INVESTING FOR THE ECONOMIC TRANSITION: THE CASE FOR WHOLE-OF-GOVERNMENT POLICY REFORM

POLICY WHITE PAPER

To inform this briefing, the following investor group has been consulted: PRI Global Policy Reference Group. This consultation is not an endorsement or acknowledgement of the views expressed in this briefing.

ABOUT THIS REPORT

Economic progress – and the financial returns it generates – relies on the stability and resilience of natural and social systems. If these are under threat, so is present and future economic growth. For decades, policy makers and market practitioners have been increasingly trying to protect the environment and address extreme economic inequality through various approaches and strategies. Despite these efforts, macro-level indicators of environmental and social sustainability continue to move in the wrong direction.

The transition to a sustainable and equitable economy that benefits natural and social systems has become an increasingly urgent policy objective in many countries and within international forums. Such a transition aims to shift economic activity from that which exploits and irreversibly degrades the environment to that which the Earth's natural systems can support sustainably. It also aims to ensure social cohesion by reducing extreme inequality, upholding human rights and protecting vulnerable people and communities from the impacts of transition.

To drive the economic transition, governments are introducing policies and regulations to address climate change, biodiversity loss, macroeconomic instability, effects on the cost of living etc. However, these reforms are often pursued in isolation to each other, and with insufficient influence over business-as-usual public policy and business strategy.

This report argues that an effective policy approach to redress decades of market and government failures on environmental and social issues needs to be the responsibility of governments as a whole and needs to be executed as such. It sets out what is understood by a sustainable, just economic transition, and presents a high-level framework to support governments in pursuing such a transition. It also examines how key jurisdictions are approaching the economic transition – particularly with regards to climate change – and finally explains how investors might best support governments in their efforts.

The report is aimed at investors and economic and financial policy makers. It builds on discussions at the PRI's 2nd Sustainable Finance Policy Conference, held in Barcelona in November 2022, interviews with investors, regulators, policy makers, intergovernmental and civil society organisations from January to March 2023, a review of how different governments are approaching the economic transition, and a targeted literature review.

It represents a first step in the PRI's engagement on the topic of the economic transition. Its findings reflect the inputs obtained through the above-described outreach and are intended to start a conversation. This report will be followed by further research, including country-focused analysis, and engagement over the coming year to further drive policy change in support of the economic transition.

REORIENTING PUBLIC POLICY TOWARDS THE ECONOMIC TRANSITION

The transition to a sustainable and equitable economy that benefits natural and social systems is an increasingly shared public policy vision across many jurisdictions. To analyse policy reforms that support this transition, it is important to understand some of the key terms and concepts that underpin this broad, system-level change.

In pursuit of the economic transition, governments are introducing a growing suite of domestic and international public policies to deliver environmental and social objectives, but they face significant barriers, and more rapid and comprehensive reform is needed to address them. It is essential that investors support and engage policy makers in this effort.

KEY CONCEPTS

Underpinning the economic transition are a number of concepts, approaches and objectives for which definitions vary and consensus is lacking. Nonetheless, a broad understanding of the key terms and issues at stake is sufficient to begin to advance the policy thinking on the economic transition in ways that can deliver on its ultimate goals. The following paragraphs provide such context for the following key terms: economic transition, sustainability, transition pathways and just transition. **There is a role for governments, in collaboration with relevant stakeholders, to define each of these concepts more clearly and further the understanding of them.**

THE ECONOMIC TRANSITION

The economic transition is the process by which the economy is transformed from its current extractive and unsustainable state to one that is sustainable and equitable, and that benefits both the economy and natural and social systems. Such a transition is urgently needed to address environmental and social challenges that are posing growing threats to prosperity around the world.

- To avert dangerous climate change, governments have agreed to move from a global economy that depends on fossil fuels for more than 80% of primary energy use to one that is a net zero emitter of greenhouse gases by the second half of the 21st century.[1]
- More than half of global GDP is moderately or highly dependent on nature and the services it provides.[2] This economic activity is at risk from the rapid and unprecedented loss of biodiversity, with about 75% and 66% of terrestrial and marine ecosystems, respectively, significantly altered by human activities.[3]
- Social inequality is high and rising. Global inequalities in income and wealth are close to the peak levels seen in the early 20th century, with particularly large recent increases in the United States, among advanced economies, and in China, India and Russia.[4] Technological changes may further drive insecurity and instability in labour markets, heightening the risk of exclusion of certain groups, and increasing inequality and political volatility.[5] Climate change threatens to increase migration, further stressing social and economic systems, with as many as 1.2bn billion potentially uprooted by its

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1 The IEA (2022), Net Zero Emissions by 2050 Scenario (NZE)
2 The World Economic Forum and PwC (2020), Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy
3 IPBES (2019), Summary for policymakers of the global assessment report on biodiversity and ecosystem services
4 The Brookings Institution (2023), Rising inequality: A major issue of our time
5 PRI (2022), How investors can advance decent work

impacts by 2050.[6] These pressures are already being felt by government borrowers, with those countries exposed to greater climate risks paying higher spreads on their long-term financing.[7]

SUSTAINABILITY

Fundamentally, the economic transition aims to deliver a global economy that is environmentally and socially sustainable. The term 'sustainability':

- is multidimensional, in that it encompasses a range of issues and themes, including biodiversity and nature, climate change, social justice, equity and inequality, and economic wellbeing. These issues are interdependent, and policy decision-making often involves discussions about trade-offs and competing priorities.
- incorporates both process and outcomes, with the literature focusing both on the outcomes (or impacts) in relation to social, environmental and economic aspects, and to the quality of the processes relating to decision-making and to implementation. These process elements include governance and oversight mechanisms, decision-making processes, and transparency and accountability mechanisms. They also require that attention be paid to characteristics such as fairness, equity and the ability of stakeholders to participate in processes that affect them.
- concerns the present and the future: this is tied to the concepts of intragenerational equity and intergenerational equity (or the needs of present and of future generations).[8]
- is concerned about limits. Specifically, attention needs to be paid to planetary boundaries and the capacity of the natural environment to absorb impacts such as pollution and tolerate the extraction of resources.[9]

TRANSITION PATHWAYS

There are a number of pathways that can be defined to deliver the goals of the economic transition:

- In the area of climate change, transition can be defined (or interpreted) in terms of technology pathways (e.g., adopting specific technologies and moving away from others), emissions pathways (which define trajectories in terms of emissions outcomes, but which pay less attention to technologies or actions) or processes (where the emphasis is on how to make decisions on the actions needed to deliver the low-carbon economy).
- For nature, the World Economic Forum (WEF) has identified 15 transitions necessary across the three socio-economic systems (food, land and ocean use; infrastructure and the built environment; and energy and extractives);[10] and the World Business Council for Sustainable Development (WBCSD) has undertaken work on a nature-positive roadmap for the forest sector.[11]

JUST TRANSITION

There is a growing consensus that the social impacts of the economic transition must be effectively managed. An economic transition at the scale needed to address climate change and biodiversity loss will require the cessation (or, at least, transformation) of unsustainable economic activity. This will have profound implications for individuals as workers, consumers and members of communities who depend on those economic activities. A politically acceptable and economically successful transition implies that socio-economic aspects, such as living standards, incomes and communities, are not negatively impacted, or that such potential impacts are managed and addressed. Acknowledging this, the Paris Agreement on

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[6] Financial Times (17 August 2023), 'Lex in depth: how investors are underpricing climate risks', Vanessa Houlder and Nathalie Thomas
[7] ibid
[8] It is also connected to the duty of impartiality. See Waitzer, E.J., Sarro, D. (March 2020), Fiduciary duty and sustainable finance: Clarifying the legal concepts.
[9] Stockholm Resilience Centre, The nine planetary boundaries
[10] World Economic Forum (2020), New Nature Economy Report II: The Future Of Nature And Business
[11] WBCSD (2022), Forest Sector Nature-Positive Roadmap

Climate Change calls for a ‘just transition’. Its signatories recognise the need to 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”.

Key elements of the just transition

Over recent years, the PRI has published and contributed to studies relating to the just transition.[12] These reports point to the need for the transition to be both fast and fair. The evidence shows that the shift to a resilient, low-carbon 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. Managed well, the transition to a net zero economy will not only help to reduce the immense human and economic costs of climate disruption, but it could also generate sustainable, inclusive growth, now and into the future, and lead to a greater number of jobs overall. However, these benefits will not happen automatically. Moreover, failing to deliver a just transition could slow or even stall climate progress, while contributing to economic stagnation and political instability.

Carefully designed and targeted government and company policies are needed to ensure a just transition. Public finance, and its ability to crowd-in private finance, will be an important mechanism to enable investment in workers and communities and inclusive growth.

Essential elements for successful economic transition through the lens of the just transition include:

- anticipating changes in advance to enable adjustment;
- empowering those impacted, be it communities, workers along the value chains, and consumers of companies' products or services, so that human rights are respected, enabling people to participate in the process of change.
- investing in workers and communities and capabilities needed to underpin the transition;
- focusing on its spatial and place-based dimensions;
- mobilising the capital required from the public and private sectors, including from institutional investors as holders of corporate as well as public assets (e.g., sovereign bonds).

[12] LSE (2018), Climate change and the just transition: A guide for investor action; Inevitable Policy Response (2019), Why a just transition is crucial for effective climate action.

THE ROLE OF POLICY

Public policy facilitates, enables and delivers national economic and sustainability objectives. Well-designed public policies can enhance the resilience and stability of financial and economic systems by providing overarching frameworks that address externalities and manage systemic risks. They can also improve market efficiency, address public concerns regarding environmental, social and governance (ESG) issues and increase the attractiveness of countries as investment destinations. Effective policy frameworks that address both financial and real-economy policy goals can also help safeguard financial returns by enabling the profound transformation of business models, funding streams, fiscal mechanisms and related capital flows that are needed for the economic transition.

Public policy has already progressed towards the delivery of environmental and social objectives.

- At the international level, public policies include the Paris Agreement on Climate Change, the Sustainable Development Goals (SDGs), the Kunming-Montreal Global Biodiversity Framework, the International Bill of Human Rights, the International Labour Organization Core Conventions, the UN Guiding Principles on Business and Human Rights, and the development of a pathway which could lead to a binding global agreement on tackling plastic pollution by 2025.
- The international agreements are being implemented – to a greater or lesser extent and influenced by existing legal and regulatory frameworks and overall philosophies regarding economic regulation – in national and sub-national policies around the world. Major economies have adopted potentially transformative environmental and social policies, including the US Inflation Reduction Act, the European Union's Green Deal (including its Fit for 55 Package and REPowerEU), Japan's roadmap for the transition of high-emitting sectors and China's 1+N programme. In addition, many countries have now adopted sustainable finance policies covering aspects such as corporate ESG disclosure requirements, stewardship frameworks and regulations, formal obligations on investors to incorporate ESG-related considerations into their investment decision making, taxonomies of sustainable economic activities, and national or regional sustainable finance strategies that encourage and enable the low-carbon transition and the delivery of the SDGs.[13] Finally, due diligence regulations on environmental and human rights are an increasingly important policy tool.

These policy reforms have supported and underpinned an increased flow of capital towards sustainability goals, but not at the scale needed. The most recent data from the Climate Policy Initiative (CPI) suggests that climate finance grew from US$364bn in 2011/12 to US$632bn in 2019/20; while the rate of growth is impressive, this is still well below what is needed to limit global warming to 1.5°C, which CPI estimates will need US$4.35trn annually by 2030.[14] Adaptation is particularly underfunded. In 2019/2020, climate finance for adaptation constituted only US$46bn of the total. For developing countries, international adaptation finance flows are five-10 times below estimated needs, and the gap is widening.[15] A similar picture emerges in other areas targeted by the SDGs;[16] there has been clear ambition, significant progress and large amounts of investment, but much more targeted, well-planned and well-communicated policy action is needed to raise the capital required to transition successfully to a sustainable economy.

A successful economic transition at the scale needed will require more comprehensive and rapid changes across all sectors of the economy and in all aspects of how we live and work. There are numerous barriers to such a transition, including vested interests, short-term investment cycles, failures to price environmental and social externalities, perverse subsidies, and tax avoidance and evasion practices. Many, if not all, of these barriers can be removed by effective public policy reform. However, the necessary policy making cannot be undertaken in a piecemeal manner, nor can it be seen simply as a matter for one

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[13] See the PRI's Regulation Database, which tracks the adoption of sustainable finance policies around the world.
[14] Climate Policy Initiative (2021), Global Landscape of Climate Finance: A Decade of Data: 2011-2020
[15] UNEP (2022), Too Little, Too Slow
[16] See, for example, the UN's assessment of progress against the Sustainable Development Goals.

arm of government or as an issue for the public rather than the private sector. Instead, the economic transition must be placed at the heart of public policy making: such a policy approach is referred to as **'whole-of-government', meaning it mobilises all sectors of the economy and society at the relevant level to ensure policy effectiveness for the results sought – a sustainable and equitable economy that benefits natural and social systems**.[17]

Responsible investors have a clear interest in governments designing and implementing effective policy frameworks. It is therefore essential that investors support and engage with policy makers around the world to develop critical transition-related policy reforms. Many PRI signatories are engaging policy makers and supporting policy reforms to enable responsible investment. In 2021, of the 1,927 PRI signatories who could respond to policy-related questions in the PRI's Reporting and Assessment framework, 42% stated that they had engaged with policy makers directly on responsible investment-related policy and regulation.[18] In 2023, of the 1,487 respondents to the PRI in a changing world signatory consultation, 77% stated that they were supportive of the PRI's role in policy engagement, and would welcome the PRI continuing this work or even increasing its policy activity.[19]

To help facilitate this engagement, the PRI has developed a conceptual framework for a whole-of-government approach to the economic transition. This framework, as set out in the next chapter, can be used by governments to understand and identify the key features of public policy needed to enable the economic transition, and by investors to assess where policy engagement is most urgently needed.

[17] European Commission (2021), Whole-of-government approach
[18] The PRI (2022), A sustainable finance policy engagement handbook
[19] Atkin, D. (30 March 2023), PRI Blog: The role of the PRI in a changing world

FRAMEWORK FOR A WHOLE-OF-GOVERNMENT APPROACH TO THE ECONOMIC TRANSITION

The PRI has developed a high-level conceptual framework to support government efforts in the establishment of whole-of-government approaches to the economic transition. This framework stresses the importance of the economic transition becoming a central goal of public policy, both as a necessary prerequisite for ensuring effective coordination across government (i.e., 'structural features') and to ensure consistency of policy goals, of implementation measures and of collaboration (i.e., 'dynamic features').

INTRODUCTION TO THE WHOLE-OF-GOVERNMENT FRAMEWORK

The previous sections of this report have established the role of public policy in enabling the economic transition, as well as the need for governments to further the design of whole-of-government approaches to the economic transition.

To clarify what sort of approach to policy-making investors will need to best direct capital towards the economic transition, the PRI interviewed 14 stakeholders[20] in early 2023, building on discussions held at the PRI's 2nd Sustainable Finance Policy Conference, held in Barcelona in 2022.[21] These discussions, alongside a targeted literature review,[22] informed the development of a high-level conceptual framework to support governments in their efforts. The framework aims to start a conversation with policy makers and help investors understand key features of a whole-of-government approach. It reflects the inputs received through the external outreach and literature review, but does not claim to provide answers to all challenges related to the establishment of a whole-of-government approach to the economic transition. The PRI intends to further refine and develop the framework through future work.

The framework distinguishes between structural features (i.e., the extent to which the economic transition is adopted as a central goal of public policy and integrated into the mandates of and interactions between government bodies) and dynamic features (i.e., policy plans, actions and interventions). It also identifies stakeholder consultation (e.g., with cities, sub-national governments, labour unions, companies, investors, civil society organisations and academia) and public-private sector partnerships as cross-cutting aspects.

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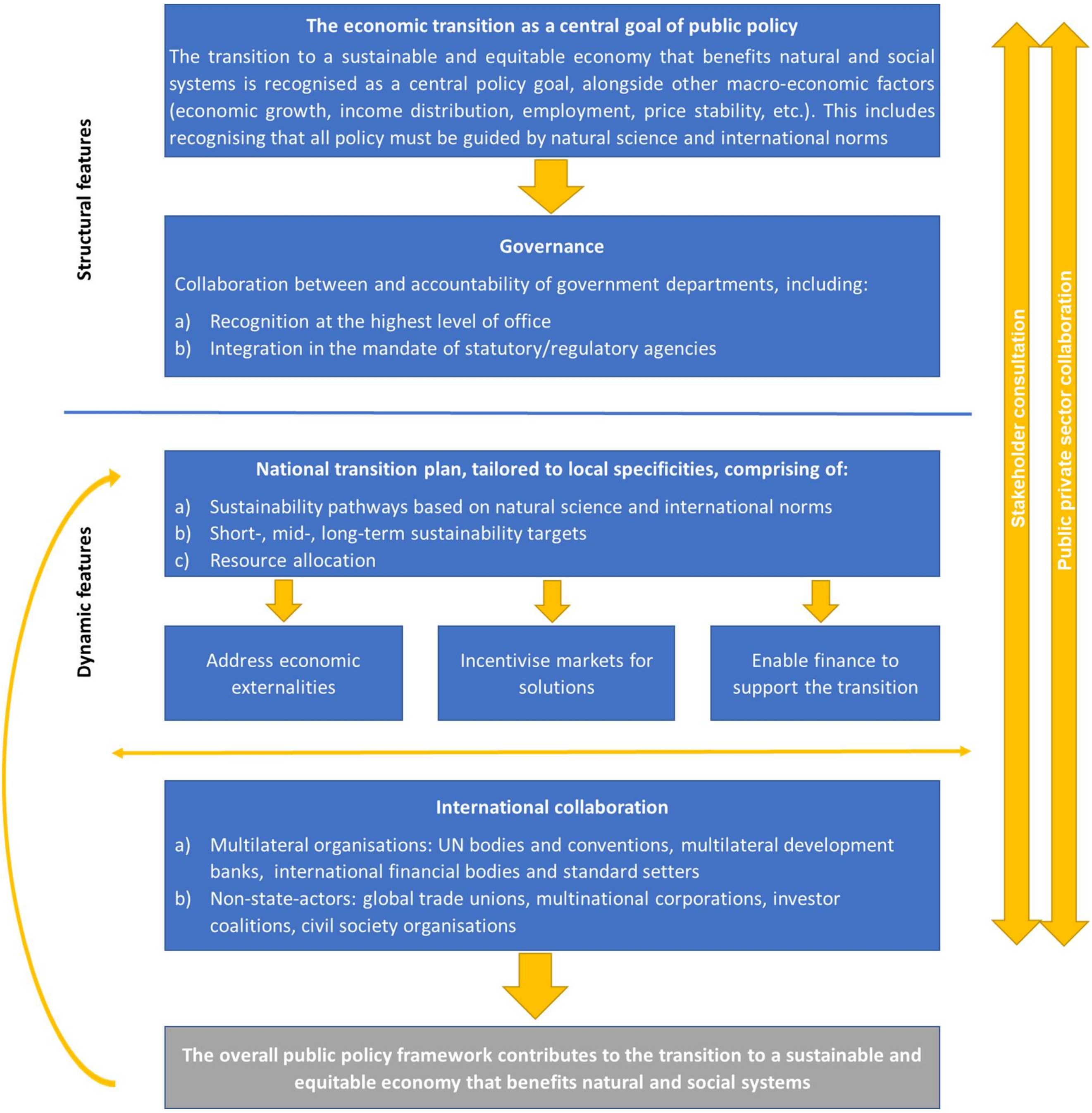
[20] See the full list of contributors in the credits section at the end of this report.
[21] PRI (2023), Policy briefing: PRI sustainable finance policy conference, Barcelona, 29th November 2022
[22] The review included the following publications:
Coalition of finance ministers for climate action (2023), Strengthening the Role of Ministries of Finance in Driving Climate Action; G20 (2021), Sustainable Finance Working Group Roadmap; G20 (2022), Sustainable Finance Working Group Progress Report; GFANZ (2021), Act now: Financial leaders urge more climate action from the G20; GFANZ (2022), Call to action: One year on; IMF (2023), Activating Alignment: Applying the G-20 Principles for Sustainable Finance Alignment with a Focus on Climate Change Mitigation; IPSF (2022), Transition finance report; OECD (2023), Net Zero+: Climate and Economic Resilience in a Changing World; OECD (2022), OECD Guidance on Transition Finance; UN Environment Programme and World Bank (2017), Roadmap for a sustainable financial system; WBCSD (2020), Reinventing Capitalism: a transformation agenda; WWF (2015), From crisis to opportunity: Five steps to sustainable European economies

Figure 1 – A high-level policy framework for a whole-of-government approach to the economic transition



KEY FEATURES OF A WHOLE-OF-GOVERNMENT TRANSITION POLICY APPROACH

Whole-of-government approaches should be developed bearing in mind the following elements:

- **The economic transition must be a central goal of public policy.** This must be backed up by **governance structures**, notably through allocating cabinet or ministerial responsibility for the economic transition, and making the transition an integral part of the statutory mandates of regulatory and oversight bodies and agencies.
- **Governments must adopt national transition plans** that are informed by science and international norms. They should include short-, medium- and long-term sustainability targets and define resource allocation. The specific details of each plan and its implementation will depend on a series of factors, including economic context, economic structure, political and institutional capacity and expertise, the sources and types of finance available to the country, domestic economic, social and environmental priorities, and the nature of the relationships between the various actors involved in the policy development and implementation processes.[23]
- **The economic transition requires all major areas of government policy to be aligned**. Specifically, the economic transition necessitates coordinated and integrated action across three levers: addressing economic externalities, incentivising markets for solutions, and enabling finance to support the transition. Table 1 below provides a non-exhaustive list of policy tools that governments can put in place to activate these interdependent levers. It also identifies green budgeting as a cross-cutting instrument.

Table 1: The levers needed for a whole-of-government approach to the economic transition

Addressing economic externalities	Incentivising markets for solutions	Enabling finance to support the transition
▪ Pricing instruments (e.g., carbon pricing and emission trading schemes) ▪ Adopting performance standards (e.g., for vehicles, buildings and household appliances) ▪ Setting phase-out dates for polluting sectors (e.g., unabated fossil fuel power plants) and demand-side measures for hard-to-abate sectors ▪ Subsidy reform (e.g., phasing out harmful subsidies) ▪ Requiring minimum social safeguards from economic actors (e.g., decent work) and highlighting good-job externalities (e.g., increased social cohesion)[24] ▪ Regulation relative to public goods (e.g. affordability standards in the housing market, data protection regulation)	▪ Setting sustainability targets (e.g., for renewable energy, energy savings and nature restoration) ▪ Issuing credible and predictable sector-specific policies, targets, and transition plans ▪ Providing tax exemptions and/or subsidies for clean technologies and sectors ▪ Supporting measures for early-stage innovation and R&D ▪ Adopting and implementing public procurement policies ▪ Up-skilling and re-skilling of the work force	▪ Embedding sustainability outcomes in financial regulation – as per the PRI and World Bank policy toolkit[25] and the Legal Framework for Impact[26] ▪ Providing public finance in support of sustainable finance (e.g., green development banks, concessional finance, grants, guarantees and other risk-sharing instruments, long-term credit lines and investment guidelines)

[23] Investor Agenda (2023), The changing climate policy landscape: considerations for policy-makers and the needs of investors
[24] Dani Rodrik (2022), An Industrial Policy for Good Jobs
[25] PRI and World Bank (2020), How policy makers can implement reforms for a sustainable financial system
[26] PRI (2021), A Legal Framework for Impact

Sustainable budgeting
▪ Using the budget and public financial management to drive transformation in all sectors of the economy. This should build on existing public financial management processes so that sustainability is mainstreamed throughout the entire budget cycle and detailed line ministry budgets fully reflect government sustainability priorities and include aligning public investment management and procurement practices with sustainability objectives.[27]

- **Public and private finance to enable the transition:** In the wake of the COVID-19 pandemic, many governments need to rebuild their balance sheets and potentially face constraints on their ability to raise new funding. Even then, budget constraints may persist in light of structural evolutions such as aging populations. The role and contribution of private finance is therefore key, and policy makers need to create the conditions to support and enable private finance. This will require policy makers to provide policy certainty over the short, medium and long term, remove barriers to private finance, remove perverse incentives, set up green development banks, and support the private sector with concessional finance, grants, guarantees and other risk-sharing instruments, long-term credit lines and investment guidelines. In acknowledging the importance of private finance, it is also necessary to be realistic about the role that private finance can play. There are likely to be areas where there is no business case for action, where costs significantly outweigh benefits, or where the benefits accrue to actors other than those making the investment.
- **International collaboration to complement national transition policy reform.** While domestic legislation is the critical determinant of the level of capital flows into the economic transition, rules-based international regimes supported by governments are critically important to global capital markets. There are various reasons for this: international regimes are seen as important signals of intent and as providing a higher level of certainty that government commitments will be delivered; they can enable governments to work together, helping to address the reluctance of individual governments to act in a way that may undermine national competitiveness; and they can create the rules and markets necessary to incentivise private sector investment.[28] In addition, collaboration across markets on transition policy will be essential to avoid fragmentation and costly competition between governments.[29]
- **Monitoring and review processes**. There is much that we do not know about the economic transition. Priorities may change. Technologies that do not exist today may be developed. The relative economics (the cost curves) of technologies and solutions will change over time. In addition, our understanding of policy interventions – what is needed, what works, what doesn't work, what the costs are – will further develop. Robust and regular monitoring is critical to ensure that the policy interventions adopted are meeting their goals, and to ensure that the spillover and knock-on effects – whether social, environmental or economic, relating to processes and institutions or to outcomes and impacts – are identified and addressed by policy review processes. These processes should not only consider performance against defined short-, medium- and long-term goals, but should also consider the effectiveness of actions taken, the factors that have shaped or influenced performance, and changes in the political, economic, social and environmental context of the country (which may shape the types of policy interventions that can be adopted). An important corollary to this point is that policy makers need to retain the flexibility to change course if policy is not as effective as it needs to be or if the social, environmental or economic impacts are not acceptable. This need for flexibility may, at times, conflict with the demand from investors for policy certainty.

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[27] Coalition of Finance Ministers for Climate Action (2023), Strengthening the Role of Ministries of Finance in Driving Climate Action
[28] See for instance IMF (2023), Activating Alignment: Applying the G-20 Principles for Sustainable Finance Alignment with a Focus on Climate Change Mitigation. This report highlights the need to connect countries' climate targets and plans (NDC/LTS/NAPs) with taxonomies and transition planning frameworks for the financing sector.
[29] Foreign Affairs (18 April 2023), 'The perils of the new industrial policy', David Kamin and Rebecca Kysar

THE STATE OF PLAY OF SELECTED TRANSITION-RELATED POLICIES IN SIX MARKETS

Many governments have started developing policies for the economic transition, albeit primarily focused on decarbonisation. The selected geographies analysed below show that public policies go some way towards being whole-of-government: they are increasingly at the right financial scale, span multiple government departments, are underpinned by short-, medium- and long-term targets, and provide clarity about costs and about how these costs will be met (or, at least, who is expected to carry the costs). However, there remain important gaps in each of the government approaches assessed.

INTRODUCTION

The PRI has undertaken an initial policy landscape analysis of six markets (China, the EU, Japan, South-Africa, the UK and the United States). The sections below describe the extent to which policy frameworks in each of the countries correspond to the key elements of the whole-of-government framework presented in the chapter above – i.e. with a whole-of-government vision, cross-cutting governance and existing transition frameworks or features. They also identify where there is room for improvement and make suggestions for ways forward. The analysis is based on a description of relevant policies, which are included as an annex to this report. The PRI will further develop this initial assessment in a series of country-focused reports.

CHINA

China has made progress in setting up a high-level framework for transition, with targets and sectoral implementation plans, but more efforts are needed in terms of enhancing governance and accountability. The heavy reliance on coal for energy security complicates efforts, and it is unclear how multiple social targets will be integrated into government policies. Private sector involvement and robust market mechanisms are crucial for success and further policy reforms are needed to establish an enabling environment.

Whole-of-government vision. China's target to peak carbon dioxide (CO_2) emissions by 2030 and achieve carbon neutrality by 2060 has been explicitly recognised and endorsed at the highest levels of government. China's government has clarified the top-level design for achieving those goals and formulated sectoral implementation plans. This is known as the 1+N policy framework.

Cross-cutting governance. A "leading small group", chaired by Vice President Han Zheng and comprised of key national-level ministries and agencies, has been established to handle critical government issues through cross-departmental coordination. This group's mandate is to ensure that China's targets for a carbon emissions peak by 2030 and carbon neutrality by 2060 are met.

Existing transition framework/features. China's latest five-year plan sets an 18% reduction target for CO_2 intensity and 13.5% reduction target for energy intensity from 2021 to 2025. For the first time within a five-year plan, it also refers to China's longer-term climate goals and introduces the idea of a "CO_2 emissions cap", although it does not go so far as to set one. China also has targets for people's wellbeing, including growth in disposable income, the urban unemployment rate, average years of education of the working-age population, the number of licensed physicians per thousand people, and the basic pension insurance participation rate.

To implement the 1+N policy framework, all relevant ministries have developed action plans, covering a wide range of areas, including transport, industry, agriculture, urban and rural development, technology, fiscal measures, and finance.

Way forward/room for improvement. The government's efforts to achieve a transition towards carbon neutrality is further complicated by other equally important goals. First, China's increasing emphasis on energy security through coal complicates transition efforts. Coal production and coal power plant capacity have surged to record levels. Second, it remains unclear how social targets, such as common prosperity, welfare, fairness and balanced regional development, will be integrated into cohesive transition plans at both the national and local levels.

State actions, public finance and state-owned enterprises are driving the transition. Direct government involvement in financing green projects risks distorting resource allocation and crowding out private capital. Market mechanisms to facilitate private investment are underdeveloped and ineffective, and urgently need improvement, including by ensuring that the externalities of economic activities are priced, through a more effective emissions trading system (ETS) or fiscal measures, by establishing mandatory and standardised corporate reporting requirements, regulating greenwashing, enabling effective investor stewardship, etc.

THE EU

The EU has adopted ambitious legislation on sustainable finance, climate change and nature under the banner of its EU Green Deal (EGD).[30] The framework has put an increasing emphasis on transition, and steps have been taken to better integrate sustainability objectives into public finance instruments. However, there is still a finance gap, the social aspects of the EGD need to be strengthened, and growing concerns over international competitiveness have led to a less conducive environment for the EU's sustainability agenda.

Whole-of-government vision. The EGD provides an overarching framework to help transition the EU economy towards a sustainable model. While the overall goal is to address climate change by reaching climate neutrality by 2050, the EGD addresses a range of interrelated economic, societal and environmental objectives. These include reducing emissions, creating jobs and growth, addressing energy poverty, reducing external energy dependency, and improving citizens' health and wellbeing.

Cross-cutting governance. By stating that all EU actions and policies will have to contribute to its objectives, the EGD acknowledges the need to take a cross-sectoral approach to the transition. This is to some extent reflected in the EU's governance structure, which for instance assigns responsibility for the EGD to the level of executive vice president within the College of Commissioners of the European Commission. However, some tensions and trade-offs remain between competing objectives for the EU's climate, energy and nature policies.

Existing transition framework/features. Since the adoption of the EGD, the EU has adopted a set of strategies and real-economy policies with important transition features. These include: (i) the adoption of the EU Climate Law, which sets stringent climate goals for 2030 and 2050; (ii) the Fit for 55 package, which aims to accelerate the decarbonisation of key sectors of the economy; (iii) the Green Deal Industrial plan, to scale up EU's manufacturing capacity for net zero technologies; (iv) the 2030 Biodiversity Strategy that aims, among other things, to protect a minimum of 30% of the EU's land and sea area; and (v) a strategy for financing the transition, which seeks to reorient financial flows toward sustainable activities.

To support the EGD's objectives, 30% of the EU's 2021-27 budget is to be spent on climate action.[31] COVID recovery funds are also aligned with the EU's green transition and digitalisation objectives. The EU Climate Law also strengthens the EGD's science-policy interface, with the appointment of a European Scientific Advisory Board on Climate Change set to review progress on EU's climate commitments, propose an interim emission reduction target for 2040, and provide advice to ensure policy coherence.

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[30] European Commission (2019), The European Green Deal

[31] The PRI (2022), Powering a Green Recovery: How EU recovery funds can support investors and the European Green Deal

Way forward/room for improvement. Despite a strong transition policy framework, concerns have been raised that the EGD currently lacks sufficient financing, social considerations have not been adequately taken into account, and there is insufficient policy coherence to successfully deliver the transition. While initiatives undertaken through the Sustainable Finance Strategy (2021) have helped strengthen the EU's sustainable finance framework, stronger EU policy signals are needed on the exit from coal, key net zero technologies, sectoral decarbonisation roadmaps, and providing financial support to unlock private capital flows. Also, the EGD's social components (i.e., the Social Climate Fund and the Just Transition Fund) appear insufficient to address all the social risks of the transition. Finally, within the current challenging international setting, there is increasing pushback against new legislation under the EGD, such as the EU Commission's proposed Nature Restoration Law, which some argue undermines competitiveness and poses risks to project financing.

EU definition of transition finance

The European Commission has stated in a policy recommendation that "although the legal framework does not define the concept of transition finance, transition finance should be understood as the financing of climate and environmental performance improvements to transition towards a sustainable economy, at a pace that is compatible with the climate and environmental objectives of the EU."[32]

JAPAN

Japan has taken important steps in integrating the economic transition at the highest levels of government, as well as putting in place policy tools that aim to enable the transition of the high-emitting sectors that make the greatest contribution to the country's emissions. There is, however, a need to increase the ambition level of its policies, broaden the scope from climate to other sustainability issues, and provide more clarity on the social implications of Japan's framework.

Whole-of-government vision. Japan's GX Basic Policy is a 10-year roadmap that positions the economic transition as a central policy goal: its main objectives are to develop markets in the areas of energy supply and decarbonisation, while strengthening Japan's industrial competitiveness and economic growth. The roadmap also encourages a just transition by simultaneously promoting the acquisition of new skills and the smooth movement of labour to growth sectors, including the green sector.

Cross-cutting governance. The economic transition is recognised at a high level in terms of governance: the GX Basis Policy was developed by the GX Implementation Council, which was chaired by the prime minister, and consequently adopted through a Cabinet decision.[33]

Existing transition framework/features. Based on the adoption of the Paris Agreement, Japan's 2050 net zero goal was announced by the prime minister in 2020 and a 2030 reduction target was submitted to the UN as a nationally determined contribution, under the terms of the Paris Agreement, in 2021.

One of the regional specificities on which Japan's transition policy is based is its industrial structure: the electricity/heat and industrial sectors account for about two-thirds of Japan's CO_2 emissions, while manufacturing (which includes many high-emitting sectors) accounts for about 20% of GDP. It also faces other specific challenges, such as limited shallow sea areas suitable for offshore wind, robust energy demand from its population of over 100 million in a relatively small country, and the experience of the Fukushima nuclear power plant accident in 2011.

Considering the dominance of high-emitting sectors in the Japanese economy, the government has emphasised policy development that encourages transitions in these sectors. For example, it has produced a Technology Roadmap for high-emitting companies and Basic Guidelines on Climate Transition Finance

[32] European Commission (2023), Commission recommendation on facilitating finance for the transition to a sustainable economy
[33] METI (2023), Cabinet Decision on the Basic Policy for the Realization of GX

for investors. This policy-making process has involved discussions among companies, investors and the government (including multiple departments such as the Ministry for Economy, Trade and Investment, the Financial Services Agency and the Ministry of the Environment), and has also considered alignment with international guidelines (such as those from the International Capital Markets Association, the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change, etc.).

Way forward/room for improvement. There are some areas which could be improved. One would be to raise ambition toward 1.5°C in the transition pathways referred to by the government. The current Japanese transition policies mainly refer to well-below 2°C scenarios (such as the IEA's Sustainable Development scenario referenced by the Green Growth Strategy) rather than the more ambitious 1.5°C target within the IEA's Net Zero Emissions scenario. This makes it difficult for investors and companies in Japan to respond to growing demands for alignment with the Paris Agreement.

The Japanese government's approach also appears to be prioritising fixed income in its policy frameworks, with a focus on high-emitting industries. Investors and companies are not yet required to report on plans to align with a Paris Agreement-aligned pathway, which makes it more difficult for voluntary action, given the insufficient information on how the pathways align on a granular level with the government's net-zero-by-2050 goal. Also, there is a lack of clarity on how social policies relate to climate and energy policies, which a whole-of-government approach could help to address.

SOUTH AFRICA

South Africa has taken important steps in putting in place a climate policy framework and the fiscal policies to support sector decarbonisation and the development of renewable energy. It has also attracted international support for its energy transition. However, the country's climate law is not yet formally adopted. South Africa is also continuing to grapple with reducing its dependence on coal-fired power and the social impacts of the energy transition.

Whole-of-government vision. South Africa's climate policy journey is underpinned by significant milestones, beginning with the 2004 National Climate Change Response Strategy, followed by the National Climate Change Response White Paper in 2011. In 2012, climate change became a key element of its National Development Plan, the overarching plan for the country.

Cross-cutting governance. Since 2018, the South African government has been developing its Climate Change Bill. If the bill becomes law, it will provide the first legal framework in South Africa to respond to the impacts of climate change. The draft law aims to establish a ministerial-level climate change committee to oversee and coordinate activity across all departments.

Existing transition framework/features. South Africa has introduced plans, regulations or standards to guide transition in key sectors, such as energy, transport, buildings, etc. For example, the Integrated Resource Plan 2010–2030 provides a capacity expansion plan for the electricity sector until 2030. The government has also introduced the Renewable Independent Power Producer Programme (REIPPP) to promote private sector investment in renewable energy technologies.

Recognising the significance of international collaboration, South Africa has actively sought support for its economic transition. During COP26, the country announced a landmark agreement with donors including France, Germany, the UK, the United States and the EU. This agreement – dubbed the Just Energy Transition Partnership – includes a US$8.5bn package of grants and concessional finance over five years, aimed at expediting the retirement of coal plants, accelerating the deployment of renewable energy, repurposing mine sites and promoting the development of green hydrogen and low-carbon transport technologies.

Way forward/room for improvement. While actively pursuing its climate goals, South Africa faces pressing challenges, including energy shortages, a water crisis and social impacts from the transition. In response to the energy crisis, the government has undertaken a review of the timeframe and process for decommissioning or mothballing coal-fired power stations, seeking to address electricity supply shortfalls without compromising its commitment to a just energy transition. A Framework for a Just Transition has been introduced to outline the actions and outcomes the government and its social partners will undertake in the short, medium, and long term, aiming to ensure an equitable and inclusive transition process. Further attention will be needed to ensure these plans are executed and – if needed – accelerated, most notably with regards to ensuring a sustainable transition of the public power utility Eskom.

THE UK

The UK has been a pioneer in developing robust climate legislation and has started to formulate and implement a multi-faceted sustainable finance agenda. While these frameworks provide much-needed structure, they have at present not been connected by a common strategy: this has led to fragmented implementation and stop-start approaches that have undermined policy effectiveness.

Whole-of-government vision. Despite strong policy frameworks and structures in some areas, the UK lacks an overarching strategy and direction from the top, and insufficiently emphases progress and delivery of targets. The UK government has not taken an interventionist approach to the transition, deferring instead to the market. Comparatively, spending on the economic transition has fallen in recent years compared to other G7 economies.

Cross-cutting governance. In the UK, policy is first guided by overarching primary legislation, set by Parliament, with Departments and Ministers responsible for setting associated mandates for regulation. Once set, regulators have a degree of autonomy and ownership on implementing this mandate, within the boundaries of the law. Therefore, government bodies and regulators can drive the transition within the realms of their mandates. The Financial Conduct Authority (FCA), for example, must support the UK government's economic policy objective for achieving strong, sustainable and balanced growth, by increasing long-term energy security and delivering net zero.

Existing transition framework/features. In 2019, the UK became the first major economy to set a legally binding national net zero commitment, with a 2050 target date. This commitment stems from the Climate Change Act of 2008, which introduced legally binding emissions targets (carbon budgets) every five years, as well as an independent expert body, the Committee on Climate Change, to advise the government on emissions targets and report on progress to Parliament.

The UK's Green Finance Strategy – the first version of which was published in 2019 – was delayed at every stage, with stop-start approaches undermining both consumer and investor confidence. Nonetheless, the strategy, updated in 2023, did provide some clarity on net zero investment roadmaps, delivering a UK Green Taxonomy (with a 2-year voluntary window), and launching a Transition Finance Market Review and a consultation on transition plan requirements. However, the revised strategy still contains key policy gaps, with no new public investment in energy efficiency, for example.

In 2022, the government set up its Transition Plan Taskforce (TPT) to help develop a framework for private sector climate transition plans, building on international disclosure standards. Following the publication of a sector-neutral framework in 2023, the TPT has now set up working groups on nature, adaptation and just transition that will produce further guidance on transition plans and wider sustainability issues. Work by the FCA on sustainability disclosure requirements and investment labels, specifically the sustainable improvers label, is well-aligned with facilitating the transition to net zero. The FCA has further committed to draw on the TPT's outputs to strengthen disclosure requirements for listed companies and regulated firms.

Way forward/room for improvement. Across government, elements of a transition policy framework exist, but the needs of the transition are inconsistently addressed and the mandate and ambition for a whole-of-government approach are lacking.

Crucially, the UK government does not recognise that investment in new fossil fuel production needs to end for the UK to transition to net zero. Instead, it sees fossil fuel production and related subsidies as integral to energy security. Continuing incentives for fossil fuel production are incompatible with a net zero economy, and a whole-of-government approach that has the transition as a central goal of public policy must recognise that trade-offs are necessary to achieve a successful transition.

THE UNITED STATES

The United States has put in place landmark legislation that provides permanent incentives for investments in key sectors for the economic transition. These policies are supported by a strong focus by the current administration on environmental justice. Such executive action is subject to changes in administration, however, and the country's sustainable finance agenda also lags its industrial and real-economy policy.

Whole-of-government vision. The Biden administration has, through Executive Order 14057, established an official "whole-of-government-approach" to achieving net zero by 2050, with an interim economy-wide target of reducing net greenhouse gas emissions to 50-52% below 2005 levels by 2030.

Cross-cutting governance. The US currently lacks a permanent governance structure that can circumvent political hyperpolarisation around climate change and a lack of political will in Congress to address the issue. Executive and agency-level actions may be revoked or substantially amended in the future by other administrations. However, some states and municipalities have committed to filling gaps where the federal government falls short.

Existing transition framework/features. Since 2020, the US has passed three large-scale industrial and real-economy policies with transition implications. These policies are primarily incentive-based, covering specific economic sectors, including renewable energy, climate resilience, electrical grid improvements and electric vehicle adoption. The Inflation Reduction Act created permanent incentives to attract capital investment in renewable energy through 12 clean energy tax provisions, including Investment and Production Tax Credits. Other policies cover infrastructure and industrial priorities, such as the Bipartisan Infrastructure Law, which allocates US$550bn for areas including electric vehicle infrastructure and climate resilience, and the CHIPS Act, which provides funding to encourage research into and development and manufacturing of net zero technologies.

Federal laws will be guided by executive actions to further the Biden administration's whole-of-government approach to the climate crisis. This approach includes prioritising environmental justice though the Justice40 initiative, whereby 40% of the benefits of certain climate- and transition-related federal investments will be directed to "disadvantaged communities that are marginalized, underserved, and overburdened by pollution". The Securities and Exchange Commission is also considering rulemakings around climate-related financial disclosures, greenwashing and human capital management. Further administrative actions have directed federal agencies to integrate aspects of a just transition into their operations.

Way forward/room for improvement. While the US has clear official targets, it lacks a coherent, permanent legislative strategy to implement a full-scale transition, and is not projected to fully meet its 2030 emissions reduction target. US financial policy does not have an established directive to support the goal of a just transition, and lags behind industrial and real-economy policy.

SUMMARY OF COUNTRY ANALYSIS

Address economic externalities	Incentivise markets for solutions	Enable finance to support the transition
CHINA		
■ World's largest ETS launched in 2021 ■ Standards system for assessing carbon emission reduction, carbon removal and other market-based products under development, but not clear how these standards will be implemented Points for improvement: ■ The capability of the ETS to drive decarbonisation has been limited by challenges in power market interactions, data quality and ETS design	■ Subsidies to support the economic transition (e.g., vehicles, clean heating) ■ Public procurement policy on specific areas ■ Cross-ministry action plan to support the development and deployment of key technology needed to achieve carbon neutrality targets Points for improvement: ■ Public procurement policies lack a clear and overarching policy framework that is aligned with the SDGs[34]	■ Guidelines and sustainable finance regulations (e.g., for the development of sustainable financial products, the green bonds catalogue) in support of the economic transition ■ Many government-led investment funds have been established to support the achievement of carbon neutrality goals, such as the China Green Investment Fund and the China Clean Development Mechanism Fund Points for improvement: ■ No mandatory corporate sustainability disclosure framework; need to clarify investor duties to manage sustainability-related risks and to practice stewardship to drive credible sustainable investment and sustainability outcomes
THE EU		
■ EU ETS established with broad sector coverage, complemented by the first international carbon border tax to avoid carbon leakage ■ Adoption of performance standards (e.g., for buildings, manufacturing, transport etc.). Points for improvement: ■ Less attention has been paid to regressive effects of the green transition that disproportionally affect low-income households, and to addressing social inequality in general ■ The Just Transition Fund and other redistribution mechanisms face limitations, especially in terms of financial volume	■ Legislation with robust targets for renewable energy and energy efficiency; and nature restoration law under negotiation ■ Net zero industry act (under negotiation): simplified conditions for investments in net zero technologies and requirement to consider sustainability and resilience criteria for net zero technologies in public procurements Points for improvement: ■ Financial incentives could be increased by shifting subsidies from environmentally harmful practices to more sustainable approaches, de-risking new and innovative technologies, and redirecting public investments by applying stricter green procurement rules	■ Private finance: sustainable finance package to increase disclosure by companies and financial institutions regarding sustainability objectives; adoption of standards and labels for climate benchmarks and the EU Green Bond Standard. ■ Public finance: ringfencing of public funds for climate change objectives Points for improvement: ■ Private finance: reporting and disclosure requirements could be harmonised, and the overall sustainable finance framework could be developed to increase transition finance and stewardship efforts. ■ Public finance, funding gap of an estimated €700bn per year remains

[34] Fuguo Cao, Runyu Li, Xioyan Cao, (2022) Implementation of sustainable public procurement in China: An assessment using quantitative text analysis in large-scale tender documents, 2022(10), Frontiers in Environmental Science.

Address economic externalities	Incentivise markets for solutions	Enable finance to support the transition
	JAPAN	
■ The GX Basic Policy includes provisions to establish an ETS Points for improvement: ■ Uncertainties remain regarding the ETS' voluntary approach and effective carbon prices ■ Minimum requirements for social and environmental due diligence are yet to be embedded across industrial and financial policies	■ The GX Basic Policy includes various initiatives, including expansion of offshore wind power, R&D in storage batteries, and Y20trn investment by government using the GX economic transition bond ■ Technology roadmaps developed for high-emitting sectors Points for improvement: ■ Progress is needed in developing a Paris-aligned national net zero pathway, and in raising the ambition of its technology roadmaps to 1.5°C scenarios	■ Private finance: transition finance policies focused on fixed-income frameworks, and aimed at supporting high-emitting sectors in their transition ■ Public finance: the GX Basic Policy commits the government to encouraging transition finance through blended finance opportunities Points for improvement: ■ Private finance: key policies that are either partially or fully not yet implemented include mandatory climate reporting from investors and corporates, and a classification system to identify and differentiate between green and/or transition-aligned economic activities
	SOUTH AFRICA	
■ Carbon tax adopted in 2019 covering fossil fuel combustion emissions, industrial processes and product use emissions, and fugitive emissions (coal mining) ■ The Energy Efficiency Regulations in 2011. Energy efficiency standards and labelling programme aims to reduce wasteful electricity consumption in the residential sector Points for improvement: ■ Recent analysis indicates that the carbon tax currently does not effectively contribute to emission reductions given the low levy in comparison with other carbon prices, generous basic allowances and other available exemptions, such as the use of offset credits[35]	■ REIPPP aimsing to increase private investment in renewable energy. ■ Green Transport Strategy enables the transport sector to contribute its "fair share" to national efforts to combat climate change; promote behavioural changes towards sustainable mobility alternatives. Points for improvement: ■ Despite the REIPPP's success in generating interest in renewable energy project development, there have been considerable delays in connecting new renewable projects to the grid.	■ Private finance: the National Treasury published the draft Technical Paper on "Financing a Sustainable Economy" in May 2020 with the aim of unlocking access to sustainable finance and stimulating the allocation of capital to support a development focused and climate-resilient economy. As part of the initiative, South Africa green finance taxonomy was developed in 2022. ■ Public finance: USD 8.5 billion of international capital raised through the Just Energy Transition Partnership (JETP)

[35] Carbon Pulse (2021), South African carbon tax could be too low, too limited to cut emissions

Address economic externalities	Incentivise markets for solutions	Enable finance to support the transition
UK		
■ The UK government supports an ambitious carbon pricing system Points for improvement: ■ A de facto windfall tax on renewable energy compared with tax breaks for oil and gas investment is counter-intuitive to transition efforts	■ Vision for a market-led, technology-driven transition to decarbonise the UK economy and reach net zero by 2050. ■ Government committed to producing sector-specific net zero investment roadmaps for offshore wind, heat pumps, carbon capture and hydrogen, and is expected to produce future roadmaps on nature, nuclear, heat networks, automotive EV and transport. Points for improvement: ■ The UK's COP26 commitment to introduce mandatory transition plans has been rolled back to a 'comply or explain' requirement. ■ To create the conditions that accelerate the transition, the UK government should uphold the net zero ambition and avoid backsliding on key climate policies. In the absence of strong policy incentives and consistent, clear, and continuous signals, the capacity of industry to invest in the net zero transition will be at risk.	■ Private finance: the UK government has adopted a Green Finance Strategy Points for improvement: ■ The UK government did not commit to any new investment to support the transition. Instead, it elevated previous commitments and confirmed that it would not consider new levers to ramp up investment, either from public or private finance
THE UNITED STATES		
■ State and regional networks have implemented carbon pricing systems, such as the Regional Greenhouse Gas Initiative between 12 northeastern states ■ Cap-and-trade system regulating emissions of sulphur dioxide and nitrogen oxide as part of the Environmental Protection Agency's Acid Rain Program Points for improvement: ■ No national carbon pricing system. Legislation that would have created an emissions trading programme similar to the EU ETS (the Waxman-Markey Bill) passed one body of Congress in 2009 but was never enacted ■ Continuous support to oil, gas and coal industries through various tax loopholes and legislative gridlock that limits the ability of regulators to proactively support a coordinated transition	■ The Inflation Reduction Act (IRA) provides tax credits for clean energy projects, including wind and solar. There are also a variety of tax credits available for purchases of electric vehicles at the federal level, as well as in some states ■ The Biden Administration has committed to aligning federal procurement with sustainability objectives Points for improvement: ■ Barriers to market incentives include removal of the most stringent clean electricity provisions of the IRA before passage, excessively long permitting approval for new clean energy projects, and continuing approval of new oil and gas leases on federal lands	■ Private finance: The Securities and Exchange Commission is considering rulemakings on disclosure of climate-related financial information and human capital management information from publicly listed companies, as well as rules to combat greenwashing by financial companies ■ Public finance: the federal administration is currently drafting guidelines for implementation of legislation such as the IRA Points for improvement: ■ The US lacks a coherent national strategy to explicitly enable the financing of a just transition ■ The US has not produced a taxonomy or other core components of a national sustainable financial system

INVESTOR ACTION TO ENABLE THE ECONOMIC TRANSITION

PRI engagement with stakeholders has resulted in an emerging consensus on the role that investors can play in enabling the economic transition. Investors can explicitly call for a whole-of-government approach to the economic transition, share expertise on policy design and implementation, welcome the adoption of policy measures that enable and accelerate the economic transition, and ensure that investor and company lobbying aligns with economic transition goals.

One of the key questions considered in discussions at the PRI's Sustainable Finance Policy Conference in November 2022 and in subsequent discussions concerned the substance of investor engagement with policy makers, and specifically what calls (or demands) investors should be making in relation to the economic transition.

In late 2022, the PRI published an updated version of its sustainable finance policy engagement handbook, focusing on the practicalities of how investors can engage with policy makers.[36] From the engagement and research undertaken for this report, five additional areas have emerged where investors can make substantive and impactful contributions – while keeping in mind country-specific nuances and considerations. Investors should:

- **Explicitly call for a whole-of-government approach to the economic transition.** Stakeholders observed that investor calls have tended to be relatively narrowly drawn, focusing on a particular topic (e.g., climate change) or on a particular aspect of government policy (mainly financial services and, in conjunction with specific topics, on specific economic sectors). If investors wish to focus on economic transition, they can use the whole-of-government framework presented in this report as an inspiration to call on governments to make the economic transition a central goal of public policy, put in place governance structures, and adopt, implement and monitor national transition plans.
- **Share investment practice expertise on policy design and implementation.** Investors can provide valuable insights to policy makers on how to design and implement effective policy, building on their own experience in, for instance, investment portfolio alignment with net zero goals, defining key elements of transition plans, developing credible transition pathways and supporting collaborative engagement. Investors can also advise on the types of policy measures that are likely to be most effective in mobilising capital, on the point at which investors or companies are likely to find the costs of compliance unacceptable, on the likely evolution of technology and on the economics of specific technologies. Investors can also contribute to policy review processes, identifying examples where policy interventions were effective in promoting sustainable investment.
- **Actively welcome the adoption and effective implementation of policy measures that enable and accelerate the economic transition**.[37] Stakeholders commented that it is important that policy makers get credit and praise for action. While there is, inevitably, more that can be called for, policy makers often need to expend significant amounts of political capital and effort to get policies or regulations adopted and implemented. By acknowledging and praising action, investors increase the likelihood that policy makers will have a mandate to further develop a whole-of-government approach to the economic transition.
- **Ensure that their own and investee company lobbying aligns with the goals of the economic transition**. Investors have to align their own lobbying with the goals of the economic transition. In addition, they have a key role to play in challenging companies and their industry groups to ensure

[36] PRI (2022), A sustainable finance policy engagement handbook
[37] See, for example, Finance for Biodiversity's statement by investors following the adoption of the Global Biodiversity Framework.

that policy advocacy does not run counter to the goals of a sustainable economy. This has been a major investor focus in recent years, with a coalition of investors developing the Global Standard on Responsible Climate Lobbying,[38] the PRI running a significant programme on responsible political engagement,[39] with lobbying being a major part of the Climate Action 100+ and Advance engagement programmes,[40] and with investors encouraging companies to ensure that their policy lobbying is aligned with their commitments on sustainability and corporate responsibility.

- **Encourage and collaborate with companies and other actors to share expertise and provide relevant data that can guide policy design and implementation.** This can – among other things – include the adoption of transition plans in which governments translate their commitments into concrete action by setting targets, specifying the actions they will take and allocating capital and operating budgets.

[38] Responsible climate lobbying homepage
[39] The PRI (2022), Responsible political engagement
[40] Climate Action 100+, Net zero company benchmark

THE PRI'S NEXT STEPS

The PRI's immediate priorities are to engage with policy makers at the international and national level so that they identify the economic transition as a central goal of all their activities, adopt a whole-of-government approach in their respective organisations and strategies, and develop transition plans that explain how they plan to implement their commitments to the economic transition.

Our engagement with stakeholders during and since our November 2022 Sustainable Finance Policy Conference have shown broad support for the PRI advocating a whole-of-government approach to the economic transition in our policy engagement. Stakeholders stressed that investors need confidence that national governments will pursue a coherent approach to the economic transition, and that national strategies will not be jeopardised by changes in government or by wider social, political, economic or environmental challenges.

At the domestic level, we will encourage governments to explicitly identify the economic transition as a central goal of all of their activities, and to develop whole-of-government strategies for the economic transition, along the lines of the conceptual framework outlined in this report.

At the international level (e.g., in our interactions with multilateral organisations such as the Organisation for Economic Cooperation and Development, the World Bank, the International Monetary Fund and the UN), our priorities are to:

- Encourage these organisations to explicitly identify the economic transition as a central goal of all their activities.
- Encourage these organisations to explicitly integrate the economic transition into their organisational activities.
- Develop and implement transition plans that explain how they plan to implement their commitments to the economic transition. These plans should identify the actions that will be taken, the resources (human and financial) allocated and the measures that will be used to track progress and assess success.
- Monitor and report on progress on the above points.

The PRI will also consider how to create a space in which to work with our signatories on a coordinated effort to engage at the domestic and international levels for the establishment of whole-of-government approaches to the economic transition.

ANNEX: DESCRIPTION OF SELECTED TRANSITION-RELATED POLICIES IN SIX MARKETS

CHINA

China's NDC	The NDC confirmed the broad targets announced in 2020, committing for 2030 to cut CO2 intensity by over 65 percent from the 2005 level, increase the share of non-fossil fuels in primary energy consumption to 25 percent, increase the forest stock volume by 6 billion cubic meters (m3) from the 2005 level, and reach 1200 gigawatts (GW) of solar and wind power generating capacity.
China's mid-century long-term low greenhouse gas emission development strategy	
China launched a leading small group on carbon peak and carbon neutrality	On 27 May China's government **launched** a high-level group, a 'Leading Small Group', to support carbon reduction efforts. Leading Small Groups are management bodies comprised of key national-level ministries and agencies that handle critical government issues through cross-departmental coordination; this Group's mandate is to ensure China's targets for a carbon emissions peak by 2030 and carbon neutrality by 2060 are met.
1+N system	The country recently issued the 1+N climate policy framework, providing further details on China's 30-60 goals. The "1" in the policy framework's title stands for the overarching "Working Guidance," which identifies core strategic priorities. The "N" in the policy framework indicates both the published and upcoming action plans in key sectors and industries for achieving carbon peaking and neutrality.
Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy	It is the '1' in the so-called '1+N' policy framework, setting out the overarching principles for a number (N) of forthcoming policies to facilitate China's peaking and neutrality goal. The new development philosophy (mentioned in the title of the document) refers to the concept of innovative, coordinated, green, open, and shared development.
Action Plan for Carbon Dioxide Peaking Before 2023 China briefing summary	This Action Plan aims to enable carbon dioxide peaking by 2030 and ultimately achieve carbon neutrality. It covers the 14th and 15th five-year plan periods. It seeks to strengthen the government's ability to mobilise the nation as a whole and involve the private sector into the decarbonisation efforts. It highlights 1) the promotion of innovation in green and low-carbon science and technology, 2) institutional reform in energy and other relevant fields, 3) the development of incentives and constraint mechanisms, and 4) the need to "avoid excessive side effects" of decarbonisation policies, so as to maintain energy security and economic development as the bottom line. The plan also calls

	for stimulating international cooperation, notably through 1) global climate governance, 2) green cooperation on business, technology, and finance, and 3) making the Belt and Road Initiative green. The Action Plan further seeks to enhance policy support by developing a unified and standardised carbon emissions measuring and accounting system; improve laws, regulations and standards; optimise economic policies; and establish further market mechanisms. It should be implemented through a strengthening of planning and coordination efforts, ensuring that responsibilities are taken at all levels, and develop a strict oversight and assessment system.
14th Five-Year Plan UNDP policy briefing on the 14FYP	A five-year plan, or FYP, is a comprehensive policy blueprint released by China every five years to guide its overall economic and social development. Over the years, China's FYPs have evolved beyond their initial functions of economic roadmaps. The official document now covers all important issues, from national security through to carbon emissions. Xi calls the plans "an important way for our party to govern the country". China will focus on promoting 'high-quality development', which is focused on innovation-driven, balanced, green, open, and inclusive growth. The five year plan's outline sets a 18% reduction target for "CO2 intensity" and 13.5% reduction target for "energy intensity" from 2021 to 2025. For the first time, it also refers to China's longer-term climate goals within a five year plan and introduces the idea of a "CO2 emissions cap", though it does not go so far as to set one. China also sets out targets for people's wellbeing, including growth in disposable income, unban unemployment rate, average years of education of working-age population, number of licensed physicians per thousand population, and basic pension insurance participation rate.
Chinese-style modernization 20th National Congress report by Xi Jinping Additional media link	"Chinese-style modernization," also referred to in English as the "Chinese path to modernization," is a catchphrase formally introduced by Xi Jinping in early 2021 to encapsulate the political assertion that modernization as pursued by China abides by such principles as the equitable income distribution, peaceful national development, and ecological sustainability that distinguish it from modernization as it unfolded historically in the developed countries of the West. Simultaneously, it makes the political claim that the prerequisite of such modernization is the rule of the CCP.
The National Strategy for Climate Change Adaptation	The strategy lays out clear guidelines and principles for climate change adaptation and proposes some specific adaptation goals. It outlines a wide range of measures to be implemented by 2020 in order to protect water resources, minimise soil erosion and strengthen disaster prevention, such as early-warning detection and information-sharing mechanisms at the national and provincial levels, ocean disaster monitoring system and coastal restoration. To reduce climate impacts in agriculture the Chinese government plans to develop new farming practices, including controlling plant-eating pests and improving crop adaptability. The plan also includes weather-based financial instruments such as catastrophe bonds and weather index-based insurance. China's Ministry of Ecology and Environment deliberated and passed the National Strategy on Climate Adaptation 2035 in February 2022. A separate implementation plan is expected to complement the strategy. All sectors and localities are encouraged to formulate their own adaptation plans.
Guidelines on promoting high-quality development of central	Optimize the industrial structure and energy structure of central enterprises, and improve the energy utilization efficiency of key industries

enterprises and achieving carbon peak and carbon neutrality	
Implementation plan for achieving carbon peaking in the industry sector	Achieve carbon peak in the industry sector
Guidelines by the Ministry of Transport, National Railway Administration, Civil Aviation Administration of China, and State Post Bureau on implementing the guidelines of the Central Committee of the Communist Party and State Council on implementing the new development concept in a complete, accurate and comprehensive manner to achieve peak carbon and carbon neutrality	Achieve carbon peak in the transportation sector
Guidelines on Financial support for carbon peak and carbon neutrality	The guidelines aim to gradually establish fiscal and tax policy mechanism to support carbon peaking and neutrality goals by 2060, and indicate an intention to use fiscal supports to contribute to the goals through 1) fiscal expenditure and subsidies, 2) tax policy incentives, 3) diversified investment mechanisms, and 4) the government's green procurement policy.
Guidelines on establishing a system of standards for carbon peaking and carbon neutrality	China releases a guideline on establishing a standards system for carbon peaking and carbon neutrality. The standards system consists of four primary subsystems, which can be further subdivided into 15 secondary subsystems, and 63 tertiary subsystems, covering key industries and fields, such as energy, industrials, transportation, construction, agriculture and green finance. China aims to take participation in no less than 30 international standards in relevant green and low-carbon fields.
Opinions of the Supreme People's Court on Fully, Accurately, and Comprehensively Implementing the New Development Concept and Providing Judicial Services for the Active and Steady Promotion of	The Supreme People's Court issued a guideline on relevant judicial services to support achieving carbon peaking and neutrality goals. The guideline highlights liabilities for misleading green claims by issuers of securities and financial products.

Carbon Peaking and Carbon Neutrality	
Green Industry Guidance Catalogue	The 2019 Catalogue identifies 211 sub-sectors under 6 green industries and aims to guide capital policy-making for these industries. Following new development in national goals and strategies, especially on energy saving and carbon-reduction-related sectors, the 2023 version expects to adjust and broaden the scope of sectors covered to provide more policy support.
Carbon Reduction Supporting Facility	The central bank expanded the scope of the carbon emission reduction facility to cover some regional and global financial institutions, and the implementation period will last until the end of 2024. In addition, PBOC also extended the specialized refinancing programme supporting the clean and efficient use of coal till the end of 2023. The PBOC has 15 structural monetary tools in place dedicated to providing discounted lending to strategic segments, including agriculture, innovation, logistics, pension, carbon reduction, clean coal, and small private businesses. Introduced in November 2021, the carbon emission reduction facility (CERF) and the clean coal special re-lending (CCSR) were specifically designed to incentivize investment in four green industries: renewables, environmental protection and energy conservation, low-carbon technologies, and clean coal.
A summary of ETS related policies and progress	China publishes a report on the implementation of the national ETS. The report published by the Ministry of Ecology and Environment discloses the transactions at the national ETS, introduces the allocation and clearance of free allowances, summarizes progress in establishing the measuring, reporting and verification (MRV) mechanism for carbon emission.
Green Finance Guidelines for the Banking and Insurance sector	The guidelines introduce expectations on banking and insurance institutions to reduce the carbon intensity of their asset portfolios in a gradual and orderly fashion, while ensuring energy security, industrial chain and supply chain security, and ultimately achieve carbon neutrality in their asset portfolios. The need to consider broader ESG is also reflected extensively throughout the guidelines
China Green Bonds Principle	The China Green Bond Standards Committee published the China Green Bond Principles (the Principles). The Principles clarify the core components of Green Bonds based on international practices (including ICMA) and domestic conditions in China, and put forward the basic requirements for Green Bond issuers and related institutions.
Transition bonds	The National Association of Financial Market Institutional Investors (NAFMII) launched interbank transition bonds to fund green transformation projects. The scope of projects included starts from the 8 high-emission industries identified by MEE. The transition bonds mainly support two types of projects and economic activities: 1) projects that have been included in the Green Bond Endorsed Project Catalogue but have not met the technical targets; 2) projects and other related economic activities that are compatible with the dual carbon goal.
Action plan for carbon peaking in urban and rural construction	The action plan focuses on the work to peak carbon emissions in the construction sector, laying out key specific targets and measures by 2030, jointly by the Ministry of Housing and Urban-Rural Development and the National Development and Reform Commission (NDRC).

Guidelines on promoting finance and investment for tackling climate change	Setting out basic guidelines and principles for mobilizing finance and investment to support the efforts of addressing climate change.
Guidelines on establishing a green finance system	Setting out basic guidelines and principles for establishing a green finance system

THE EU

EU Green Deal (December 2019)	A package of policy initiatives that aim to transition the EU economy toward a sustainable economic model and make Europe the first carbon-neutral continent by 2050. It provides a roadmap of key revisions and new legislations needed to create transformational changes in all parts of the economy, more particularly regarding clean energy, sustainable industry, biodiversity conservation and restoration, sustainable mobility, eliminating pollution, building and renovation, food security, and sustainable finance. The EU Green Deal states that all EU actions and policies "*should pull together to help the EU achieve a successful and just transition toward a sustainable future*", and that all other EU initiatives should "*live up to a green oath to 'do no harm'".* To finance the EU Green Deal, the European Green Deal Investment Plan (EGDIP) aims to mobilise at least €1 trillion in sustainable investments over the 2021-2023 period. As part of this Plan, a Just Transition Mechanism of €143 billion has been created to support regions and communities most exposed to the transition challenges, with a particular attention to territories with high employment in fossil fuel production and GHG-intensive industries.
Action plan on sustainable finance (March 2018)	The Action Plan was adopted in 2018. Its goal was to increase investments in longer-term, and sustainable activities through 1) reorienting capital flow towards sustainable investments, 2) mainstreaming sustainability in risk management and 3) fostering transparency and long-termism in financial and economic activity. Important milestones under the Action plan included the adoption of the Taxonomy Regulation, the Sustainable Finance Disclosure Regulation (SFDR), the EU climate benchmarks in the Benchmark Regulation, MiFID II and the Insurance Distribution Directive.
MFF(December 2020) and NextGenerationEU (June 2021) (Also see this report)	The 2021-2027 multiannual financial framework and the NextGenerationEU recovery instrument amount to €2.018 trillion (in 2018 prices). They have been set to support Member States' social and economic recovery from the COVID-19 pandemic and enable the transition toward climate neutrality. The funds are a key component of the EU Green Deal and will support the Fit for 55 packages, focused on decreasing EU emissions by 55% by 2030. 30% of the EU budget is also set to be spent to fight climate change.
Strategy for financing the transition to a sustainable economy (July 2021)	The strategy was launched as part of the EU Green Deal to accelerate the contribution of the financial sector to transition efforts. Building on the 2018 Action Plan, the Strategy sets out a programme of actions to ensure that the financial system supports the transition of business toward sustainability. This includes 1) extending the EU taxonomy framework including for the recognition of transition efforts; 2) empowering retail investors and SMEs to access sustainable finance opportunities; 3) improving the financial sector's resilience to sustainability risks by systematically integrating both financial material sustainability risks and sustainability impact in financial decision-making processes; and 4) fostering global ambition through promoting international consensus and supporting third countries' transition efforts.
EU biodiversity strategy 2030 (May 2020) and Nature Restoration Law (June 2022)	The Strategy is a key component of the EU Green Deal. It is set to support a green recovery following the COVID-19 pandemic by providing a roadmap for biodiversity conservation and restoration in the EU. Its two main objectives are to establish protected areas for at least 30% of land in Europe and 30% of sea in Europe by 2030 and get EU countries to put in place effective restoration measures

	to restore degraded ecosystems. To accelerate restoration activities, the Commission has proposed the EU's first ever Nature Restoration Law. The proposal aims to restore at least 20% of EU land and sea by 2030, and all ecosystems in need of restoration by 2050. It also includes binding restoration targets for specific habitats and species as well as a target for reducing the use of pesticides.
Fit for 55 Package (July 2021)	A package of legislative proposals aimed to keep the EU on track to deliver on its 2030 climate targets of 55%. The package aims to reduce reliance on fossil fuels, producing 40% of Europe's energy from renewable sources by 2030, accelerate the development of electric cars and spur clean-energy options for aviation and shipping. Important aspects of the package include: revisions of the EU legislations such as the EU Emission Trading Directive and the LULUCF Regulation; a Carbon Border Adjustment Mechanism (CBAM) that aims to equalize the carbon price between goods produced in the ETS-regulated EU and those produced elsewhere; and the establishment of a Social Climate Fund to address the disproportionate distributional impact on low-income groups of the anticipated increased price of fossil fuels.
European Climate Law (July 2021)	The European Climate Law translates into legal obligations the EU commitment to reach climate neutrality by 2050, and the intermediate target of reducing emissions by at least 55% by 2030, compared to 1990 levels. It ensures that all EU policies contribute to climate goals, and it empowers the EU Commission to keep track of progress and adjust climate action accordingly based on the latest scientific evidence on climate change and its impact. It also includes a process for setting an intermediate 2040 climate target and sector-specific roadmaps charting the path to climate neutrality in different areas of the economy.
Green deal industrial plan (February 2023)	The Plan seeks to scale up the EU's manufacturing capacity for the net-zero technologies and products required to meet the EU climate targets. It aims to simplify the regulatory environment: fast-track permitting timelines, investments and financing for clean tech production in Europe, create new high-skilled jobs to support the green transition; and ensure that any green trade is carried out "*under the principles of fair competition and open trade*". The Net-Zero Industry Act is a key initiative of the Green Deal Industrial Plan and aims to ensure that at least 40% of the EU demand for clean technologies is made domestically by 2030.
DG FISMA sustainable finance package (June 2023)	The package aims to consolidate the EU sustainable finance framework and boost investments in sustainable activities. It includes 1) a new set of EU Taxonomy criteria and amendments to the EU Taxonomy Climate Delegated Act, expanding on economic activities contributing to climate change mitigation and adaptation not included so far (i.e., manufacturing and transport sectors); 2) a proposal for a regulation on ESG ratings providers to increase market integrity; 3) a communication stating the Commission's commitment to enhance the usability and consistency of the sustainable finance framework; 4) recommendations to facilitate transition finance, not only for companies that are advanced in terms of sustainability, but also for those that are at different starting points, with credible plans and targets to improve their sustainability performance.

JAPAN

NDC (Oct 2021)	The government commits to reduce greenhouse gas emissions by 46 percent in 2030 from 2013 levels, setting a target which is aligned with the long-term goal of achieving net-zero by 2050.
The Long-Term Strategy under the Paris Agreement (Developed in June 2019, renewed in Oct 2021)	Developed as a long-term low greenhouse gas emission development strategy for 2050 in accordance with the provisions of the Paris Agreement. This presents a long-term vision toward 2050 carbon neutrality and refers to the Green Growth Strategy (see below) in terms of the specific plan.
Green Growth Strategy Through Achieving Carbon Neutrality in 2050 (developed in December 2020, renewed in June 2021)	This document presents long-term strategies in 14 sectors (e.g. renewable energy, hydrogen/ammonia, automobiles) that are expected to grow in light of the 2050 carbon neutrality commitment, and as such will strengthen the industrial competitiveness of Japan.
Plan for Global Warming Countermeasures (Developed in May 2016, renewed in Oct 2021, Japanese only)	This plan presents specific measures and policies to support the 2030 reduction target committed in NDC.
Sixth Strategic Energy Plan (Oct 2021)	This plan projects Japan's energy mix in 2030, with renewable energy at 36-38%, nuclear at 20-22%, LNG at 20%, coal at 19%, oil at 2%, and hydrogen/ammonia a 1%. This energy mix is a premise of Japan's NDC, and focuses on energy supply side.
Basic Guidelines on Climate Transition Finance (May 2021)	The objective of the guidelines is to strengthen the position of climate transition finance, especially in hard-to-abate sectors; and to raise more funds to contribute to achieving the 2050 carbon-neutral goals and the Paris Agreement by popularizing transition finance. The guidelines define transition finance as "financing means to promote long-term, strategic GHG emissions reduction initiatives that are taken by a company considering tackling climate change for the achievement of a decarbonized society". It also describes the expected disclosure elements in transition finance and the pathways (SDS by IEA, RCP2.6 or RCP2.6 by IPCC, etc) that corporates should refer to when developing transition strategies.
Technology Roadmap for Transition Finance (Oct 2021- Mar 2023)	The roadmaps provide companies (especially in high emitting sectors) that are considering using transition finance for climate change measures, based on the Basic guidelines on Climate Transition Finance, with a more detailed reference.

	The roadmaps also assist financial institutions in determining whether a company's strategies and initiatives toward decarbonization qualify for transition finance when the company raises funds.
Clean Energy Strategy -Interim Report- (May 2022)	This strategy supplements existing 2030 plans (Six Strategic Energy Plan / Plan for Warming Countermeasures) and 2050 plans (The Long-Term Strategy under the Paris Agreement / Green Growth Strategy Through Achieving Carbon Neutrality in 2050) by presenting the direction of energy transition on the demand side, and the policies required to shift the entire economy and industrial structure to a clean energy-centred one. It also shows the policies needed to accelerate decarbonization while ensuring energy security considering the crisis in Ukraine and the tightening of electricity supply and demand.
GX Basic Policy -Roadmap for next 10 years- (Feb 2023, Japanese only)	The objective is to create new demand and markets in the areas of stable energy supply and decarbonization, and to strengthen the industrial competitiveness and economic growth of the Japanese economy mainly for next 10 years. This includes various Green Transformation (GX) initiatives including expansion of offshore wind power, R&D in storage batteries, and 20 trillion-yen investment by government using the GX economic transition Bond. This roadmap includes encouraging a just transition by simultaneously promoting the acquisition of new skills and the smooth movement of labor to growth sectors, including the green sector, etc.
Paper addressing Issues related to Financed Emissions in public-private promotion of transition finance (Feb 2023)	This paper clarifies the characteristics of Financed Emission and raises the issue that “some financial institutions may refrain from financing hard-to-abate sectors based on their concern of a temporary increase in Financed Emissions, hindering the transition of such sectors” even if the financing will contribute to the decarbonization of the sectors in the long run, which could result in a delay in achieving 2050 carbon neutrality and meeting the goals of the Paris Agreement. It also states the necessary approach on disclosure of financial Institutions’ progress by saying that “Financial institutions should showcase their contributions to the real economy decarbonization in a comprehensive manner by focusing on the capital mobilization for transition and innovation. To allow stakeholders to appropriately evaluate such contributions by financial institutions and to further scale-up finance mobilization towards decarbonization, a complementary metrics for financed emissions and disclosure framework is required along with the current methodologies.”
Research Report on Internationally Trusted Decarbonization Transition in Financial Institutions (April 2023, Japanese only)	This summarizes trends in international discussions on transitions, together with examples of initiatives by leading companies, financial institutions, and other organizations to further promote Japanese financial institutions’ dialogues with companies. It recommends financial institutions to establish the necessary evaluation criteria for monitoring corporate progress, and to promote dialogue on decarbonization. Also, it recommends policy makers to consider local circumstances, present country-specific sectoral targets and pathways in line with the Paris Agreement's temperature targets, disseminate them in a manner that is easy to understand, and establish guidelines for information disclosure to companies.
Follow-up Guidance on Transition Financing (May 2023)	This provides guidance for financial institutions (especially bond investors) on how to engage with investees after implementing transition financing.

National Action Plan on Business and Human Rights 2020-2025 (Oct 2020, Japanese only)	This action plan was developed based on the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the ILO MNE declaration, and is positioned as one of the initiatives for the realization of the SDGs. It consists of initiatives on the obligation of the government to protect human rights, initiatives to promote corporate responsibility to respect human rights, and access to remedies. It describes various measures that the government will take regarding business and human rights (ex. promoting decent work, eliminating child labour, accepting foreign human resources, etc), and expresses expectations for companies to identify, prevent, mitigate, address, and share information on the human rights impacts of their business activities, and to promote the introduction of human rights due diligence.
Guidelines on Respecting Human Rights in Responsible Supply Chains (Sep 2022)	This guideline is also based on UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, and the ILO MNE declaration. The purpose is to explain the efforts required for companies to respect human rights in line with the actual situation of companies doing business in Japan, to help companies understand their human rights and to promote their human rights efforts. This is not legally binding, but it states that companies are required to formulate human rights policies and implement human rights DDs.
Report of the Study Group on Improvement of Sustainable Corporate Value and Human Capital - Jinzaiban Ito Report- (Sep 2020)	This report describes human resource strategies for companies to achieve sustainable corporate value enhancement. This was developed by METI's study group led by Ito professor of Hitotsubashi University in Japan.
Report of the Study Group for the Realization of Human Capital Management -Jinzaiban Ito Report 2.0- (May 2022, Japanese Only)	This is the updated version of the report above. The focus is on how to materialize and put into practice the transformation of human capital management, and to present concrete ideas that will be useful in this process.
Guidelines for Human Capital Visualization (Aug 2022, Japanese only)	This guideline is organized with a particular focus on how information on human capital should be disclosed to the capital markets.

SOUTH-AFRICA

National Climate Change Response Strategy, National Climate Change Response White Paper	The 2004 National Climate Change Response Strategy, followed by the National Climate Change Response White Paper (NCCRWP), approved in 2011, form the foundation of national climate policy. In 2012 climate change became a key element of the National Development Plan, the overarching plan for the country.
Climate Change Bill (draft)	The draft law aims to establish a Ministerial Committee on Climate Change to oversee and coordinate the activities across all sector departments. Under the proposed legislation, the Minister responsible for Environmental Affairs together with the Ministerial Committee on Climate Change would have to set sectoral emission targets (SETs) for each GHG emitting sector in line with the national emission target every five years and carbon budgets would be allocated to significant GHG emitting companies. Carbon budgets would put a cap on emissions and make it mandatory for companies to constrain their emissions.
Integrated Resource Plan towards 2030	Originally introduced in 2010, the Integrated Resource Plan (IRP) 2010–2030 is the government's capacity expansion plan for the electricity sector until 2030 (Department of Energy, 2011), which contains targets for all technologies, including renewable energy technologies. In October 2019, the Cabinet passed the IRP2019 update (Department of Energy, 2019) which includes decommission of coal generation capacity.
Carbon tax	South Africa adopted a carbon tax in February 2019 covering fossil fuel combustion emissions, industrial processes and product use emissions, and fugitive emissions such as those from coal mining (Climate Home News, 2019; Reuters, 2019). The tax was implemented in June 2019 (KPMG, 2019).
framework for a Just Transition in South Africa	The just transition framework is a planning tool for achieving a just transition in South Africa, setting out the actions that the government and its social partners will take to achieve a just transition, and the outcomes to be realised in the short, medium, and long term.
International collaboration	At COP26, South Africa announced an agreement with several donors (France, Germany, UK, USA, EU) on a USD 8.5 billion package of grants and concessional finance over three to five years to accelerate the retirement of coal plants, the deployment of renewable energy, repurposing mine sites, and supporting green hydrogen and low-carbon transport technologies
Renewable Energy Independent Power Producer Procurement Programme	Renewable Independent Power Producer Programme (REIPPP) is aimed at bringing additional megawatts onto the country's electricity system through private sector investment in wind, biomass and small hydro, among others.
Response to energy crisis	The government states that 'it may be necessary to re-examine the timeframe and the process of decommissioning or mothballing of coal-fired power stations temporarily to address our electricity supply shortfall. Few would argue that we should close down power

	stations even as we experience load shedding. The process of re-examining our timeframes is not a reversal of our position on the just energy transition'.
Green Transport Strategy (GTS) 2018–2050	This document sets the transport ministry's strategy to contribute to economic development, build a safe, efficient, reliable, affordable transport system, and thus drives the goals of the National Transport Master Plan 2050.
Building sector regulations: Energy Efficiency Regulations 2011, and National Building Regulations, energy efficiency standards and labeling (EESL) program	The Energy Efficiency Regulations were promulgated in November 2011. The introduction and implementation of an energy efficiency standards and labeling (EESL) program is aimed to reduce wasteful electricity consumption in the residential sector. The owner of the building is ultimately responsible for the energy performance of the building. It is now mandatory to specify thermal insulation in certain building occupancy classes in accordance with Regulation XA1, XA2 and XA3. Recently the application of the National Building Regulations SANS 10400-XA: 2021 Ed 2 Energy usage in buildings, was updated and published.

THE UK

The Transition Plan Taskforce (TPT), under the mandate of HM Treasury	Mandate to develop granular transition plan recommendations suitable for incorporation into regulatory frameworks in the UK. Intended to develop the gold standard for private sector climate transition plans and build on international disclosure standards. Existing commitment.
Financial Conduct Authority (FCA) requirement to publish transition plans as part of TCFD reporting	Requires listed companies, as well as large asset owners and managers to disclose transition plans on a 'comply or explain' basis. (NB: this will certainly impact the comparability aspects of transition plans). Existing commitment.
HM Treasury consultation on requirements to disclose transition plans for private and listed companies	The government commits to consulting on the introduction of requirements for the UK's largest companies to disclose their transition plans if they have them. NB: rolled back on COP commitment for mandatory transition plans, now on a 'comply or explain' basis. Commitment to consult in 2023.
HM Treasury consultation on a transition taxonomy	Consultation to be conducted later in 2023 on whether it is appropriate to pursue a separate taxonomy. Commitment to consult in 2023.
TPT Disclosure Framework and Implementation Guidance	A sector-neutral framework which recommends disclosures for high quality transition plans. Builds on ISSB, TCFD and GFANZ.
Transition Finance Market Review	Will consider what the UK financial and professional services ecosystem needs to do to become a leading provider of transition financial services and innovative instruments on the pathway to 2050. Commitment in Green Finance Strategy but unknown delivery date.
UK Climate Transition Benchmarks Markets in Financial Instruments Benchmarks and Financial Promotions (Amendment) (EU Exit) Regulations 2021	Support investors in reducing the emissions they fund over time. Incorporates specific objectives related to emission reductions and the transition to a low-carbon economy. Existing commitment.
The Scottish National Investment Bank	The Bank's missions have been designed to address the long term, persistent challenges facing Scotland (achieving a Just Transition to net zero by 2045, extending equality of opportunity through improving place, harnessing innovation to enable people to flourish by 2040). Existing commitment.

Net Zero Investment Roadmaps (multiple that exist in the UK, here on CCUS as an example)	Roadmaps for specific sectors (automotive, hydrogen, CCUS, Jet Zero) were published in 2022: these will be updated, and additional sector specific roadmaps have been developed (heat pumps) or will be developed (offshore wind, nuclear, heat networks, automotive) will be developed. A nature investment roadmap will also be published by 2024. Existing and a commitment.
North Sea Transition Deal	Sets out an ambitious plan for how the UK's offshore oil and gas sector and the government will work together to deliver the skills, innovation and new infrastructure required to meet stretching greenhouse gas emissions reduction targets. Existing commitment.
Just Transition Commission (Scottish Government)	Committed to lead the production of key just transition plans, support the production and monitoring of such plans, providing expert advice on their development. Existing commitment.
UK Infrastructure Bank	£22 billion of capital to level up and decarbonise the economy. Its mission is to partner with the private sector and government to increase infrastructure investment to help to tackle climate change and promote economic growth across the UK. Existing commitment.
British Business Bank	Supports access to finance for smaller businesses to drive sustainable growth and prosperity across the UK, and also to enable the transition to a net zero economy. Existing commitment.
Future Nuclear Enabling Fund	Launched a £120 million Future Nuclear Enabling Fund to support nuclear projects through grant funding, set out in the British Energy Security Strategy. Existing commitment.
Green Finance Strategy	**Policies committed:** • Further detail on Net Zero-aligned Financial Centre framework • Commitment to consult on transition plan requirements for the largest private companies • Commitment to deliver UK Green Taxonomy with Autumn 2023 consultation • Further details on ISSB assessment and endorsement process • ESG ratings regulation consultation • Commitment to consult on VCMs • Call for Evidence on Scope 3 disclosures coming later in 2023 • Launch of a Transition Finance Market Review, to be led by an industry figurehead and recommend how the UK can stay at the forefront of this market • Updated Investor Roadmaps published and forthcoming, including detail on investment need for the first time • Detail on process to determine a robust methodology for investment tracking • A clear articulation of the role public finance institutions play alongside central Government funding, including an extra £10bn capacity for UKEF • Proper incorporation of nature into the green finance policy framework, and a new Nature Markets Framework • UK will continue its policy of expanding fossil fuel production in the North Sea

Climate Change Act	The Climate Change Act 2008 is the basis for the UK's approach to tackling and responding to climate change. It requires that emissions of carbon dioxide and other greenhouse gases are reduced and that climate change risks are adapted to. The Act also establishes the framework to deliver on these requirements. The Act supports the UK's commitment to urgent international action to tackle climate change. The Act is to set a target for the year 2050 for the reduction of targeted greenhouse gas emissions; to provide for a system of carbon budgeting; to establish a Committee on Climate Change; to confer powers to establish trading schemes for the purpose of limiting greenhouse gas emissions or encouraging activities that reduce such emissions or remove greenhouse gas from the atmosphere; to make provision about adaptation to climate change; to confer powers to make schemes for providing financial incentives to produce less domestic waste and to recycle more of what is produced; to make provision about the collection of household waste; to confer powers to make provision about charging for single use carrier bags; to amend the provisions of the Energy Act 2004 about renewable transport fuel obligations; to make provision about carbon emissions reduction targets; to make other provision about climate change; and for connected purposes.
Financial Conduct Authority's (FCA) Sustainability Disclosure Requirements (SDR)	The regime proposes a 'sustainable improvers' label. These are products with an objective to deliver measurable improvements in the sustainability profile of assets over time. These products are invested in assets that, while not currently environmentally or socially sustainable, are selected for their potential to become more environmentally and/or socially sustainable over time, including in response to the stewardship influence of the firm. This label is aligned with a transition approach, recognising investments that are improving their sustainability credentials. It also allows investors to support companies and incentivise them to transition. a sustainable improvers category acknowledges the important role of stewardship, and of investee and policy engagement as effective tools for investors to shape positive sustainability outcomes. Consulted on proposals, expected policy statement Q3.

THE UNITED STATES

Inflation Reduction Act (IRA)	President Biden's flagship industrial climate legislation. The IRA includes $396 billion in funding over 10 years for climate-related provisions. The IRA mostly includes incentives for investment, rather than disincentives for emissions. Estimates indicate that the IRA could reduce aggregate US GHG emissions by approximately 40% compared to 2005 levels by 2030. It supports future federal action to reduce emissions with stricter standards for power plants, fossil fuel production, and vehicles.
Infrastructure Investment and Jobs Act (the "Bipartisan Infrastructure Law")	Bipartisan legislation that includes $550 billion in new funding for infrastructure projects. It also contains the largest federal investment in public transit in history. Finally, it contains provisions expanding electric vehicle access and infrastructure, climate resilience, clean drinking water, environmental remediation, and clean energy transmission/grid modernization.
Executive Order 14057: Catalyzing Clean Energy and Jobs Through Federal Sustainability	Establishes a goal of achieving nation-wide net-zero emissions by 2050 through a "coordinated whole-of-government approach" using the federal government's "scale and procurement power." Requires agencies to achieve a variety of climate targets, including 100% carbon-free electricity by 2030, building and vehicle targets, and targets to reduce water and energy usage. Also establishes commitments to climate resilient infrastructure, environmental justice (EJ), and domestic/international partnerships.
Executive Order 14008: Tackling the Climate Crisis at Home and Abroad	Signed days after Biden took office. EO 14008 establishes climate considerations as an "essential element of United States foreign policy and national security" and laid out the Biden administration's "Government-wide approach to combat the climate crisis." Established some of the below, including Justice40 and IAC, and laid the groundwork for future EOs.
Justice40 Initiative	The Justice40 Initiative sets the goal of directing 40% of the overall benefits of certain federal investments to disadvantaged communities, which bear disproportionate burdens of pollution. It applies to hundreds of federal programs in virtually every government agency or department. See also: White House EJ hub.
Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All	Reaffirms the Biden' administration's commitments to EJ, pursuing a "whole-of-government approach to environmental justice." Directs each federal agency to make achieving EJ goals part of their mission, identifying historic injustices and seeking to remedy them alongside involvement with affected communities and stakeholders. Agencies must create strategic plans to do so.
White House Environmental Justice Interagency Council (IAC)	Established by EO 14008. IAC is charged with developing "a strategy to address current and historic environmental injustice" and to develop performance metrics to assess federal EJ efforts. IAC committees meet to discuss the "all-of-government commitment" to EJ. IAC and its members execute many federal programs, including Justice40 and the Environmental Justice Scorecard.
Executive Order 14030: Climate-Related Financial Risk	Recognizes the financial risks of climate change and calls for "a comprehensive, government-wide strategy" on climate-related financial risks to the federal government, and financing of a net-zero US economy by 2050. It also directs government regulators and agencies to consider climate-related financial risks; this preceded climate considerations in acquisitions, FSOC, SEC, and DOL.

CHIPS and Science Act	Industrial policy bill passed in August 2022, providing for high-tech research and semiconductor manufacturing. Provisions of the bill authorize spending on net-zero technologies and climate science research. It also directs the creation of regional economic development hubs and increased STEM education funding, particularly to rural and underserved/marginalized communities.
Consolidated Appropriations Act of 2021	Omnibus spending bill combining stimulus relief for the COVID-19 pandemic and regular gov't spending. Included transition measures such as extending the wind production tax credit, and environmental measures including $35 billion in funding for clean energy R&D at the DOE, and a phase out of HFCs (decreasing usage by 85% over 15 years) (aligns US with Montreal Protocol).
Trump Administration	Quick news overview of Trump's plan for a coal revival demonstrated that it didn't happen. Market forces are destroying the coal industry in America, more than any other factor, mostly due to cheap natural gas and solar power. The coal industry declined even under the Trump administration.
Link	Economy-wide target of reducing net GHG emissions by 50-52% below 2005 levels in 2030. The US is currently on track to achieve 26-28% reduction below 2005 levels in 2025.

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