institute on Climate Change and the Environment.



The Investing in a Just Transition initiative

The Investing in a Just Transition initiative is led by the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science (LSE) and the Initiative for Responsible Investment at the Harvard Kennedy School. Launched in February 2018, the initiative is working to identify the role that institutional investors can play in connecting their action on climate change with inclusive development pathways. This builds on the commitment within the Paris Agreement on climate change to support a just transition.

The initiative is being delivered in partnership with the Principles for Responsible Investment (PRI) and the International Trade Union Confederation (ITUC). The initiative is funded by the PRI, the Friends Provident Foundation in the UK and the Surdna Foundation in the USA. The authors also gratefully acknowledge funding from the UK's Economic and Social Research Council through the Centre for Climate Change Economics and Policy.

For further information on the initiative, or to provide feedback on this report, please contact:

Nick Robins: n.v.robins@lse.ac.uk

Vonda Brunsting: vonda_brunsting@hks.harvard.edu

David Wood: david_wood@hks.harvard.edu

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Executive summary

A 'just transition' for workers and communities as the world's economy responds to climate change was included as part of the 2015 Paris Agreement on climate change. This guide sets out how investors can pursue the goal of a just transition as part of their core operating practices.

Reasons for investor action on the just transition Understandina systemic risks Contributing Reinvigorating to societal fiduciary goals Just transition entry points Uncovering Recognising investment material value opportunities drivers

Responsible investment, a just transition and sustainable development

The critical need for the transition to be both fast and fair is recognised in the Paris Agreement. The evidence shows that the shift to a resilient, lowcarbon economy will boost prosperity and be a net driver of job creation. There will be transitional challenges, however, for workers, communities and countries as this shift takes place. To address this, investor strategies to tackle the growing threat of climate change need to incorporate the full range of environmental, social and governance (ESG) dimensions of responsible investment. As fiduciaries, investors can make an important contribution to achieving a just transition, as stewards of assets, allocators of capital, and as influential voices in public policy. There is increasing recognition, however, that investors have so far given insufficient attention to the social consequences of climate change. For investors, the just transition provides the framework for connecting climate action with the need for an inclusive economy and sustainable development.

The good news is that investors do not need to reinvent the wheel to address the social dimension of climate change. There are a range of well-tested investor approaches that already exist. This guide draws on an international review of those approaches, and on extensive dialogue with investors, to provide a framework that can be applied both by individual institutions and through collaborative initiatives.

Five motivations for investor action

The case for investor action rests on five strategic motivations. These are aligned with core duties and interests and also show that contributing to the just transition is a way for investors to deliver positive social and environmental impacts.

- **1. Broadening the understanding of systemic risks** from climate change, by factoring in issues such as social exclusion and increasing inequality.
- 2. Reinvigorating fiduciary duty by better capturing the interrelated environmental and social drivers of long-term performance and by taking better account of beneficiary interests in sectors and regions affected by the transition.
- 3. Recognising material value drivers in terms of corporate practices in the workplace and the broader social licence to operate: business performance will be increasingly conditioned by the just transition.
- **4.** Uncovering investment opportunities that combine climate and social goals such as inclusive growth, identified through the lens of the just transition.
- **5. Contributing to societal goals** including existing responsibilities to respect international human rights and labour standards as well as new ways of realising the Sustainable Development Goals.

Five areas for investor action

Based on these motivations, there are five areas for action through which investors can make the just transition part of their core operating practices.

- 1. Investment strategy: Assessing exposure to the social dimension (including employment impacts) of the transition, pursuing dialogue with workers and other key stakeholders, and integrating just transition factors into investment beliefs and policies.
- 2. Corporate engagement: Including just transition factors in investor expectations, requesting disclosure, benchmarking performance, and pressing for improvement. The guide provides an initial set of questions for corporate engagement.
- 3. Capital allocation: Incorporating the social dimension into strategies for climate investment across all asset classes, including listed equities, bonds, private equity and real assets.
- **4. Policy advocacy and partnerships:** Making the just transition a part of policy dialogue at sub-national, national and international levels as well as taking part in place-based partnerships.
- **5. Learning and review:** Understanding emerging lessons and disclosing results so that the efficiency and effectiveness of investor action on the just transition continue to improve.

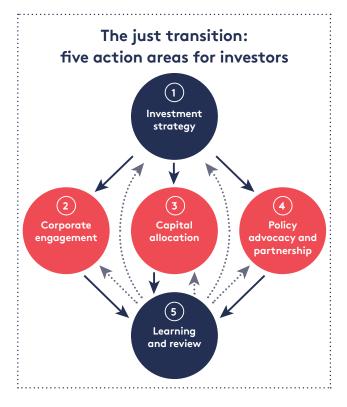
Where can investors start?

The just transition is a new and emerging agenda for investors. In December 2018, a broad range of institutions with over US\$4.4 trillion in assets under management expressed their commitment to take action by signing an international investor statement.¹

The task for investors is to develop their own plan in the areas outlined in this guide. Key next steps include:

- **Incorporate** the just transition into policy on responsible investment and climate change.
- **Integrate** the just transition into procurement of investment services across all asset classes.
- **Engage** with companies to include the just transition within climate strategies, covering critical workplace issues, as well as supply chain management and community relations.
- Participate in place-based initiatives to channel capital into community renewal and regional diversification through investments with positive social and environmental impacts.
- Promote disclosure by companies, asset owners and asset managers using the framework of the Task Force on Climate-related Financial Disclosures (TCFD) and extending this to include the social dimension.

Investing in a just transition is set to be the best way to manage the strategic risks and opportunities that flow from the shift to a prosperous, low-carbon, resilient and inclusive global economy.



1. Introduction

Climate action + social inclusion = the just transition

The transition to a resilient, low-carbon economy is underway and investors are increasingly taking action to drive this shift. However, the pace of change is still too slow and too limited to achieve the goals of the 2015 Paris Agreement on climate change or to realise the economic and social benefits that climate action can bring. Investors can do much more to bring about the needed change.

One of the ways to accelerate climate action – and optimise its benefits – is to ensure that it is inclusive. This means taking account of the distributional consequences so that no one is left behind. It is clear that the benefits of the transition will far outweigh the costs. Managed well, the transition will both prevent the immense human and economic costs of climate disruption and also improve growth, generate net new jobs and reduce inequality. In fact, the transition is essential to maintaining decent work and thriving communities in the coming decades.

However, these benefits will not happen automatically. Action is needed to ensure that jobs in the low-carbon economy have working conditions at least as good as those in highcarbon sectors. The benefits of the low-carbon economy also need to flow beyond the workplace to the wider community. In addition, there are significant transitional implications for key sectors, regions and countries that need to be managed. Poorly done, the result could be not only 'stranded assets' but also 'stranded workers' and 'stranded communities'. Past experience of deindustrialisation in many parts of the world highlights the importance of looking beyond the direct employment impacts to understand the wider ecosystem of prosperity in affected regions. Failing to do this could slow or even stall climate progress, while contributing to economic stagnation and political instability.

A framework for action

To overcome this challenge, the goal of a just transition for workers and communities was included as part of the Paris Agreement on climate change. At its core, the just transition is a forwardlooking, action-oriented framework that identifies opportunities for public and private investment in economic development that is both sustainable and inclusive. It helps to connect activities across international organisations, regional and national governments, businesses and investors, the development and philanthropic sectors, and, crucially, the workers and communities who will feel the effects of the transition - whether well or poorly managed - most keenly. Importantly, the just transition is a global agenda for industrialised as well as emerging and developing economies, one that addresses both the decarbonisation and resilience dimensions of the transition. The main features of the just transition are presented on pages 8 and 9.

The just transition builds on well-established global frameworks in terms of climate change, human rights, labour standards and inclusive growth. It focuses attention on the need to anticipate the social implications of the shift to a low-carbon economy and the increasing physical impacts of climate change.² This emphasis on the linkages between environmental drivers of change and the social dimension places the just transition at the heart of the global effort to mobilise the trillions

of dollars needed to implement the Sustainable Development Goals.³

A growing number of trade unions, governments, businesses, investors, civil society advocates and international organisations are now taking action to make the just transition a reality.⁴ This guide identifies the role that investors can also play in delivering the social dimension of climate change with a focus on the implications for workers and communities.

Mobilising investor action: aims of the guide

This guide is the second output of the Investing in a Just Transition initiative. It builds on an earlier review of the challenge of the just transition for investors, which concluded that the just transition is about *how* the transition is delivered. The ultimate aim of this new guide is to inspire investors to place the just transition at the centre of their climate strategies and it provides an initial framework for investors to apply both individually and collectively.

The just transition is a new agenda and a complex and challenging topic for investors and other stakeholders. But they do not need to reinvent the wheel to address the social dimension of climate change: there is a range of well-tested investor approaches that can be applied, upon which this guide draws. The guide also builds on extensive dialogue and feedback from investors and other stakeholders in a range of countries including Australia, Brazil, Canada,

France, Germany, India, Italy, the Netherlands, South Africa, Sweden, the United Kingdom and the United States.

A clear message from this dialogue is that the just transition is a necessary agenda for investors to work on, one that is fully consistent with the fiduciary commitment to responsible investment and the integration of environmental, social and governance (ESG) dimensions in all decision-making. The just transition is equally relevant for investors whether they are focused on the E or the S of ESG and reveals the need to bring these dimensions together. As fiduciaries, there are important contributions that can be made

as stewards of assets, allocators of capital and influential voices in public policy. These now need to be deployed in a strategic fashion.

Structure of the guide

After explaining the just transition and presenting a detailed case for action, the guide sets out five areas where investors can make the just transition part of their practices. Included are examples of how investors in countries such as Australia, Canada, France, Germany, Italy and the UK are making progress. The guide ends by outlining next steps.

"The just transition is a necessary agenda for investors to work on, one that is fully consistent with the fiduciary commitment to responsible investment and the integration of environmental, social and governance (ESG) dimensions in all decision-making"

The just transition explained

Action to implement the Paris Agreement on climate change needs to be accelerated

Implementing the Paris Agreement means reaching an early peak in global emissions of greenhouse gases and rapid reductions thereafter to 'net zero' levels. The special report of the Intergovernmental Panel on Climate Change (IPCC) on how to hold global warming to 1.5°C

concludes that global emissions will need to fall by 45% from 1990 levels by 2030 to constrain the worst impacts. 6

This will require unprecedented levels of investment in innovation-led structural change

The International Energy Agency estimates that US\$3.5 trillion of energy sector investments will be needed on average each year between 2016 and 2050, compared with US\$1.8bn in 2015. Supply-side investments need to fall in fossil fuels

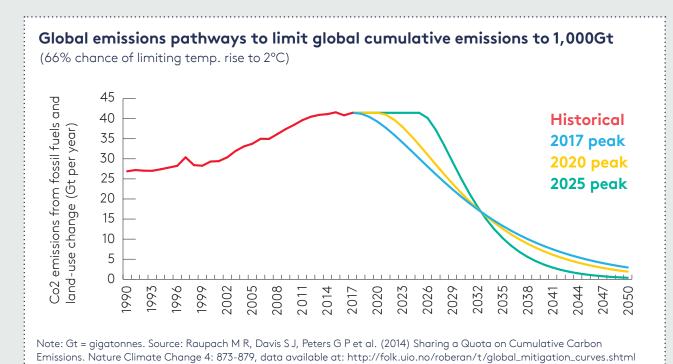
and rise in renewables. The biggest switch will be towards demand-side efficiency investments in buildings, industry and transport, which will need to grow ten-fold. Current levels of low-carbon energy investment remain insufficient. Investment in carbon capture and storage (CCS) has declined substantially in the past decade.

The transition will be a powerful engine for economic development and job creation

According to the Organisation for Economic Co-operation and Development (OECD), a decisive transition package could boost long-run output by 5% on average across the G20 economies by 2050.9 The International Labour Organisation (ILO), the United Nations' agency for the world of work, estimates that action to meet the Paris goals would create 24 million jobs in clean energy generation, electric vehicles and energy efficiency and lead to job losses of around 6 million, a net gain of 18 million jobs. 10 The latest report from the New Climate Economy (NCE) concludes that ambitious climate action would result in a net employment gain of 37 million jobs across the global economy by 2030. 11

The transition will affect nearly 1.5 billion workers across the world

The secretariat of the UN Framework Convention on Climate Change (UNFCCC) has identified 1.47 billion jobs in sectors critical to climate stability: agriculture (1 billion), followed by manufacturing (200 million), buildings (110 million), transport (88 million) and energy (30 million). ¹² The just transition



means understanding both the quantitative and the qualitative implications so that all jobs in the new economy are decent, contributing to thriving and resilient communities.

The just transition is part of implementing the Paris Agreement

Governments acknowledged the importance of the social dimension in the Paris Agreement and the preamble states that governments should take into account '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.'¹³

Guidelines for the just transition have been agreed internationally

In 2015, the ILO adopted a set of guidelines based on inputs from governments, businesses and trade unions. These guidelines highlight the real need for policy coherence between action on climate change and macroeconomic, industrial, labour market and enterprise policies. They emphasise the need to pay special attention to the industries, regions, workers and communities that could be negatively affected. The guidelines recommend action to anticipate skills needs, assess health and safety risks, ensure social protection in the transition (such as workers' health care and pensions), implement international labour standards and actively promote social dialogue.¹⁴

The just transition is a system-wide challenge

The just transition means managing both the positive and negative social and employment implications of climate action across the whole economy. It means thinking ahead

and managing fast-paced and often disruptive change. It involves developed and developing countries and tracking social impacts along global value chains. It places climate action in the broader context of the future of work. It joins the dots between a number of the Sustainable Development Goals. It focuses attention on the decentralisation of energy systems, the importance of place and the need to prioritise marginalised communities. And it needs to be delivered at a time of growing concern about unequal economic and financial systems.

Action is beginning to grow across government, business, trade unions and civil society

No single actor can deliver the just transition alone. Governments have a leading role in terms of linking climate, macroeconomic, industrial, labour and regional policies. Business and trade unions play a direct role in shaping the transition within the workplace, along with civil society organisations in the wider community. Examples of this include:

- South Africa led the way in 2015 with the incorporation of the just transition in its Nationally Determined Contribution (NDC) to the Paris Agreement, highlighting that 'an inclusive and just transition requires time and well planned low-carbon and climate resilient development'. 15
- In Canada, the government launched the Task Force on the Just Transition for Canadian Coal-Power Workers and Communities in February 2018 to make the phase-out of coal a fair one.¹⁶
- In Australia, the Latrobe Valley Worker Transfer Partnership Scheme was agreed in May 2018 involving the state government, unions and

- business to manage the closure of Engie's Hazelwood coal-fired power station.
- In Italy, energy utility Enel has committed to decarbonise its energy mix by 2050, agreed a global framework agreement with its unions and a just transition framework with its Italian union partners, with a focus on fair labour practices, retraining and redeployment.¹⁷
- In the USA, the Just Transition Fund has used federal funds and grant-making to support bottom-up innovation in sustainable development in coal communities in Appalachia.¹⁸

See also map on page 27.

The just transition offers a highly attractive model for managing change

In the words of economist Nicholas Stern, Chair of the Grantham Research Institute on Climate Change and the Environment:

'We should see the just transition as part of the new story of inclusive, sustainable growth. This is a highly attractive economic model, with strong innovation and growth and able to overcome poverty in an effective and lasting way. But it requires us to manage the process of change in much better ways within modern market economies. We need to be organising for transitions in the plural including technologies, economic structures, cities and the international division of labour. And we must accelerate the pace of decision-making if we are to respond to the urgency of climate change.'

2. The case for investor action

The just transition builds on and deepens the core investment case for action on climate change. It focuses on the management of the social aspects of climate change in the workplace and wider community so that rapid decarbonisation is achieved in ways that contribute to inclusive and resilient growth. This section focuses on why investors should act on this agenda.

For investors, the specific language of the just transition may be new. But the underlying implications are familiar to around 2,200 investors worldwide with more than US\$82 trillion in assets under management who have committed to implement the Principles for Responsible Investment. ¹⁹ It takes the core insight of responsible investment – that a robust understanding of environmental and social issues is a better way to assess and pursue long-term value – and applies it to the climate change agenda.

At the heart of the Principles and other frameworks is the commitment to integrate environmental, social and governance (ESG) factors into decision-making at all levels. For fiduciaries managing funds on behalf of others the just transition points to the need for institutional investors to develop a comprehensive response to climate change that connects these dimensions. In practice, however, ESG factors have often been addressed in separate silos.

The just transition focuses attention on the need for a joined-up approach to climate change.

Strategically, the just transition is a way to think about the broad and deep socioeconomic changes that are needed as part of a shift to a low-carbon economy. This takes its place in a long line of transformations associated with technological innovation, new business models, changing demographics and rising social expectations. Today, the economic transformation required to respond to climate change stands out both because of the urgency of the need to make progress and also because of the deep linkages with wider disruptive changes to the nature of work itself brought on by rapid technological change.

As the pace of decarbonisation accelerates and the physical impacts of climate change intensify, the just transition approach will increasingly provide investors with a strategic way to anticipate, evaluate and respond to the social and economic implications for their beneficiaries, their portfolios and the financial system as a whole. The just transition also offers investors a way to participate in building a consensus for managing the transition effectively, efficiently and responsibly.

Five reasons for investor action

Institutional investors are a diverse group with a variety of institutional forms, goals and capacities. However, there is a common case for investors to contribute to the just transition and it rests on five reasons for action:

- Understanding systemic risks
- Reinvigorating fiduciary duty
- Recognising material value drivers
- Uncovering investment opportunities
- Contributing to societal goals

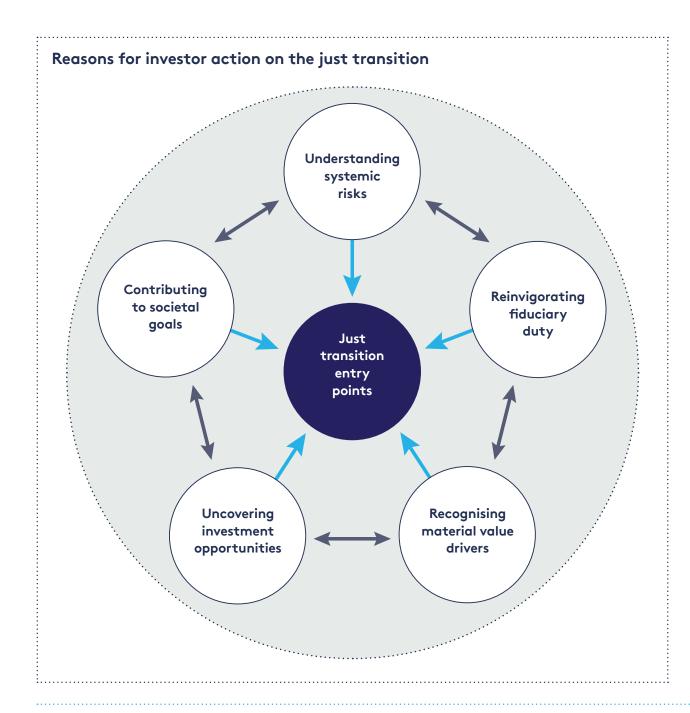
As illustrated in the diagram opposite, these reasons are overlapping and mutually reinforcing in many ways. The five reasons represent different entry points and investors with different orientations will find that they often converge on strategies and practices to address the just transition challenge.

The five reasons point to a compelling case for investor action based both on strong financial arguments and on the potential to deliver positive social and environmental impacts.

1. Understanding systemic risks

Climate change is well understood by investors as a systemic risk to the global economy, undermining the ability of the financial system to deliver long-term returns. There is also growing realisation among investors that they need to be concerned about the systemic risk posed by social inequality.²⁰ According to a recent IMF study on the US economy, for example, inequality not only entails high social costs but has also been 'shown to negatively affect the pace and sustainability of economic growth'.²¹

The just transition sits at the intersection of these environmental and social risks to the stability and



functioning of the financial system. Both types of risk manifest over extended periods of time and diffuse through the economy and society. One systemic concern raised by the just transition is that failing to take account of the social dimension will give rise to pressures to delay, dilute or abandon climate policy. This will make the shift to a low-carbon economy less likely, thereby placing investors at risk from rising climate costs. Another systemic concern is that the transition could go ahead in a partial and sub-optimal fashion, achieved at high social cost, potentially deepening inequality and harming the sustainability of economic growth by increasing fiscal drag.

Focusing on the just transition is therefore a way for investors to address these systemic threats to long-term stability and value creation.

2. Reinvigorating fiduciary duty

Climate change threatens the delivery of longterm returns and undermines the ability of people to live in a stable and prosperous world. Investors with fiduciary duties that extend across long-term horizons will be forced to confront the economic. social and environmental effects of the transition and the physical impacts of climate change. This is true of large institutional asset owners such as pension funds and insurance companies, with holdings and obligations that stretch across generations of beneficiaries. These 'universal owners' must manage major environmental and social macro-trends in a holistic manner to ensure the delivery of both long-term investment returns and a world in which these returns are made meaningful. The investments managed by these asset owners represent beneficiaries, workers and

communities for whom the transition will have powerful effects, both positive and negative. Investors have an obligation to favour the former and minimise the latter. Understood through this lens, the just transition represents a reinvigoration of fiduciary duty, rejecting short-termism in favour of a longer-term integrated approach to investment stewardship. The same logic applies to smaller institutional and retail investors.

The interests of savers and beneficiaries are fundamental to responsible investment, resting on the building blocks of the duties of loyalty and prudence. Beneficiaries in specific corporate, sector- or geographically-based funds may have additional reasons for seeking a just transition. Here, beneficiaries need assurance that they will not be in 'stranded pensions' where solvency is put in question by reliance on high-carbon business models and asset allocation.²²

As part of this, fiduciaries will need to understand and consider the interests and sustainability preferences of savers and beneficiaries as they relate to the environmental and social dimensions of climate action. The just transition is also a way to manage intergenerational equity, by ensuring that an inclusive transition to a low-carbon economy fairly allocates risk and cost over time as well as among contemporary stakeholders.

3. Recognising material drivers of long-term value

Moving from the strategic to the portfolio level, the just transition highlights for investors that a siloed analysis of ESG factors is unlikely to generate a full picture of long-term performance. In an era of decarbonisation, the management of the social

dimension is set to be increasingly material to the successful delivery of value.

For investors, it will be essential that the assets they hold operate effective systems for human capital management at a time of transformational change in technologies, business models and market demand. To date, human capital management has been absent from most business responses to climate change. Investors need to understand how companies are implementing the just transition in the workplace. This includes anticipating human capital implications, respecting human rights, delivering health and safety, building the skills needed for climate success, ensuring social dialogue in the transition process, and managing responsible restructuring (e.g. protecting pensions). Poor management of the transition could damage employee engagement and innovative capacity as well as reduce resilience in crisis situations.

The way that companies manage the transition will also have important impacts on their social licence to operate in the wider community. Companies that do not engage with workers and communities or take into account their views face operational, consumer, client and regulatory repercussions. Conversely, companies that manage this well could benefit from better reputations as well as reduced transaction costs.

The box shown right highlights why the community impacts of renewable energy need to be managed by investors as part of the just transition; these impacts are often greatest in emerging and developing economies.

Why investors need to manage the community impacts of renewable energy

The way in which renewable energy projects are developed and implemented matters – both for local communities and for investors. There has been a rise in reports of renewable energy projects negatively affecting the communities where they operate. This causes operational delays, legal costs and reputational risks, which are likely to translate into diminished financial returns for investors, as well as increased operational and capital expenditure. A review of 50 companies involved in renewable energy has revealed weaknesses in commitments and practices to prevent negative impacts on communities.

Source: Business & Human Rights Resource Centre (2017) Investor Briefing: Renewable Energy Impacts on Communities: Managing Investors' Risks and Responsibilities.

4. Uncovering investment opportunities

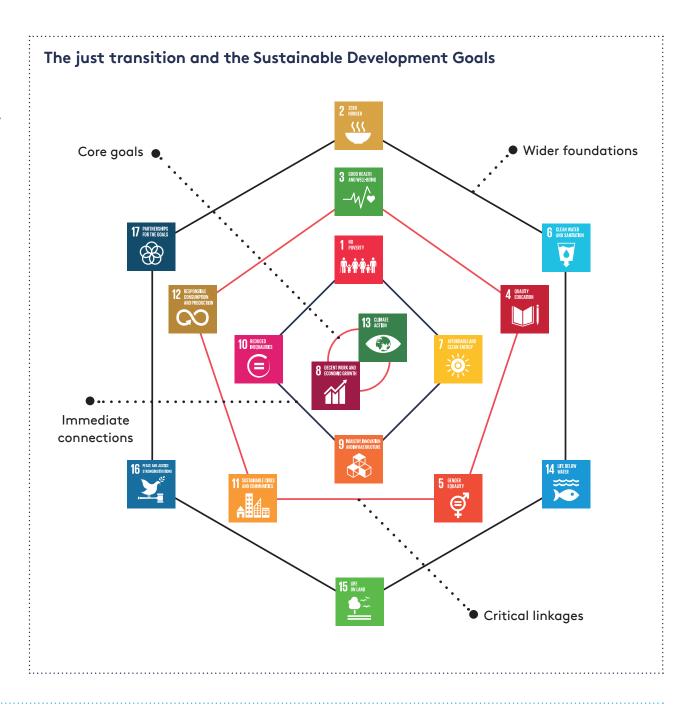
The just transition provides a lens through which investors can identify new investment opportunities and develop investment products that connect environmental and social goals. These opportunities extend across all asset classes – cash, listed equity and fixed income as well as private equity, real estate and infrastructure – and include green bonds, low-carbon indices, sustainable infrastructure and green buildings.

By incorporating a social dimension, investors can better understand the way in which the transition is disrupting the traditional investment landscape. For example, the shift to decentralised renewables is bringing structural changes to the energy system, with a greater role for community involvement and ownership.

Public and mission-driven investors can also use the just transition to channel investments in ways that leverage private capital. Development finance institutions (DFIs), promotional banks, philanthropic foundations and cities can help drive place-based investment strategies focused on hard-hit regions and communities. The just transition provides a framework for collaboration across investor types and goals, a way for public and mission-driven investors to work with private sector finance to achieve their goals more effectively.

5. Contributing to societal goals

Investors clearly need to manage the just transition as it relates to their own beneficiaries, portfolios and systemic risks. But they are also social actors and the just transition provides a way for investors to contribute to societal goals. A successful transition depends on a well functioning economy that delivers broad social value; investors can help make this happen or hinder its achievement. This wider perspective is increasingly appreciated and the Principles for Responsible Investment itself is based on the belief that 'an economically efficient, sustainable global financial system is a necessity for long-term value creation', which is being implemented through the PRI's UN-supported Principles.²³



Taking an active approach to the just transition enables investors to realise their existing obligations to respect human rights and labour standards. These include ILO's core labour standards, the UN's Guiding principles of business and human rights,²⁴ and the OECD's Guidelines for multinational enterprises.²⁵ These international 'soft law' instruments refer mainly to how investors can encourage investee companies to embed respect for human rights. Investors themselves also need to incorporate these into their due diligence and how they approach responsible business conduct, as set out in the OECD's paper Responsible business conduct for institutional investors.²⁶

Strategically, three foundation agreements from 2015 provide the basis for aligning investment practice with the just transition: the Addis Ababa Action Agenda on Financing for Development, the universal adoption of the Sustainable Development Goals (SDGs), and the ratification of the Paris Agreement on climate change.²⁷ In particular, the just transition also enables investors to use their expertise and resources to realise the SDGs. As more and more asset owners and managers commit to implementing the SDGs, this will drive demand for products that deliver just-transition outcomes. Indeed, the just transition provides connective tissue that brings together different SDGs, most notably the goals on climate change (SDG 13) and decent work (SDG 8), showing how the other SDGs support this process, as the figure on page 13 illustrates.

Conclusions on the case for action

A growing body of academic and practitioner work has shown both that unmanaged climate change generates significant value at risk for investors and that incorporating climate factors can improve returns. ²⁸ Alongside this, academics and practitioners are also showing that investing in training and development, health and safety, employee engagement, as well as diversity and inclusion, is associated with increased workforce productivity, reduced turnover and higher customer satisfaction. ²⁹

As influential actors in the financial system, investors need to consider the broad impacts of their investments. The appropriate role of investors in delivering economic, social and environmental outcomes is increasingly a topic of discussion. The just transition is a leading manifestation of this trend and represents a way for investors to better identify where they have significant roles to play in contributing to societal goals and their own long-term wellbeing.

Looking ahead, there is now a concern that the failure to effectively manage the social dimension of the climate transition could generate a new set of investment risks in terms of political instability, depressed economic activity and insufficient progress in the delivery of climate targets. What the just transition approach does is anticipate these risks and deliver strategies that help to realise a strong social dimension to climate action. This offers a way not just to generate long-term returns but also to enable beneficiaries to enjoy the fruits of their investments in a stable and prosperous world in a way that makes those investments meaningful. Furthermore, the intersection of issues of climate change and inclusion at the heart of the just transition naturally links the long-term interests of investors to those of society: this is an essential tenet of responsible investment and central to arguments involving the generation of long-term value.

Based on these reasons for action, the next section sets out the ways in which investors can contribute to the just transition.

"The intersection of issues of climate change and inclusion at the heart of the just transition naturally links the long-term interests of investors to those of society: this is an essential tenet of responsible investment."

3. Taking action

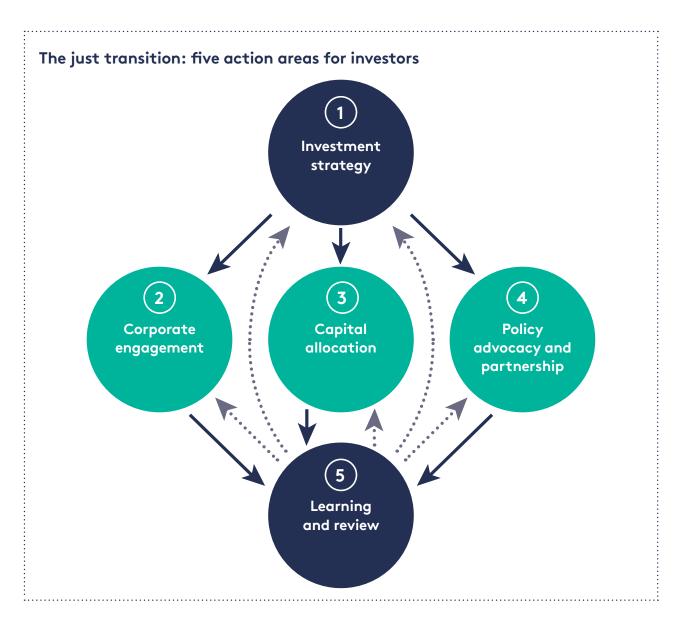
The just transition means integrating employment, decent work and community dimensions into the design and delivery of climate actions by investors. This requires ensuring high social standards in the growing low-carbon economy, responding to concerns about potentially 'stranded workers' and 'stranded communities' in carbon-intensive sectors, and protecting people and assets from intensifying climate impacts. These imperatives cover sectors across the economy, notably energy, mobility, industry and cities, as well as agriculture and land-use.

To be meaningful for investors, responding to this imperative will require a new way of integrating ESG into investment practice. This section sets out a structured approach that builds on established mechanisms for evaluating, planning, implementing and reviewing the implications of environmental, social and governance factors for investment practice.

Five areas for investor action

Our approach is organised around five interlocking areas for action that respond to the following crucial questions for investors:

- 1. **Investment strategy:** How can the just transition be reflected in overall investment strategy?
- **2. Corporate engagement:** How can corporate engagement be deployed to advance the just transition?



- **3. Capital allocation:** How can capital allocation decisions integrate the just transition?
- **4. Policy advocacy and partnership:** How can investors promote the just transition through policy advocacy and place-based partnerships?
- **5. Learning and review:** How can investors learn and build expertise in the just transition?

Not every investor is the same, of course. Investors come in different sizes, have different goals, and work on different beliefs about the market. There will be a wide variety of approaches to the topic. These action areas are therefore designed to offer investors a range of practical steps that funds can take, drawing on support from their consultants and service providers. Taken together, they point to the value of a comprehensive approach from investors.

This is not intended to be a simplistic linear process. Some investors may wish to begin at the strategy level. Others may prefer to start with specific actions in terms of corporate engagement or targeted investments. The important point is for investors to begin incorporating the just transition into the heart of their approach to responsible investing and climate change.

Action area 1: Investment strategy

At the institutional level, investors need to understand what the just transition means for their overall positioning and strategic intent. This can be done through three iterative stages: assessment, dialogue and integration.

Stage 1: Assess portfolio exposure to the social dimension of the transition

Asset owners and asset managers are developing an increasingly sophisticated understanding of their exposure to long-term environmental and social factors, not least climate change.

As a first step, investors could screen their portfolios to generate a high-level profile of just transition risks and opportunities, as many do already with carbon exposure. The aim would be to anticipate the range of social issues that could affect their portfolios and understand the speed at which these could manifest. This could involve a review of where issues related to workers and communities affect investor exposure to industry sectors or geographic concentration, and where social stress could negatively impact climate investment.

As part of this assessment exercise, investors can use existing frameworks, including:

- The Committee on Workers' Capital Guidelines for the evaluation of workers' human rights and labour standards³⁰
- Reporting made by companies through the Workforce Disclosure Initiative³¹
- The latest results of the Corporate Human Rights Benchmark³²

The boxes that follow provide examples of how investors can start this review process by focusing on a specific region (see Example 1) or a specific theme and sector (see Example 2).

The aim of assessment exercises such as these is to generate a broad sense of performance and priority areas for action through engagement, investment or policy dialogue. Building on this, investors could

INVESTOR EXAMPLE 1

IGCC: understanding the links between coal, carbon and the community in Australia

The Investor Group on Climate Change has undertaken a review of the social issues facing investors in Australia's coal sector. The assessment examined two regions – Latrobe Valley and Lake Macquarie – and outlined the role that investors could play as part of consensus-building with unions and different levels of government. For investors, the review highlighted the potential for capital allocation towards high growth industries, renewables and rehabilitation.

Source: Investor Group on Climate Change [IGCC] (2017) Coal, carbon and the community: Investing in a just transition

start considering how to extend the scope of their climate scenario exercises to include social implications for the workplace and wider economy.

Stage 2: Dialogue with stakeholders

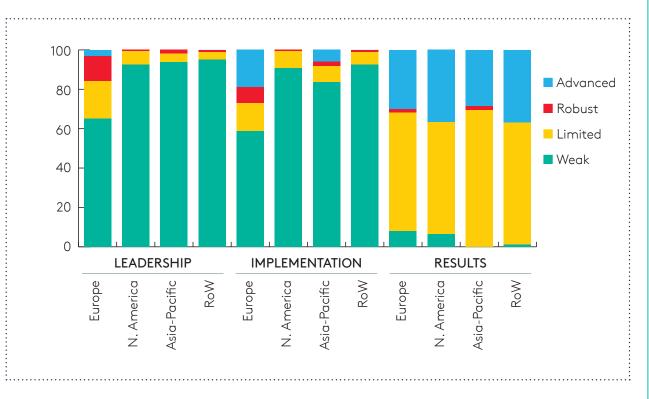
Dialogue with stakeholders is an effective way to reveal existing experience, opportunities and concerns that may relate to the just transition. Key stakeholders include: beneficiaries; asset owner trustees; internal investment experts and staff; investment partners (e.g. consultants, asset managers); businesses; trade unions; governments and regulators; community groups; and universities and think tanks.

INVESTOR EXAMPLE 2

Vigeo Eiris: evaluating responsible restructuring in the fossil fuel sector

To understand whether companies are considering their social impacts as they restructure for transition, independent ESG provider Vigeo Eiris has developed an approach to responsible restructuring based on ILO conventions and the Sustainable Development Goals. This was applied to 365 companies identified by its Controversial Activities Screening as generating more than 20% of their revenue from fossil fuel-related activities. These companies were analysed using indicators from Vigeo Eiris's 'Responsible Restructuring' ESG sustainability criteria:

Leadership	Companies' commitments to minimising the number of lay-offs and framework agreements with employees
Implementation	Initiatives adopted to mitigate the impacts of restructuring on affected individuals
Results	 Stakeholder feedback on company restructuring processes and related actions, including by trade unions Company avoids layoffs and promotes alternatives



The graph shows that North American companies are noticeably less well prepared for a just transition than developed European economies, where social systems may also provide safety nets.

The weakest performance is displayed by countries outside Europe, North America and Asia-Pacific (the rest of world/RoW), where the challenges may be greatest. However, good practice does exist and a recent Vigeo Eiris paper demonstrates that some companies are taking their responsibilities seriously: when Norwegian hydropower company

Statkraft made reductions to its workforce in 2017, all affected employees were offered downsizing packages, early retirement options, alternative jobs within the company or outplacement services.

Further good practice examples are available in Vigeo Eiris' recent responsible restructuring study which examined a universe of 3,847 companies: How do corporations report on the management and impact of restructuring? (2018)

This dialogue process can be managed individually or collaboratively through national or international investor coalitions. It could include exploring the way in which issues related to workers and communities are included in existing investor collaborations. An important part of this will be taking part in forums that enable investors to interact with other stakeholders. Example 3 outlines how Generali has done this.

Stage 3: Integration into investment strategy

To bring the just transition to life, the social dimension needs to be embedded into investment strategy and, where relevant, an institution's statement of investment beliefs. This can be used to drive specific behaviours on the just transition both internally and along the investment chain, including:

- Responsible investment policies: highlighting the importance of overcoming a siloed approach to ESG analysis.
- Climate strategies: seeking opportunities for building long-term value through attention to workers and communities.
- Request for proposals: understanding competence and commitment to address the just transition by managers.
- Human resource management: identifying ways of supporting employee engagement and voice on strategic planning for the transition.
- Targeted investments: integrating just transition priorities into specific strategies in support of the SDGs and inclusive growth.

Example 4 describes how the UK's Environment Agency Pension Fund included the just transition as a strategic element of its new climate policy.

INVESTOR EXAMPLE 3

Generali: including stakeholder dialogue in climate change policy

In 2018, Italian insurance company Generali released its climate strategy including targets to increase green assets and divest from coal. In addition, it has made a commitment to stakeholder dialogue, stating: 'In countries in which the economy and employment depend heavily on the coal sector, Generali will involve issuers, clients, and other stakeholders through dialogue, monitoring their plans to reduce environmental impacts, the strategy to transition to activities with low environmental impact, and measures envisaged for protecting the community and citizens.'

Source: Generali (2018) Generali approves climate change strategy. It will divest € 2 billion from coal. Press release, 21 February.

INVESTOR EXAMPLE 4

Environment Agency Pension Fund: integrating the just transition into climate policy

In the UK, the EAPF updated its climate policy in 2017 to include the following commitment: 'We recognise the need to integrate our climate goals with our wider programme of responsible investment, in particular the social impacts of transition, and we will look for investment opportunities to support the Sustainable Development Goals and the Paris commitment for an orderly and just transition.'

Source: Environment Agency Pension Fund (2017) Policy to address the impacts of climate change.

Action area 2: Corporate engagement

Across all asset classes, engagement by investors is a powerful mechanism both for generating a better understanding of corporate performance on the just transition and for driving improved practices. Through their position as asset owners and managers, investors can help to shape the behaviour of boards of directors, whether as shareholders of publicly listed

corporations or limited partners of private equity funds. Here, the just transition provides a useful way of communicating the importance of a joined-up approach to environmental, social and governance factors to overcome the risk that some companies can engage in 'sustainability arbitrage', with good performance on low-carbon product development, for example, masking poor labour or community practices (and vice versa).

INVESTOR EXAMPLE 5

Ircantec: incorporating the just transition into engagement priorities

In France, the Ircantec pension fund has identified the energy and ecological transition as one of its three engagement priorities. Its approach highlights the importance of combining environmental and social objectives to generate jobs and incomes over the long term. This means working with companies and along the investment chain so that these considerations are included in products and services. One priority is to integrate social aspects such as the prospects for employees and the needs for retraining within discussions about 'stranded assets'.

Source: Ircantec (2018) Publications Investissement Socialement Responsable

Corporate engagement on the just transition could involve the following important elements, which draw from established practice in responsible investment:

- Expectations: Set out investor expectations
 of companies drawn from consensus documents
 such as the ILO guidelines for a just transition.
 This would include critical workplace issues
 (such as social dialogue, training and skills,
 and redeployment), as well as supply chain
 management and community relations.
- **Disclosure:** Promote climate disclosure by the companies, asset owners and asset managers using the Task Force on Climate-related Financial

INVESTOR EXAMPLE 6

SHARE: engaging with utilities on the just transition in North America

On behalf of its institutional investor clients, the Shareholder Association for Research and Education (SHARE) has approached four utilities companies that are planning closures of coal-fired generating facilities in North America to inquire about each company's strategy for a just transition.

The process starts with research on transition plans and local impacts, including consultation with labour representatives, followed by letters and meetings with company officials to ask the company to assess the potential economic impacts on workers and communities of its closures and new investments. SHARE asks the company to discuss the potential mitigation measures it can take (individually or with other actors) to address those economic impacts. These may include new employment opportunities and/or preferential hiring at any new facilities or operations that the company develops in the area, associated retraining and skills development, advocacy with local government, community benefits agreements, and transition funding where appropriate. Recognising that the just transition is not solely a management responsibility, SHARE asks the company to engage in social dialogue with workers' representatives, local government and other stakeholders. This includes indigenous governments in locations where a company's plans have particular impacts on indigenous communities and workers.

Disclosures' (TCFD) framework and extending this to include reporting on the social dimension, using consistent approaches such as the Global Reporting Initiative, the UN Guiding Principles Reporting Framework and the Workplace Disclosure Initiative.

- Benchmarking: Corporate practice can then be benchmarked to reveal companies and assets where improvement is needed. The Transition Pathway Initiative (TPI), which benchmarks companies on carbon management and performance, could be used as a model here.³³
- **Improvement:** Investors can then press for improvement in practices on the social

- dimension of the transition through dialogue with management as well as through shareholder resolutions.³⁴
- Consequences: Where companies fail to meet key performance standards, investors need to consider the consequences, including capital reallocation; this is discussed in the next action area.

The boxes above explore how investors are integrating the just transition into their engagement strategy (examples 5 and 6).

Initial questions for investor engagement with companies on the just transition

Strategy

- Impacts: What are the potential impacts of climate change-related risks and opportunities for employees, workers in the supply chain, and communities affected by business activity over the short, medium and long term? Do these have a particular gender or race dimension?
- Scenarios: Has the organisation included the implications for employees, workers in the supply chain and communities in its climate scenario analysis? If so, what are the results?
- Human resources and industrial relations: What are the strategic implications of climate-related risks and opportunities for the organisation's human resource management, notably the quantity and quality of employment; wages, benefits and pensions; role of unions; worker representation; employee satisfaction?
- Restructuring: How is the social dimension reflected in any restructuring plans linked to the transition (including mergers and acquisitions, capital expenditure, expansion plans, downsizing, closures)?
- **Investment:** How is the organisation investing to generate positive social outcomes from the transition and to mitigate potentially negative implications for employees, workers in the supply chain, and communities?
- Regeneration: How is the organisation contributing to wider plans for community renewal and economic revitalisation linked to the low-carbon transition in areas where it operates? What contacts has the company made with workers and their unions, and affected communities, to design regeneration plans?

Governance

- Social dialogue: How are workers and their unions, as well as affected communities, involved in developing and implementing the organisation's plans for responding to climate change risks and opportunities? What grievance mechanisms exist?
- **Social protection:** How are employee rights protected during the transition, for example in terms of the security of pensions or the use of public resources?
- Skills and development: What is the company's strategy and performance in terms of developing employees with the skills they need to contribute to the transition? How does the company build inclusive strategies for worker retraining and recruitment?

Risk management

- **Identification:** How are climate change-related risks to employees, workers in the supply chain and communities identified?
- Management: How are climate change-related risks to employees, workers in the supply chain and communities managed? Has the organisation committed to respect for core labour standards and recognised collective bargaining in this process?
- **Health and safety:** How are the occupational health and safety (OHS) risks linked to a changing climate and resource scarcity identified and managed, and how are union OHS committees or delegates involved?
- **Due diligence:** How are workplace human rights and community impacts incorporated into corporate procedures for due diligence related to investments and activities linked to climate change strategies?

To get the process of dialogue underway, investors could include the just transition in regular discussions with companies. We have developed an initial set of questions that builds on the framework developed by the TCFD, focusing on strategy, governance and risk. These are set out in the box on p20.³⁵

Engagement is often most effective when it brings together the weight of numbers through collaborative initiatives. The Climate Action 100+ provides a coordinated platform for engagement with the largest contributors to carbon pollution and represents an important mechanism for collaborative action on the just transition as well.³⁶

Identifying sectoral and thematic priorities

The just transition is a whole-economy challenge, but investors may wish to focus on an initial set of sectoral and thematic priorities, using their voice to add the social dimension to existing and new climate engagement actions, such as:

- Fossil fuels: Promoting the responsible management of worker and community issues in the early phase-out of coal and the progressive reduction in the use of oil and gas, including by companies involved in these value chains (e.g. capital goods manufacturers).
- Clean energy and energy efficiency: Promoting high labour standards and respect for community rights and inclusive growth in the renewable energy as well as green building segments across manufacturing, construction, operations and maintenance.
- Transport: Promoting high labour standards and respect for community rights and inclusive growth in the shift to zero-emission mobility by understanding the impacts along value chains

INVESTOR EXAMPLE 7

DWS: developing a just transition response to the physical impacts of climate change

In 2017, Germany-based DWS was the first asset manager to publish analysis of physical climate risk in equity portfolios. Physical climate risk is also an important but under-appreciated part of the just transition. Physical impacts will become more frequent and extreme, even if the Paris Agreement goals are met.

Injustice manifests itself in several ways. There are crucial societal implications for low-lying nations and climate-induced migration. Extreme heat endangers the health of outdoor construction and agriculture workers, particularly where workers have fewer labour rights. Companies could also begin to shift their operations and facilities to less vulnerable areas, reducing the number of jobs and the tax base. As investors begin to assess and manage their physical climate risks, they also have a role to help society become more resilient in a way that addresses the injustices of physical climate change. Investor cooperation with development banks and other market players can help to stimulate markets for new resilience investment opportunities that factor in the social dimension. In addition, investor engagement with companies and governments will be crucial to encourage a stronger focus on resilience, which is delivered in a way that both accounts for and improves distributional outcomes.

Source: Four Twenty Seven and DWS (2017) Measuring physical climate risk in equity portfolios

in terms of energy supply, vehicle manufacture, the key role of walking, cycling and public transport, as well as the maintenance of transport systems.

- Agriculture and land use: Ensuring high social standards for workers, communities and farmers along complex value chains in the drive to zero deforestation and sustainable agriculture.
- Resilience: Ensuring that the workplace and community implications of rising temperatures, sea-level rise and extreme weather events exacerbated by climate change are effectively managed by companies.

Example 7 illustrates why German asset manager DWS sees the physical impacts of climate change as part of the just transition agenda for investors.

Action area 3: Capital allocation

Strategically, climate action involves the reallocation of capital from high- to low-carbon assets and to investments in resilience to the physical impacts of climate change. A just transition approach integrates the impacts on affected workers and communities, and seeks out opportunities to connect green assets with positive social performance. This means working with portfolio companies to make company-level capital allocation decisions that support a just transition as well as switching capital between companies.

Investors may also wish to specifically target investments that make outsized contributions to achieving the just transition. In much the same way that discussions around achieving the Sustainable Development Goals generate social impact targets or ambitions, the just transition can be a lens through which to view investments, with a focus on economic development in communities negatively affected by the low-carbon transition, identifying companies providing good-quality jobs for workers who bear the brunt of industrial change. These might include developmental investments in low-income regions, and equity investments in specialist funds that link labour and human rights issues with low-carbon outcomes.

Looking across the main asset classes, this just transition approach could be integrated into existing strategies and also drive a focus on specialist thematic opportunities. Table 1 provides options across asset classes.

Table 1. Capital allocation for the just transition (JT): potential options across asset classes

Asset class	Integrated just transition	Thematic just transition		
Cash	Engage all banks on JT principles and strategies (e.g. green and ESG loans, safeguarding policies and lending strategies for exposed regions)	Focus on banks with specialist JT lending strategies: green jobs, place-based development, community development finance institutions (CDFIs)		
Fixed income	Incorporate JT factors into core selection of bonds, index design and benchmarks; integrate JT into green social and sustainable bond strategies	Target bonds linked to sectoral or regional JT transition plans and funding (e.g. green bonds with proceeds ringfenced for specific areas)		
Public equities	Integrate JT factors into core stock selection, index design and benchmarking	Identify listed companies, focused on environmental solutions in affected regions		
Private equity (PE)/venture capital (VC)	Engage PE/VC funds on JT policies; include JT in routine PE/VC screening and engagement policies	Seek specialist impact investment funds linking climate, job quality and community development		
Real assets	Enforce JT criteria in green real estate and infrastructure strategies, as well as in timber, land and commodity investments	Target investment in communities and regions affected by the transition to deliver positive social and environmental impacts		

High-leverage options for the just transition

Investors have highlighted a number of highleverage options for fast-tracking the integration of the just transition into capital allocation decisions:

- Benchmarks and indices: The growing importance of passive investment as well as the use of indices to benchmark the performance of actively managed assets means social factors
- need to be included in the design of climate index products to make the just transition a reality.
- Investment analytics: Investment research provided by sell-side brokers and credit rating agencies will be an important source of insight into the risks and opportunities around the just transition. Investors could request that these analysts include worker and community

- impacts in the scope of their climate and green finance research.
- Bonds: The green bond arena is growing in size and sophistication and issuers are now extending environmental criteria to include social and broader sustainability factors. The Aclear connection between climate action and the inclusive economy lies in the area of green bonds for energy-efficient social housing, with examples including the New York State Housing Finance Agency, which has raised US\$558m in eight deals, along with three Swedish municipal housing associations that have raised US\$265m-equivalent in five deals between them. Looking ahead, bonds could be designed that channel resources into place-based activities that support economic diversification in affected regions.
- Real assets: Investors are allocating increasing amounts of capital to sustainable infrastructure.³⁹ The nature of real assets means that transactions should involve social risk assessments and community engagements as part of ensuring a robust social licence to operate. Responsible Contracting Policies (RCPs) provide investors with a practical tool for protecting their investments in renewable infrastructure and green real estate. These cover issues such as fair wages and benefits, diversity, union participation, training and skills, as well as regulatory compliance.⁴⁰ Integrating these issues into climate-related real asset strategies opens the door to partnerships across public and quasi-public economic development and mission-driven investors.⁴¹

"The systemic nature of climate change means that policy reform is essential to managing the social, economic and environmental dimensions of the transition."

Action area 4: Policy advocacy and partnerships

The systemic nature of climate change means that policy reform is essential to managing the social, economic and environmental dimensions of the transition. Investors have become increasingly influential players in the formulation of climate policies, supporting, among other things, long-term targets, carbon pricing and government support for low-carbon sectors.

The 2018 global investor statement to governments on climate change

With the backing of US\$28 trillion in assets under management, the Investor Agenda's statement released in June 2018 called on world leaders to:

- Achieve the Paris Agreement's goals
- Update and strengthen Nationally
 Determined Contributions (NDCs) to meet
 the emissions reduction goal of the Paris
 Agreement, starting the process in 2018
 and completing it no later than 2020, and
 focusing on implementation
- Formulate and communicate long-term emissions reduction strategies in 2018
- Align all climate-related policy frameworks holistically with the goals of the Paris Agreement
- Support a just transition to a low-carbon economy

Source: The Investor Agenda (2018) 2018 Global investor statement to governments on climate change

In June 2018, the Investor Agenda alliance included the just transition in its annual policy statement to governments for the first time (see box on page 23). This statement signals the start of broader policy advocacy by investors on the just transition at the regional, national and international levels, as well as involvement in place-based partnerships.

At the sub-national level, investors could call for:

- Multi-stakeholder dialogue to identify the needs of workers and communities as they relate to achieving regional climate and economic development goals.
- Regional finance forums to build collaboration between public, quasi-public, mission-driven and institutional investors on implementing just transition strategies.
- Identification of ways in which investors can support just transition programmes financed by public authorities and philanthropic foundations.

At the national level, investors could call on governments to:

- Include the just transition and how to finance it – in long-term climate strategies in order to implement the Nationally Determined Contributions (NDCs) to the Paris Agreement. This could include protecting and promoting rights to access information, participate in decisionmaking and having opportunities for redress.
- Integrate the just transition within national roadmaps for green and sustainable finance, which have been launched in a growing number of countries including Canada, China, EU countries and Morocco.

- Stimulate public finance institutions (such as promotional and green banks) to support a just transition by developing products that crowd in private capital.
- Use revenues from carbon trading as well as carbon and fossil fuel taxes to support just transition funds that would aim to mobilise private capital.
- Channel the proceeds from municipal, sovereign or state-owned-enterprise green bonds towards the just transition.

At the global level, investors could call for:

- Investor involvement in policy discussions at the G7 and G20, the ILO, the UNFCCC and elsewhere on delivering the just transition.
- International development finance institutions to develop financing strategies to crowd in private capital behind just transition investments.
- The incorporation of the just transition into core financial policy discussions on green and sustainable finance.
- Convergence of core climate reporting frameworks such as the TCFD with initiatives focused on the social dimension to deliver coordinated just transition disclosures.
- A focus on the just transition and financing strategies in major decarbonisation initiatives such as the Powering Past Coal Alliance.

Example 8 shows how the UK's development finance institution, CDC, is promoting high social standards in its renewable energy investments in India.

Place-based partnerships

The clustering of industry sectors makes placebased collaboration an important approach for

INVESTOR EXAMPLE 8

CDC: focusing on quality green jobs for women in India's renewable energy sector

As the UK's development finance institution, CDC seeks positive development impact in all its investments in South Asia and Africa. In India, CDC has established Ayana, a new renewable energy company. As part of its core investment thesis, CDC identified a major skills gap in the solar sector as holding back clean energy expansion. To help overcome this, Ayana is partnering with the UK government's Department for International Development and Sewa Bharat (the All India Federation of Self-Employed Women's Association) to train the local community, with a focus on women, who face more challenges than men in entering the green jobs market.

Source: Ayana Power (2018) Homepage: www.ayanapower.com

investors to join together multi-sector research, innovation and investment in the just transition. One priority for investors in the just transition is to engage in deep and potentially difficult or unfamiliar multi-stakeholder engagement. This is not a topic that investors can address alone. Place-based approaches offer important opportunities for investors to take on this work. These place-based strategies can connect powerfully with the bottomup initiatives of cities and mayors through initiatives

such as C40 (a network of megacities committed to addressing climate change) and the Covenant of Mayors (a multi-country movement for local climate and energy actions).

Areas for investor involvement include:

- Exposure: analysing the transition exposure
 of regions in terms of the positive and negative
 implications for sectors, companies, workers
 and communities.
- Capacity: evaluating the adaptive and response capacity of regions in terms of their skills base, enterprise formation, political economy, regional innovation systems, social policy, and financing.
- Investments: working with local authorities, public finance institutions, communities, businesses and trade unions to develop pipelines of assets that combine the low-carbon transition with social inclusion.

In the UK, for example, place-based green finance has been identified as a key tool to help implement the country's climate goals and industrial strategy.⁴² As part of the wider Investing in a Just Transition initiative, the Grantham Research Institute and the University of Leeds are exploring the role that investors can play to deliver inclusive, clean growth in the UK.43 The work will focus on Yorkshire and the Humber, the most carbon-intensive industrial region of the UK. It will conduct a transition exposure analysis to understand the risks and opportunities that decarbonisation could bring. It will then examine how investors can make a positive contribution in terms of the five steps contained in this guide: investment strategy, corporate engagement, capital allocation, policy advocacy and learning.

Example 9 presents how in Canada Quebec's Fonds de Solidarité FTQ is linking environmental and social factors in its place-based investment activities.

INVESTOR EXAMPLE 9

Fonds de Solidarité FTQ: investing in Quebec's just transition

With assets of C\$13.7bn, the mission of Quebec's Fonds de Solidarité FTQ is to contribute to the province's economy by creating, maintaining or protecting jobs through investments in small and mediumsized businesses. The Fonds is committed to 'sustainable economic development where people come first' and it has developed an energy transition plan respectful of workers. As part of this, the Fonds has been actively involved in a new multi-stakeholder dialogue on the just transition in Quebec. In September 2018 it announced new measures for a 'just energy transition'. The plan pledged that the fund will 'accompany Quebecois companies in the transition'. It includes plans to divest from hydrocarbons extraction and exploration in Quebec, reduce the carbon intensity of its investments in listed companies by 25% by 2025, and create a voluntary compensation plan for Quebecois companies through a subsidiary.

Sources: Fonds de Solidarité FTQ (2018) FTQ will invest up to C\$300 million CA by way of an unsecured subordinated loan to Boralex. Press release, 29 March. FTQ will no longer invest in exploration or exploitation of hydrocarbons in Quebec. Press release, 29 September.

"As part of the wider
Investing in a Just Transition
initiative, the Grantham
Research Institute and
the University of Leeds
are exploring the role that
investors can play to deliver
inclusive, clean growth
in the UK. The work will
focus on Yorkshire and the
Humber, the most carbonintensive industrial region
of the UK."

Action area 5: Learning and review

As the just transition is a relatively new dimension of the climate change agenda for investors, it will be important to have a process to learn from emerging experience and the lessons of practice in terms of corporate engagement, capital allocation and policy advocacy.

Learning lessons

Internally, the results of work on the just transition can be reviewed at the board level. Investors can create forums where they share what they have learned about integrating social issues into climate-related strategies. Investor coalitions can work with universities and other research partners to draw out approaches that work in terms of financial, environmental and social performance. An important issue here will be measuring progress on the just transition and pinpointing investor contributions. Another will be exploring the reality of how investor intentions with regard to the just transition are translated into action on the ground. One way of doing this would be to establish ways for communities to provide feedback on the 'lived experiences' of investments, in order to improve design and implementation of just transition plans.

These lessons can then be consolidated in the form of awareness-raising and capacity-building sessions for investors, including training for trustees and investment professionals.

Disclosing results

Investors can also disclose the results of their work on the just transition as part of their routine reporting to ultimate beneficiaries and clients as well as their reporting to implement the TCFD's recommendations on climate-related financial reporting. The TCFD recommendations have now been included within the PRI's own reporting framework. Importantly, this process of learning and review should be seen as being iterative, building insight, capacity and confidence, and as one that generates real performance for investors.

Conclusions on the framework for action

The strategies that investors have developed to respond to the environmental dimension of climate change can equally be applied to the social dimension. Investors have now started to formalise by starting work across the five action areas laid out in this section. These are all still relatively new developments.

Over time, a comprehensive approach will involve efforts across each of these areas. This will enable potentially powerful synergies to be generated – with the insights from engagement feeding into policy advocacy, for example, or the search for just transition opportunities leading to place-based partnerships. Example 10 shows how the UK-based Friends Provident Foundation is becoming active in the corporate engagement and capital allocation areas.

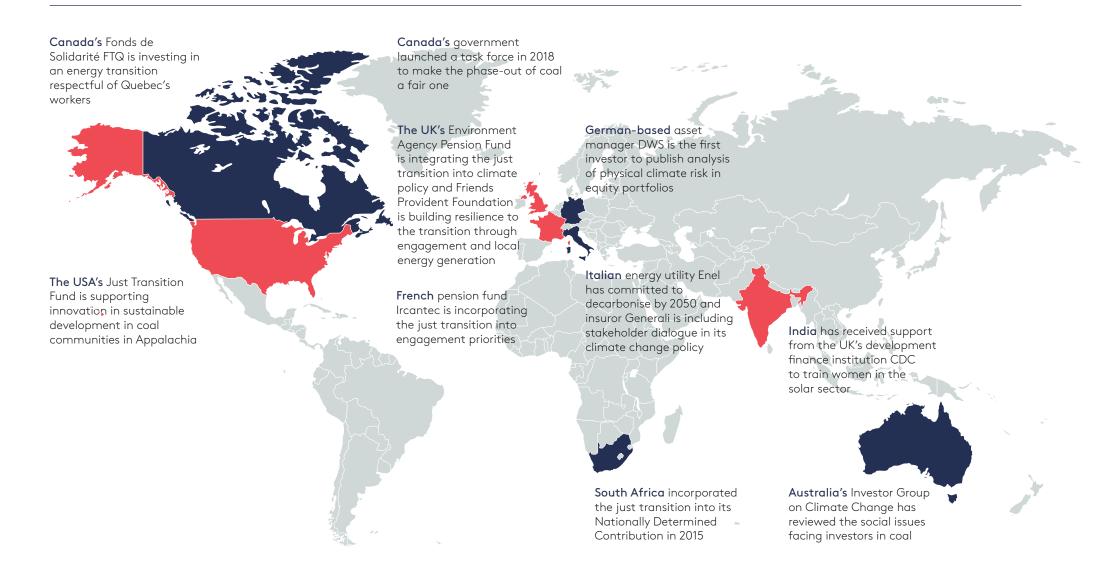
INVESTOR EXAMPLE 10

Friends Provident Foundation: building resilience through engagement and community energy investments

Friends Provident Foundation takes a strategic approach to the just transition that integrates mainstream investment engagement, social impact investing and grant-making. Working with institutional investors, it is leading shareholder engagement with incumbent energy utility companies on business model resilience to the transition to decarbonised, decentralised and democratised energy. This includes plans to support workers and local communities when plant closes (e.g. through site reuse, worker retraining programmes, or alternative local investment). The Foundation is also undertaking place-based impact investing through community-owned energy generation, efficiency and storage. For example, it has invested in the Awel wind cooperative in South Wales via a community share offer that generates financial returns as well as a revenue stream to address local fuel poverty.

Sources: Friends Provident Foundation (2018a) Investor and Shareholder Engagement and Friends Provident Foundation (2018b) Investment Portfolio

Taking action: examples from around the world



4. Next steps

A just transition is essential if the global economy is to make the shift to a low-carbon and resilient economy at the scale and pace required to avoid catastrophic climate damage in a fair way. Governments, international institutions, businesses, trade unions, civil society, communities and, increasingly, investors are placing growing emphasis on the workplace and wider social dimension of the transition. In December 2018, a broad range of insitutions with over US\$4.4 trillion in assets under management expressed their commitment to take action by signing an international investor statement.

Investors now need to develop their own plan for the just transition based on the five action areas laid out in this guide. This guide provides a broad menu of options for investors. From this, we recommend the following next steps for investors to build momentum:

- **Incorporate** the just transition into policy on responsible investment and climate change.
- Integrate the just transition into procurement of investment services across all asset classes (e.g. signalling demand for debt and equity products that promote the just transition).
- Engage with companies to include the just transition within climate strategies, covering critical workplace issues (such as social dialogue, training, skills, and redeployment), as well as supply chain management and community relations.

- Participate in place-based initiatives to channel capital into community renewal and regional diversification through investments with positive social and environmental impacts.
- Promote disclosure by the companies, asset owners and asset managers using the TCFD framework and extend this to include the social dimension.

Delivering this first round of actions will require work within individual investment institutions and with other investors in major collaborations such as the ClimateAction 100+ and the Global Investor Agenda partnership. It will also require multi-sector collaborations with public, private and civil society focused on place. Indeed, for other stakeholders in government, business, trade unions and non-profit organisations, this guide signals the readiness of a growing number of investors to play their role in the just transition.

There is no doubt that there is much work still to be done. Most of the commitments to take action on the just transition are still relatively new. Experience of what works (and what does not) needs to be built up. But the reality that the just transition is a tough agenda does not make it any less material for investors. In fact, it makes it even more important that investors start to take action, gain confidence, share lessons with others and continuously improve their approach to the investment links between climate change and building an inclusive economy.

As part of the follow-up to this guide, the partners involved in the Investing in a Just Transition initiative will encourage investors to signal their support for the just transition so that it becomes part of their core operating practices. This will involve the development of an international 'community of practice' made up of investors committed to the just transition, which will promote detailed analysis of the issues facing different sectors, geographies, investment strategies and asset classes. It will also mean working with other stakeholders to realise the just transition at the regional, national and international levels.

Ultimately, investing in a just transition looks set to be the best way to manage the strategic risks and opportunities that flow from the shift to a resilient, low-carbon and inclusive global economy.

Notes and references

- 1 Prepared by the Investing in a Just Transition lead partners and the UN Principles for Responsible Investment. The institutions who have signed this statement can be viewed at: www.tfaforms.com/4694571
- 2 For an overview of the challenges of the just transition, see Gambhir A, Green F and Pearson P (2018) Towards a just and equitable low-carbon energy transition. Grantham Institute Briefing Paper No. 26, Imperial College London. https://www. imperial.ac.uk/grantham/publications/ towards-a-just-and-equitable-lowcarbon-energy-transition.php See also Green F (2018) Transition Policy for Climate Change Mitigation: Who, What, Why and How. CCEP Working Paper 1807, Centre for Climate Economics & Policy, Crawford School of Public Policy. https://ccep.crawford.anu.edu. au/sites/default/files/publication/ ccep_crawford_anu_edu_au/2018-07/ green_f_2018_transition_policy_for_ climate_change_mitigation-who_ what_why_and_how_ccep_working_ paper_1807_0.pdf
- 5 United Nations Development Programme [UNDP] (2018) Sustainable Development Goals. http://www.undp.org/ content/undp/en/home/sustainabledevelopment-goals.html. See also the Addis Ababa Agenda for financing the SDGs. http://www.un.org/esa/ffd/ffd3/ press-release/countries-reach-historicagreement.html

- 4 See, for example, The Just Transition Centre and The B-Team (2018) Just Transition: A Business Guide. http:// www.bteam.org/announcements/justtransition-a-business-guide/
- 5 Robins N, Brunsting V and Wood D
 (2018) Investing in a Just Transition:
 why investors need to integrate a social
 dimension into their climate strategies
 and how they could take action.
 Grantham Research Institute on Climate
 Change and the Environment. http://
 www.lse.ac.uk/GranthamInstitute/
 publication/investing-in-a-justtransition-why-investors-need-tointegrate-a-social-dimension-intotheir-climate-strategies-and-howthey-could-take-action/
- 6 International Panel on Climate Change [IPCC] (2018) Global Warming of 1.5°C: an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. http://ipcc.ch/report/sr15/
- 7 International Energy Agency [IEA] and International Renewable Energy Agency [IRENA] (2017) Perspectives for the energy transition investment needs for a low-carbon energy system. https://www.iea.org/publications/insights/insightpublications/PerspectivesfortheEnergyTransition.pdf

- 8 IEA (2018) World Energy Investment Report. https://www.iea.org/wei2018/
- 9 Organisation for Economic Co-operation and Development [OECD] (2017) Investing in Climate, Investing in Growth. http://www.oecd.org/env/investingin-climate-investing-in-growth-9789264273528-en.htm
- 10 International Labour Organization [ILO] (2018) World Employment and Social Outlook 2018: Greening with jobs. http://www.ilo.org/global/publications/books/WCMS_628654/lang--en/index.htm
- 11 New Climate Economy [NCE] (2018)
 Unlocking the Inclusive Growth Story
 of the 21st Century: accelerating
 climate action in urgent time. https://
 newclimateeconomy.report/2018/
 wp-content/uploads/sites/6/2018/09/
 NCE_2018_FULL-REPORT.pdf
- 12 United Nations Framework Convention on Climate Change [UNFCCC] (2016)

 Just transition of the workforce, and the creation of decent work and quality jobs (technical paper). http://unfccc.int/resource/docs/2016/tp/07.pdf
- 13 UNFCCC (2015) The Paris Agreement. http://unfccc.int/files/home/ application/pdf/paris_agreement.pdf
- 14 ILO (2016) Guidelines for a just transition towards environmentally sustainable economies and societies for all. http://www.ilo.org/global/topics/green-jobs/

- publications/WCMS_432859/lang--en/index.htm
- 15 Government of South Africa (2016)
 Intended Nationally Determined
 Contribution, in accordance with decision
 1/CP.19 and 1/CP.20 of the Conference
 of the Parties to the UNFCCC. http://
 www4.unfccc.int/ndcregistry/
 PublishedDocuments/South%20
 Africa%20First/South%20Africa.pdf
- 16 Government of Canada (2018a) Just Transition Task Force. https://www. canada.ca/en/environment-climatechange/news/2018/02/just_transition_ taskforce.html
- 17 Enel (2017) COP23, the strategy to fight climate change. https://www.enel.com/stories/a/2017/11/COP23-reinforces-the-climate-change-commitment
- 18 Just Transition Fund (2018) Homepage: http://www.justtransitionfund.org/
- 19 For details on the six principles of the PRI see https://www.unpri.org/pri
- 20 Wood D (2016) Discussion paper: Why and how might investors respond to economic inequality? Principles for Responsible Investment and Initiative for Responsible Investment. Initiative for Responsible Investment, Harvard Kennedy School. https://iri.hks.harvard.edu/links/why-and-how-might-investors-respond-economic-inequality

- 21 Abdih Y and Danninger S (2017) What Explains the Decline of the US Labor Share of Income? An Analysis of State and Industry Level Data, IMF Working Paper No. 17/167. http://www.imf.org/en/Publications/WP/Issues/2017/07/24/What-Explains-the-Decline-of-the-U-S-45086
- 22 See European Trade Union Confederation [ETUC] (2018) Involving trade unions in climate action to build a just transition. https://www.etuc.org/en/pressrelease/involving-trade-unions-climate-action-build-just-transition
- 23 United Nations Principles for Responsible Investment [UNPRI] (2017) A Blueprint for Responsible Investment. https://www. unpri.org/blueprint
- 24 United Nations Human Rights (2011)
 Guiding Principles on Business and
 Human Rights: Implementing the
 United Nations "Protect, Respect and
 Remedy" Framework. https://www.
 ohchr.org/Documents/Publications/
 GuidingPrinciplesBusinessHR_EN.pdf
- 25 Organisation for Economic Co-operation and Development [OECD] (2017a) Annual Report on the OECD Guidelines for Multinational Enterprises 2017. http://mneguidelines.oecd.org/2017-Annual-Report-MNE-Guidelines-EN.pdf
- 26 OECD (2017b) Responsible business conduct for institutional investors: Key considerations for due diligence under the OECD Guidelines for Multinational Enterprises. http://mneguidelines.oecd.org/rbc-financial-sector.htm

- 27 United Nations (2015) Addis Ababa Action Agenda on Financing for Development. http://www.un.org/esa/ ffd/wp-content/uploads/2015/08/ AAAA_Outcome.pdf
- 28 See, for example, Aviva (2017) Climate change: investment value at risk, https://www.aviva.com/social-purpose/thought-leadership/climate-change-value-at-risk-to-investment-and-avivas-strategic and In SY, Park KY and Monk AHB (2018) Is 'Being Green' Rewarded in the Market? An Empirical Investigation of Decarbonization and Stock Returns. Stanford Global Project Center Working Paper, https://ssrn.com/abstract=3020304
- 29 Human Capital Management Coalition (2017) \$2.8 trillion investor coalition petitions U.S. Sec to require increased disclosure of human capital management information. Press release, 10 July. https://www.prnewswire.com/news-releases/28-trillion-investor-coalition-petitions-us-sec-to-require-increased-disclosure-of-human-capital-management-information-300485332. html
- 30 Committee on Workers' Capital (2017) Guidelines for the Evaluation of Workers' Human Rights and Labour Standards. https://www.workerscapital.org/IMG/pdf/cwc_guidelines-workers_human_rights_and_labour_standards_final_may17.pdf
- 31 ShareAction (2018) Workforce Disclosure Initiative: promoting transparency from listed companies. https://shareaction.org/wdi/

- 32 Corporate Human Rights Benchmark (2018) Homepage: https://www.corporatebenchmark.org/
- 33 Transition Pathway Initiative (2018)
 Homepage: http://www.lse.ac.uk/
 GranthamInstitute/tpi/. The Grantham
 Research Institute on Climate Change
 and the Environment is the academic
 partner for the TPI.
- 34 International Trade Union Confederation [ITUC] (n.d.) Shareholder Resolution Principles. https://www.ituc-csi.org/shareholder-resolution-principles
- 35 Task Force on Climate-related Financial Disclosures [TCFD] (2017) Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures and Annex: Implementing the Recommendations of the TCFD. https://www.fsb-tcfd.org/publications/
- 36 Climate Action 100+ (2018) Homepage, http://www.climateaction100.org/
- 37 See the release of the Social Bond Principles and Sustainable Bond Guidelines from ICMA. https://www.icmagroup.org/green-social-and-sustainability-bonds/social-bond-principles-sbp/ and https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-quidelines-sbg/
- 38 Climate Bonds Initiative (2018) Labelled Green Bonds Data. https://www. climatebonds.net/cbi/pub/data/bonds
- 39 Inter-American Development Bank (2018) What is Sustainable Infrastructure? A framework guide to sustainability across the project cycle. https://publications.

- iadb.org/bitstream/handle/11319/8798/ What-is-Sustainable-Infrastructure-A-Framework-to-Guide-Sustainability-Across-%20the-Project-Cycle. pdf?sequence=1&isAllowed=y
- 40 See for example, CalPERS (2018)
 Responsible Contractor Program
 https://www.calpers.ca.gov/page/
 investments/investment-managerengagement-programs/responsiblecontractor-program, and New York
 City Comptroller (2018) Responsible
 Contractor Policy https://comptroller.
 nyc.gov/services/financial-matters/
 pension/initiatives/responsiblecontractor-policy/
- 41 See for example the High Road
 Infrastructure Project, overview in NRDC
 (2016) Taking the High Road to More and
 Better Infrastructure in the United States.
 https://www.nrdc.org/resources/
 taking-high-road-more-and-better-infrastructure-united-states
- 42 Department for Business, Energy & Industrial Strategy [BEIS] (2018)
 Accelerating green finance: Green Finance Taskforce report. Independent report from the Green Finance Taskforce. https://www.gov.uk/government/publications/accelerating-green-finance-green-finance-taskforce-report
- 43 Grantham Research Institute on Climate Change and the Environment (2018) Investing in a Just Transition – project webpage. http://www.lse.ac.uk/ GranthamInstitute/investing-in-ajust-transition/

The Investing in a Just Transition initiative is led by the Grantham Research Institute on Climate Change and the Environment and the Initiative for Responsible Investment. It is being delivered in partnership with the Principles for Responsible Investment (PRI) and the International Trade Union Confederation (ITUC).

The initiative is working to identify the role that institutional investors can play in connecting their action on climate change with inclusive development pathways. This builds on the commitment within the Paris Agreement to support a just transition.

This guide sets out how investors can address the social dimension of climate change and pursue the goal of a just transition as part of their core operating practices. The guide draws on an international review of well-tested investor approaches that already exist, and on extensive dialogue with investors, to provide a framework that can be applied both by individual institutions and through collaborative initiatives.

Published in December 2018 by:

Grantham Research Institute on Climate Change and the Environment London School of Economics and Political Science Houghton Street London WC2A 2AE United Kingdom

www.lse.ac.uk/GranthamInstitute











