HOW FINANCIAL AUTHORITIES CAN BUILD A SUSTAINABLE FINANCIAL SYSTEM

PART I

ADDRESSING INVESTOR CHALLENGES

PRI Principles for Responsible Investment

DISCLAIMER

This is an updated version of the Sustainable Finance Policy Toolkit that was published in 2020.

The PRI has revised the report to reflect recent developments in sustainable and responsible investment policy based on insights from the PRI regulation database, a review of academic literature and a series of interviews with key stakeholders, including investors, academics, policy makers and international organisations.

This updated Sustainable Finance Policy Toolkit is in two parts. Part one outlines the challenges investors face in addressing sustainability-related risks and explores the role of financial authorities in mitigating these challenges.

Part two presents a policy toolkit, detailing 10 key policy tools to enable a sustainable financial system.

For any questions, feedback or requests for bilateral conversations, please reach out to policy@unpri.org

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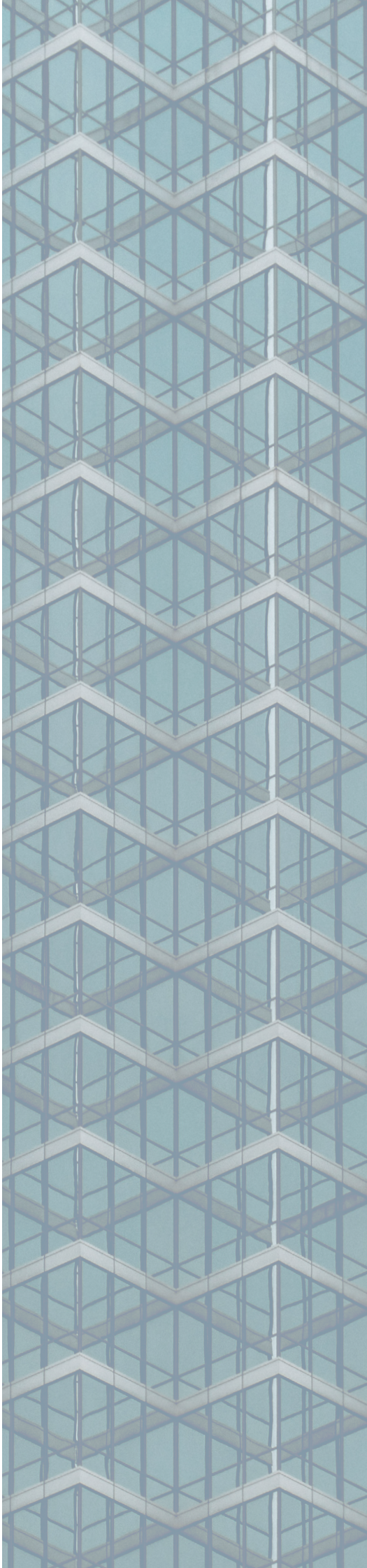


KEY TERMS

Externalities: An externality is a cost or benefit generated by one party that affects others who are not directly involved in the transaction. Externalities can be either negative or positive. A classic example of a negative externality is pollution, where a producer considers only the direct costs and profits of production, ignoring the broader harm to others. Conversely, research and development (R&D) often create positive externalities, as the resulting knowledge can benefit society beyond the investing firm. Because the firm conducting the R&D typically captures only part of the broader benefits, private returns from R&D are usually smaller than the total social returns.

Financial authorities: This report defines financial authorities as government agencies responsible for developing policies or regulations for the financial system, as well as overseeing, regulating and supervising the financial system within their jurisdiction. Examples of financial authorities include treasuries or finance ministries, central banks, prudential and conduct regulators and supervisory bodies. In some countries government departments, such as social security departments, also play a role in shaping financial regulations, given their responsibilities for parts of the financial system, such as pension provision. Stock exchanges can also be regarded as financial authorities when they perform regulatory functions, such as developing and enforcing rules, guidance and standards for companies listed on the exchange or entities involved in the capital market they are overseeing.

Idiosyncratic risk: Unsystematic risk or risk that is uncorrelated with overall market risk. In other words, a risk that is firm-specific or security-specific and can be diversified.

Impact: The effect of organisations' actions on people and the natural environment. Impact can be positive or negative, intended or unintended, and direct or indirect. All enterprises, investors and financial institutions create positive and negative impacts.

Impact management: The process by which organisations understand, act on and communicate their impact on people and the natural environment, in order to reduce negative impact, increase positive impact and ultimately achieve sustainability and improved wellbeing.

Just economic transition: The process by which the economy is transformed from an unsustainable state to one that is sustainable, equitable, resilient and benefits the economy and natural and social systems. Such a transition may be driven by governments' sustainability commitments and the need to enhance economic competitiveness and security.

Public goods: Public goods are non-excludable (available to all) and non-rival (one person's use doesn't reduce the goods' availability to others). The scope of public goods can be local, national or global. Global public goods, such as the natural environment, clean air and water, and climate

change mitigation, benefit all people worldwide. Public goods are often undersupplied because market incentives are typically insufficient to encourage adequate provision. One of the challenges faced in the supply of public goods is the collective action problem, in which a group of individuals must cooperate to achieve a common goal for the public good, but each individual has an incentive to free-ride or not contribute, leading to potential inefficiencies in achieving the desired outcome.

Policy engagement: Policy engagement refers to investors' direct or indirect interactions with regulators or other policy makers to contribute to specific policy developments. Policy engagement may include, among other actions, participating in 'sign-on' letters, responding to policy consultations, providing technical input via government- or regulator-backed working groups or engaging policy makers on the investor's own initiatives.

Sustainability outcomes: The real world sustainability outcomes of human activity, including actions by investors. Examples of positive sustainability outcomes are those aligned with global sustainability goals, such as the objectives of the Paris Agreement or the UN Sustainable Development Goals, or with the UN Guiding Principles on Business and Human Rights, the International Bill of Human Rights or International Labour Organization conventions.

System-level risk: An umbrella term to denote non-diversifiable risk originating from the market's dependencies on environmental, financial and social resources (also known as systematic risk); or any major disturbance in environmental, financial and social systems that results in cascading effects on the economy and financial system (also known as systemic risk).

Whole-of-government approach: A framework which can be used by:

- governments to understand and identify the key features of public policy needed to enable economy-wide strategies such as the economic transition;
- investors to assess where policy engagement is most urgently needed.

A whole-of-government approach stresses the importance of the economic transition becoming a central goal of public policy:

- as a prerequisite for ensuring effective coordination across government;
- to enable consistency of policy goals and implementation measures;
- to support collaboration.

EXECUTIVE SUMMARY

Financial authorities can play an important role in building a stable, sustainable financial system that rewards long-term responsible investment, to the benefit of investors' clients and beneficiaries and the environment and society as a whole. This Sustainable Finance Policy Toolkit explores this topic in two parts which are published separately. Part one of this two-part report provides an updated framework analysing sustainable finance policy approaches. It examines:

- the **challenges faced by investors**[1] in scaling up responsible investment in line with their duties and obligations to address system-level sustainability-related risks and support a just economic transition;
- **financial authorities' sustainability-related policy ambitions observed across the G20 countries**; and
- the **policy measures** that financial authorities can implement to:
  - create an enabling environment for responsible investors;
  - fulfil their mandates; and
  - respond to emerging, sustainability-related government goals and related risks, opportunities and impacts.

Part two (published separately) provides deep dives into specific policy measures identified in part one.

Together, the two parts of the Sustainable Finance Policy Toolkit may also guide and support investors in their own engagement with policy makers on broader sustainable finance and economic policy reforms.

CHALLENGES FOR INVESTORS IN PURSUING RESPONSIBLE INVESTMENT PRACTICES

Investors face six major challenges in pursuing responsible investment practices:

Challenge A. Lack of incentives resulting from issues such as externalities, entrenched short-termism and collective action problems. These have limited investor actions to address the root causes of sustainability-related investment risks even if addressing them may align with financial objectives or systems stability.

Challenge B. Incomplete capital markets, reflected in the shortage of investable project pipelines, mispricing of sustainability-related risks and restrained supply of capital, particularly for projects that involve high levels of risk, require significant upfront investment or have long time horizons before generating returns. These conditions restrain the efficient allocation of capital in line with a just economic transition that enhances long-term economic sustainability, security and competitiveness.

Challenge C. Policy inconsistency and uncertainty further constrain the long-term allocation of capital to support a just economic transition. Sources of uncertainty or inconsistency can include, for example government willingness, plans and policy implementation to drive the economy-wide transition or market players' responsibilities and discretion to manage sustainability-related risks and impacts.

Challenge D. Lack of transparency and credibility as a result of inadequate availability of standardised and comparable data and metrics, and a lack of verification mechanisms to monitor and understand sustainability-related risks, impacts and claims. This limits investors' ability to accurately price and incorporate sustainability-related risks, opportunities and impacts into investment decision-making.

Challenge E. Principal and agent challenges may lead to misaligned incentives across the investment chain and increased transaction costs. Such challenges are reflected in differing goals and time horizons between asset owners with diversified portfolios seeking long-term sustainable returns and system-level stability, investment managers seeking risk-adjusted returns across different portfolios and for a variety of clients, and corporate managers prioritising the maximisation of single company profits, potentially at the expense of broader systems stability.

Challenge F. Lack of awareness, capacity and sustainability expertise which limits investors' ability to fully address material sustainability-related risks and opportunities in pursuit of long-term risk-adjusted returns. This lack is driven by insufficient skills and resources to meet the emerging demands of managing sustainability-related risks and opportunities, as well as limited awareness of the feedback loop between individual investments and wider systems stability.

1 In this report, the term "investors" is used interchangeably with institutional investors which invest money on behalf of other people or entities.

RELEVANCE OF SUSTAINABILITY FACTORS TO FINANCIAL AUTHORITIES' MANDATES

Governments or other legally authoritative bodies generally mandate financial regulators with three main objectives, all of which interact with sustainability issues.

- **Financial stability**: sustainability-related risks can impact the stability of the financial system and individual financial institutions; some sustainability-related risks, such as climate change, degradation of nature and excessive inequality, can trigger system-level financial risks.
- **Market integrity and efficiency**: financial authorities oversee the fairness, effective functioning and transparency of financial markets. As such, they aim to support a system in which capital markets accurately reflect all material risks, including those related to broader sustainability challenges and goals. They also aim to reduce regulatory arbitrage and unnecessary regulatory burdens. Regulators operating with mandates to support the economic transition are expected to ensure that capital can be allocated to opportunities that contribute to these goals.
- **Consumer protection**: sustainability-related risks can impact financial returns and other end-investor goals. Therefore, under their mandate to protect the interests of consumers in financial markets, financial authorities can put investor protection regimes in place to ensure that financial intermediaries incorporate sustainability factors into investment decisions and advice.

Beyond these mandates, there is impetus for governments to act in a coherent manner across financial, economic and broader public policies. This is what we refer to as a 'whole-of-government' approach. Considering financial authorities' mandates and objectives through this lens supports effective policy reforms and contributes to the creation of an enabling environment for responsible investment.

LEVELS OF SUSTAINABILITY AMBITION OF FINANCIAL AUTHORITIES OBSERVED ACROSS G20 JURISDICTIONS

Financial authorities currently operate with differing mandates and varying levels of ambition regarding their role in addressing sustainability challenges. Some regulators are explicitly tasked with a secondary objective to support national efforts to transition the economy,[2] while others exercise independent discretion to interpret the scope of their role. These mandates and ambitions influence policy priorities and expectations for investor action.

Based on our analysis of key sustainable finance policy across G20 markets, this report identifies three levels of sustainability ambition that are cumulative in nature.

- **Managing exposure to sustainability-related risks**: at this level of ambition, financial authorities aim to enhance resilience by ensuring that investors are equipped to respond to sustainability-related risks. Policy frameworks are designed to promote measures such as stress testing, scenario analysis, risk management and disclosure practices, allowing investors to effectively identify, monitor and address the impacts of sustainability-related risks on investments and financial stability. For example, investors may be expected to identify and assess the impacts of sustainability-related risks on their business operations and investments, and to establish governance oversight, risk management processes, strategies and transition plans to enhance resilience against such risks (see Table 2).
- **Addressing the drivers of sustainability-related risks**: at this level of ambition, financial authorities aim to guide and support investors to consider – as part of their overall response to sustainability-related risks – how their investments impact investee entities. This impact will indirectly shape the impact of investee entities on the broader planetary and social conditions that may drive or mitigate system-level sustainability-related risks. Financial authorities may promote frameworks that guide investors to identify, measure and manage investment impacts that could drive, mitigate or enable adaptation to system-level sustainability-related risks. For example, financial and non-financial entities may be expected to implement a due diligence process to identify, prevent, mitigate and remediate adverse social and environmental impacts within their own operations, subsidiaries or value chains (see Table 3).
- **Supporting governments in driving the economy-wide transition**: at this level of ambition, financial authorities support broader government efforts to deliver the economy-wide transition to fulfil their mandate to enhance the financial stability and other objectives. This is not something that they can achieve in isolation. Instead, at this level, financial authorities support the government to implement a whole-of-government approach and to collaborate with real economy policy makers. The aim is to align responsibilities, ambitions and actions across the financial sector and the real economy to facilitate capital flow in line with transition goals. For example, financial authorities may facilitate the information flow between the wider government and financial sector. This can help to ensure that national transition strategies are investable and that transition planning by financial and non-financial entities is well informed by and connected with national transition strategies and sectoral transition roadmaps or pathways. In the meantime, financial policy and real economy policy work hand in hand. Pricing and non-pricing (i.e. standards and regulation) real economy measures that directly address externalities and build markets for solutions to sustainability challenges are essential to managing system-level risks and maximising opportunities for value creation. Without these, neither financial industry-led action nor financial policy reform will be sufficient to build a sustainable financial system (see Table 4).

2 Examples include the United Kingdom's Prudential Regulation Authority, which has a mandate to support an orderly economy-wide transition to net zero emissions and the European Central Bank, which considers itself obliged to support general economic policies in the European Union, including the transition to a net zero economy and to protecting the environment.

By considering and pursuing all three levels of sustainability ambition, financial authorities can help to:

- ensure existing sustainability-related risks and challenges are addressed;
- reward long-term responsible investment;
- benefit the environment, the economy and society – on which financial returns and stability depend – as a whole;
- unlock the full potential of the financial sector to contribute to resilient, sustainable and inclusive economic growth.

TEN POLICY TOOLS FOR A SUSTAINABLE FINANCIAL SYSTEM

Based on our analysis of existing policies and regulations across the G20, we have identified 10 sustainable finance policy tools that financial authorities can use to help address the challenges faced by investors and support a sustainable financial system. Each of these tools supports financial regulatory objectives, including enhancing financial stability, protecting investors and improving market efficiency and integrity.

Tool 1. Investor sustainability responsibilities: enabling investors to integrate sustainability factors into their investment decision-making, with the aim of contributing to financial stability, investor protection and market integrity.

Tool 2. Corporate sustainability responsibilities: setting out expected or required sustainability practices for non-financial companies (or the non-investment activities of financial companies).

Tool 3. Investor sustainability disclosure requirements: outlining the methodologies, key metrics and processes for sustainability reporting.

Tool 4. Corporate sustainability disclosure and accounting standards: establishing what should be covered in disclosure and analysis of current and forward-looking data regarding companies' strategies, operations and performance on sustainability issues.

Tool 5. Regulatory frameworks for effective stewardship: defining expectations around investors' stewardship practices and reporting, and removing obstacles to effective collaboration around systemic issues.

Tool 6. Transition plans: guiding financial and non-financial entities to describe their strategy to transition their processes, operations and business models to meet sustainability commitments within a specified timeframe.

Tool 7. Human rights and environmental due diligence requirements: supporting investors' risk and impact analysis, enabling better-informed investee engagement and levelling the playing field for responsible corporate and investor practice.

Tool 8. An enabling policy environment for sustainable financial instruments: mobilising public and private capital to finance the just transition and solutions to tackle sustainability-related risks.

Tool 9. Service provider sustainability regulations: ensuring that service providers serve the best interests of their clients, taking sustainability-related risks into consideration.

Tool 10. Sustainability standards and classification instruments: for example taxonomies, scenarios, pathways and impact assessment standards built on scientific consensus and international norms. These would provide clarity on key terminologies and tools for identifying what is sustainable.

WHY SUSTAINABILITY IS RELEVANT FOR THE FINANCIAL SYSTEM

THE FEEDBACK LOOP: SUSTAINABILITY-RELATED RISKS AND INVESTMENT PRACTICE

System-level sustainability-related risks have profoundly affected investment and will continue to do so. For example, climate change-induced physical and transition risks may cause credit, market, underwriting, operational and liquidity risks through their impacts on individual businesses and the macroeconomy. However an often-overlooked element is the continuous feedback loop between:

- investors' decisions;
- responses in the real economy;
- subsequent sustainability outcomes (whether intended or not); and
- resultant sustainability-related risks and opportunities that affect the financial performance of investments.

The sustainability-related risks and opportunities of economic activities are affected by external conditions and the perceptions and behaviour of financial and non-financial sector actors.[3]

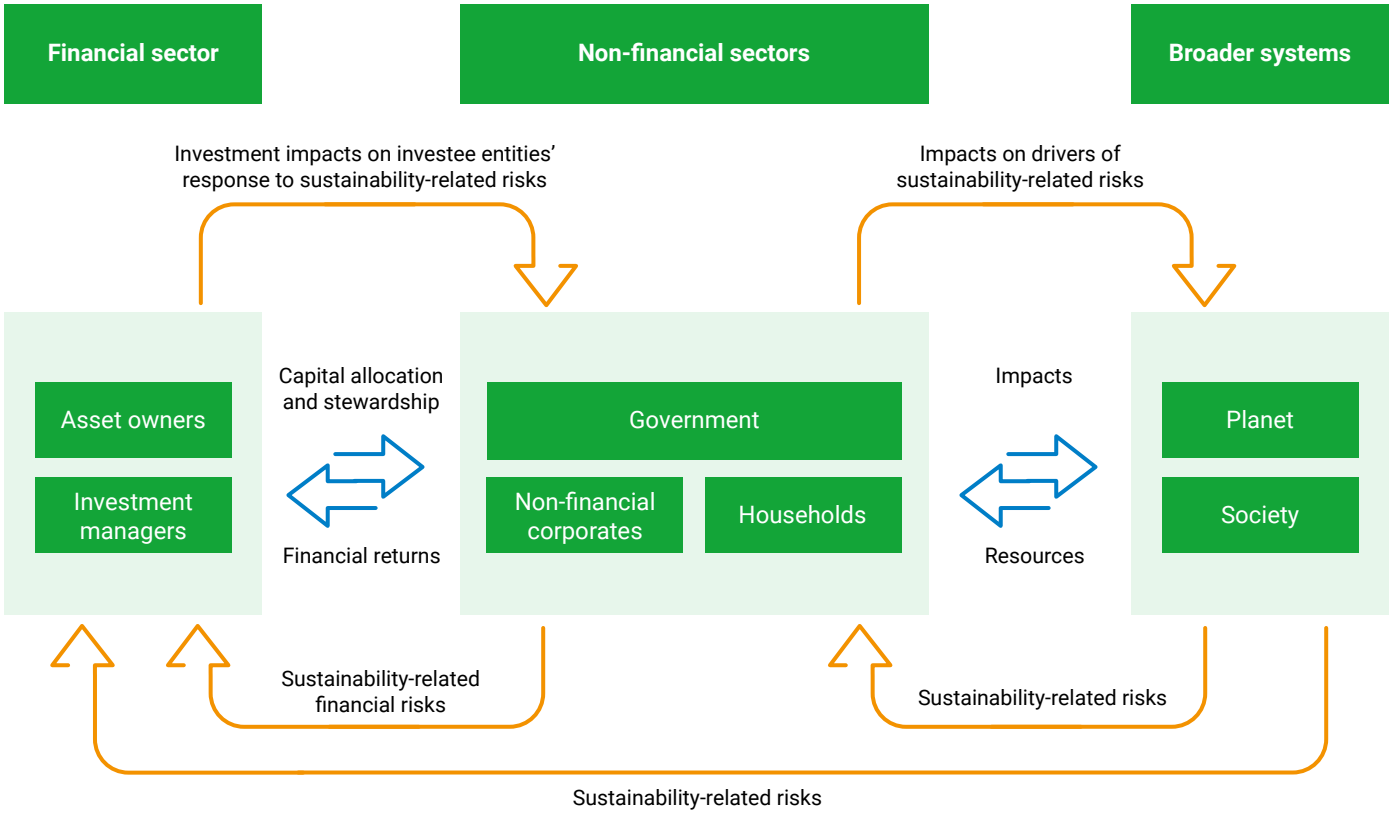
Feedback effects from the financial sector: through capital allocation and stewardship (including with investee companies and broader stakeholders, such as policy makers and standard setters), the financial sector has **direct impacts** on investee entities' capabilities, resources and incentives to manage sustainability-related risks, opportunities and impacts.

Feedback effects from the non-financial sector: activities of sovereigns (including sub-sovereigns), businesses and households may lead to sustainability outcomes that have an impact on planetary and social conditions. These impacts may exacerbate or mitigate sustainability-related risks. The financial sector **indirectly** shapes those impacts through financial services and engagement with the non-financial sector.

This feedback loop highlights that risks and impacts translate from outside of the financial sector in, and impacts translate from inside the financial sector out. These outside-in risks and inside-out impacts affect investment value and financial systems stability. **Investors need to look beyond addressing outside-in sustainability-related risks and consider how their inside-out impacts may exacerbate exposure to, mitigate or enable adaptation to these risks, particularly at the system level**.

3 Stefano Battiston, Yannis Dafermos and Irene Monasterolo (2021) Climate risks and financial stability

Figure 1. The feedback loop of sustainability-related risks



Source: PRI research, adapted from the Network for Greening the Financial System (2020), International Monetary Fund (2024), Financial Stability Board (2025).

RESPONSIBLE INVESTMENT PRACTICES

Investors have been actively exploring investment strategies to protect and enhance clients' and beneficiaries' financial returns in the face of sustainability-related risks. These strategies can be broadly categorised into three approaches: managing risks, addressing system-level risk and pursuing impact.

Managing risk: seeking competitive risk-adjusted financial returns by incorporating financially material sustainability-related risks and opportunities into investment and stewardship decisions.

Addressing system-level risk: seeking competitive risk-adjusted financial returns by incorporating financially material sustainability-related risks and opportunities into investment and stewardship decisions. This includes addressing drivers of financially material, system-level sustainability-related risks that affect returns.

Pursuing impact: seeking to meet risk-adjusted financial return objectives while pursuing a positive, measurable impact by incorporating financially material sustainability-related risks and opportunities into investment and stewardship decisions.

CHALLENGES FOR INVESTORS

Responsible investment strategies have the potential to enhance risk-adjusted returns and tackle drivers of system-level sustainability-related risks, creating value and enhancing financial stability. This section lists the most significant challenges investors face in executing these strategies at scale. In part two of the toolkit, we will connect these challenges with key elements of policy reform which could help to address them.

CHALLENGE A. LACK OF INCENTIVES

Market failures such as externalities, public goods and collective action problems often deter investors from pursuing responsible investment strategies. Without appropriate policy intervention, these failures are likely to exacerbate existing issues in the financial sector, such as short-termism and the prioritisation of private gains over systems stability.

Externalities

When individual enterprises do not bear the full cost of the sustainability-related risks to which their activities may be contributing, these costs are imposed upon other parts of the economy as externalities. These externalities can accumulate to form systemic risks. In most markets, there is currently little or no incentive for investors to account for these externalities in investment decisions,[4] impeding action to:

- **price transition risks**. Without clear signals for just economic transition, it is unlikely that high-emitting firms will bear the costs of their polluting activities. Therefore, transition risks[5] are not sufficiently priced by the market as investment risks,[6] and high-emitting firms can continue to enjoy superior earnings;
- **integrate long-term sustainability-related risks**. Investors adopting short-term strategies have little incentive to price in sustainability-related risks that materialise over a longer term. This is known as the 'tragedy of the horizon'.[7] Even for long-term investments, integrating and managing long-term sustainability-related risks is challenging due to the entrenched practice of discounting future cash flows and measuring investment performance against benchmarks that do not integrate the cost of long-term risks; [8]
- **manage investment impacts that drive system-level sustainability-related risks**. Investments generate economic, environmental and social impacts (intended or otherwise) that can contribute to system-level risks, such as climate change, biodiversity loss and inequality.[9] If ignored in investment decision-making, the costs of these impacts are largely borne by wider systems, triggering and reinforcing adverse feedback loops that ultimately threaten social, environmental and financial stability. Investors are able to benefit from short-term financial gains at the expense of wider systems stability because investment incentives are misaligned to the achievement of sustainability outcomes and there is no requirement to internalise the adverse impacts being inflicted on the wider system.[10]

Public goods and collective action problems

Many sustainability outcomes that underpin the stability of environmental, social, economic and financial systems – such as climate change mitigation and biodiversity preservation – are public goods. These outcomes depend on the collective actions of a critical mass of actors, but do not necessarily generate proportional private returns. As a result, relying on market forces alone to deliver them can be problematic. The private costs of contributing to these outcomes can be high, while the benefits are widely shared, leading to underinvestment and coordination failures.[11]

For example, investors largely understand that the Paris Agreement goal is intended to prevent a climate disaster which would destabilise the social and environmental systems upon which the financial system and economy rely. However, investment decision-making remains largely focused on projections of individual gains and costs. This discourages investor action on climate change due to a fear that their decisions will profit other market participants seeking shorter-term gains. Investors may not be able to sufficiently incentivise portfolio companies to reduce carbon emissions or transition away from fossil fuels unless those companies can expect a critical mass of other companies and investors to act in the same way, sharing the costs of foregone short-term profits while increasing the chance of success.

4 Alex Edmans (2023) Applying Economics – Not Gut Feel – To ESG

5 Transition risks are usually measured via the proxy of adverse impacts of externalities on wider systems, such as carbon emissions.

6 Yigit Atilgan, K Ozgur Demirtas, Alex Edmans and A. Doruk Gunaydin (2023) Does the Carbon Premium Reflect Risk or Outperformance?

7 Bank of England (2015) Speech by Mark Carney: Breaking the Tragedy of the Horizon – climate change and financial stability

8 Jon Lukomnik and James P Hawley (2021) Moving Beyond Modern Portfolio Theory; Bank of England (2011) Speech by Andrew G Haldane and Richard Davies: The Short Long

9 Charlotte Gardes-Landolfini, Pierpaolo Grippa, William Oman and Sha Yu (2023) International Monetary Fund IMF Staff Climate Note 2023/003 Energy Transition and Geoeconomic Fragmentation: Implications for Climate Scenario Design

10 European Central Bank/European Systemic Risk Board (2022) The macroprudential challenge of climate change

11 Richard Cornes and Todd Sandler (1986) The Theory of Externalities, Public Goods, and Club Goods

CHALLENGE B. INCOMPLETE CAPITAL MARKETS

Capital markets do not currently provide all the conditions required to enable the financing of the just economic transition, driven by governments' sustainability commitments and the need to enhance economic competitiveness. Investors face issues of incomplete capital markets in several areas.

- Transition finance in emerging markets and developing economies (EMDEs) could be exposed to additional risks that are difficult to trade or hedge, such as sovereign, liquidity and currency risks.[12] In more advanced economies, transition finance can be exposed to risks from geopolitics and policy reversals caused by political volatility – these are difficult to hedge or trade.
- In some cases, risks are not correctly evaluated, reflected or priced due to challenges such as: a lack of data, especially forward-looking data; incomplete stress testing, modelling and analysis; or inconsistent rating methodologies. This may lead to:
  - bias towards high-carbon projects based primarily on historical data; and
  - underinvestment in projects with long-term and positive contributions to sustainability objectives, such as infrastructure.
- Despite rapid growth in recent years, markets for sustainable financial products or instruments remain relatively small compared with those for mainstream financial products. This is, in part, the result of challenges in standardisation, a lack of credible impact and progress assessment frameworks, limited transparency and insufficient transaction infrastructure; together, these factors limit the liquidity of sustainable financial instruments. In addition, the risk profiles of some financial instruments intended to achieve sustainability outcomes in EMDEs may not be compatible with the mandates of asset owners, many of which are subject to strict capital and liquidity requirements and have relatively low risk appetites.
- There is a shortage of investable sustainable projects. This is due to a number of factors, including a lack of capacity and resources among project developers to meet the requirements of financing partners, and the relatively low levels of profitability and high upfront risks of many green and transition projects.[13]

CHALLENGE C. POLICY INCONSISTENCY AND UNCERTAINTY

The design and implementation of international, national and sub-national policies to address system-level risks can be incoherent and disjointed, leaving investment incentives misaligned with sustainability outcomes. Investors can interpret such mixed signals as increasing the risk associated with investing in sustainable activities. Uncertainty can complicate risk management for investors leading to an increase in the cost of capital for projects.

Innovative market practices have outpaced policy development to date. Although policy makers are gradually building their expertise and capacity in this regard, exogenous shocks, such as energy crises, divert policy makers' attention away from the development of non-partisan, regional and global consensus on policy application, reducing the likelihood of concerted solutions.

Geopolitical influences and rapid repricing contribute to market volatility and threaten financial stability.

Policy inconsistency and uncertainty manifest in the market in a number of ways.

- A lack of clarity around corporate and investor duties to integrate material sustainability-related risks and opportunities into decision-making and their discretion to pursue sustainability outcomes.
- A discrepancy in sustainability-related duties for various types and sizes of investors and business.
- Potential legal risks for investors that collaborate to address system-level risks, due to a narrow interpretation of anti-competition and anti-trust laws.
- Insufficient policy and regulatory guardrails to prohibit private, corporate and special interest groups from exercising disproportionate or disruptive power in economic and political processes.
- A lack of: government willingness; credible and consistent short-, medium- and long-term planning; aligned financial and real economy policies; and public finance and resources to drive the economy-wide transition. The absence of consistent national transition strategies and sectoral transition roadmaps may hinder long-term investment decision-making and cause market volatility.[14]
- A lack of coordination between developed economies and EMDEs in aligning policy and regulation on system-level sustainability-related risks.

CHALLENGE D. LACK OF TRANSPARENCY AND CREDIBILITY

Inconsistent corporate and investor sustainability disclosure laws within and between jurisdictions increase the reporting compliance burden and reduce comparability, limiting investors' ability to accurately assess sustainability-related risks and impacts.

12 Signe Krogstrup and William Oman (2019) Macroeconomic and Financial Policies for Climate Change Mitigation: A Review of the Literature

13 Brett Christophers (2024) The Price is Wrong: Why Capitalism Won't Save the Planet

14 J F Mercure, H Pollitt, J E Viñuales et al. (2018) Macroeconomic impact of stranded fossil fuel assets

Substantial progress is being made to increase the availability of standardised, comparable, decision-useful information needed by financial authorities and investors to monitor sustainability-related risks that are material to investment decisions and financial stability.

Transparency and credibility are also required in relation to the marketing and management of sustainability-related financial products.[15] The lack of a clear definition of what constitutes greenwashing, inconsistent standards and policy tolerance for future innovation and uncertainties may undermine trust in the credibility of responsible investment and amplify the misallocation of capital.[16] It may even lead to greenhushing, where investors are deterred from disclosing sustainability efforts due to regulatory ambiguity. This limits data availability and weakens asset owners' and financial authorities' ability to scrutinise the credibility of responsible investment strategies.

CHALLENGE E. PRINCIPAL AND AGENT CHALLENGES

Principal and agent challenges occur when the principal (e.g. shareholders or asset owners) and agent (e.g. investment managers, service providers or company directors) have different interests.[17] The agent may have access to more information than the principal and may use this advantage to pursue self-interest at the cost of the principal who may have limited power and resources to hold the agent to account.[18]

Many service providers and investment managers have grown over the last decade and now represent a greater number of principals. The result is that each agent is managing a more diverse set of principal views that may not easily align when it comes to responsible investment decision-making. Principal and agent challenges are also evident in scenarios where shareholders or asset owners with diversified portfolios seek long-term sustainable returns and system-level stability, while company managers prioritise maximising individual company benefits.[19]

CHALLENGE F. LACK OF AWARENESS, CAPACITY AND SUSTAINABILITY EXPERTISE

Stakeholders interviewed for this report expressed concerns about the lack of awareness within the investment industry regarding the need to move beyond managing idiosyncratic risks to drive system-level transformations. Achieving system-level change requires greater awareness and understanding of the feedback loops between investment decisions and system-level sustainability-related risks, and of the relationship between the pursuit of long-term financial returns and broader goals of systemic stability and sustainable growth in the real economy.

In addition, addressing exposure to and tackling the drivers of system-level sustainability-related risks and engaging in broader policy making to enable an economy-wide transition all require resources and expertise. It is now common practice for asset owners to implement responsible investment strategies. Yet over three-quarters of financial professionals report a sustainability skills shortage at their organisation. The financial sector faces challenges in developing responsible investment methodologies and struggles to commit sufficient resources to implement key responsible investment strategies, such as stewardship. Investors interviewed for this research noted that limited resources are being further strained by increasing disclosure and compliance requirements, leaving little capacity to take meaningful action.

These issues are interconnected. For example, policy uncertainties around investor duties to manage material sustainability-related risks and impacts, combined with the lack of clear definitions and criteria for greenwashing, discourage investors from taking action to create long-term value and address system-level sustainability-related risks. This may also constrain the supply of capital for long-term investment in projects with the potential to align with transitional pathways. Furthermore, a lack of sustainability expertise and limited policy consistency can compound with issues of transparency and credibility, further limiting projects' access to the capital markets. Addressing such interconnections requires a good understanding of how different parts of the financial system interact, leading to the development of policy interventions that are flexible and holistic, and contribute to addressing system-level sustainability-related risks, such as climate change and long-term sustainable growth.[20]

15 IOSCO (2023) Supervisory Practices to Address Greenwashing, Final Report

16 The PRI (2024) Response to the International Association of Insurance Supervisors public consultation on climate risk supervisory guidance—market conduct and scenario analysis

17 For example, investment managers generally have shorter time horizons than asset owners. Moreover, investment managers generally measure success on a relative market basis (outperformance), while asset owners often measure success on a total return basis because they are trying to offset real world obligations.

18 Jeffrey Gordon, Wolf-Georg Ringe (2018) The Oxford Handbook of Corporate Law and Governance; Mark Anson (2012) Asset Owners versus Asset Managers: Agency Costs and Asymmetries of Information in Alternative Assets

19 Marcel Kahan and Edward B Rock (2023) Systemic Stewardship with Tradeoffs; Frederik Alexander (2023) Decision on Lawsuit Against Facebook Will Decide How Companies Measure Financial Success

20 Marcel Kahan and Edward B Rock (2023) Systemic Stewardship with Tradeoffs

HOW POLICY REFORM CAN ADDRESS THE CHALLENGES

Financial authorities have an important role to play in tackling the challenges outlined in the previous chapter. They can do this by integrating sustainability factors into policy and regulatory frameworks: a step that for policy makers in many jurisdictions aligns closely with their mandates and objectives.

While many financial authorities have already made substantive progress, the extent of progress varies, guided by differing levels of sustainability ambition. This chapter explains how these different levels of sustainability ambition determine policy and regulatory approaches, and how they apply across financial authorities' regulatory mandates.

FINANCIAL AUTHORITIES' MANDATES

Financial regulations and policies are traditionally associated with three main objectives or mandates:[21]

1. financial stability;
2 market integrity and efficiency; and
3. investor and consumer protection.

However, it is not uncommon for financial authorities to adopt secondary objectives, such as supporting the government's sustainability policy priorities, and there is increasing evidence and sector consensus to support this approach.[22]

Developments at the global governance level, such as the establishment of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and the Coalition of Finance Ministers for Climate Action, are expected to have far-reaching implications for national financial policy reform and its implementation. In fact, many financial authorities are already integrating sustainability considerations into regulatory or policy frameworks to support, guide or supervise investors to manage sustainability-related risks, opportunities and impacts, aligning these efforts with the financial authorities' existing mandates and policy objectives.

HOW SUSTAINABILITY FACTORS INTERACT WITH FINANCIAL STABILITY

There are two dimensions of financial stability: the safety and soundness of individual financial institutions and the stability of the financial system. A growing body of empirical evidence shows that sustainability-related risks, such as climate change, degradation of nature and excessive inequality, may impact both dimensions. Some sustainability-related risks have the potential to trigger systemic financial risks, suggesting there is limited scope for hedging via diversification. This provides a robust analytical foundation for both micro-prudential and macro-prudential policy considerations.[23]

As an example of how micro-prudential policy can be applied to sustainability issues, the Canadian Office of the Superintendent of Financial Institutions issued a guideline on climate risk management. The guidance establishes expectations for how supervised entities should manage climate-related risks and enhance resilience. Meanwhile, macro-prudential supervisors, such as the European Central Bank, have been exploring potential measures to address financial activities which contribute to the accumulation of systemic risks. Given that system-level sustainability-related risks have spillover effects into regional flows of trade and capital, a global solution with strong international coordination is needed.

21 Niamh Moloney, Eilis Ferran and Jennifer Payne (2017) The Oxford Handbook of Financial Regulation; other sources also suggest that consumer protection and financial stability are the two primary objectives of financial regulations – see Marc Quintyn and Michael W Taylor (2002) Regulatory and Supervisory Independence and Financial stability

22 Simon Dikau and Ulrich Volz (2021) Central bank mandates, sustainability objectives and the promotion of green finance

23 Patrick Bolton, Morgan Despres, Luiz Samama and Romain Svartzman (2020) The green swan: Central banking and financial stability in the age of climate change

HOW SUSTAINABILITY FACTORS INTERACT WITH MARKET INTEGRITY AND EFFICIENCY

Financial authorities are generally mandated to ensure the overall fairness, effective functioning and transparency of financial markets. To fulfil this mandate, financial authorities, including standard setters, should address the market barriers and failures previously outlined to:

- ensure capital markets can accurately reflect material risks, including sustainability-related risks;
- enable efficient capital allocation to opportunities with significant growth potential, such as the economic transition; and
- tackle regulatory arbitrage and reduce unnecessary regulatory burdens on responsible investment.

For example, the International Sustainability Standards Board (ISSB) developed disclosure standards (IFRS S1 and S2) for sustainability-related financial information to help close the data gap that has long been hindering effective assessment of sustainability-related risks and opportunities. The EU Commission amended existing conduct regulations for fund managers, embedding sustainability factors (including outside-in risks and inside-out impacts) into rules for risk management, business operations, management of conflicts of interest and investor education programmes. By setting baseline expectations for investment managers to manage sustainability-related risks and principal adverse impacts, these amendments create a level playing field. They also address the temptation to cut corners on sustainability in pursuit of short-term profitability at the expense of long-term returns which can trigger a race to the bottom in the broader industry.

HOW SUSTAINABILITY FACTORS INTERACT WITH CONSUMER PROTECTION

Financial authorities are responsible for ensuring that the interests of consumers of financial products are protected in financial markets. Sustainability factors can have substantial impacts on financial returns or other end-investor goals. Therefore it is within financial authorities' remit to put in place investor protection regimes that enable and require financial intermediaries (e.g. investment managers) to incorporate material sustainability factors into investment decisions and advice. This includes outside-in risks and inside-out impacts that could materially affect risk-adjusted returns.

There has been extensive policy development in this area, including, but not limited to, investor disclosure and anti-greenwashing rules such as the Sustainability Disclosure Requirements (SDR) and Investment Labels in the UK and the Sustainable Finance Disclosure Regulation (SFDR) in the EU, as well as conduct regulations for investment managers and service providers.

Table 1. Policy mandates, financial authorities and examples of financial policies and regulations

Mandates	Financial stability	Market efficiency and integrity	Investor protection
Financial policies and regulations (examples)	■ Macro-prudential supervision ■ Micro-prudential supervision	■ Code of conduct for investment managers and service providers ■ Taxonomies for sustainable activities ■ Green bond standards	■ Fiduciary duties ■ Issuer and investor disclosure rules ■ Financial product disclosure rules
Relevance of sustainability factors	Sources of systemic financial risks	Abusive practices and mispricing of sustainability-related risks and impacts	Financial materiality and lack of transparency
Financial authorities (examples)	■ Macro-prudential supervisors such as central banks ■ Micro-prudential supervisors such as bank and insurance supervisors ■ Ministry of finance	■ Financial conduct regulators, such as securities regulators and pension regulators ■ Standard setters with delegated authority, such as stock exchanges and investor associations ■ Ministry of finance	■ Financial conduct regulators, such as securities regulators and pension regulators ■ Standard setters with delegated authority, such as stock exchanges ■ Ministry of finance

THREE LEVELS OF SUSTAINABILITY AMBITION

This report defines three levels of sustainability ambition. These three levels reflect financial authorities' differing levels of understanding regarding the role of financial policy, regulation and the financial sector in addressing sustainability-related challenges.

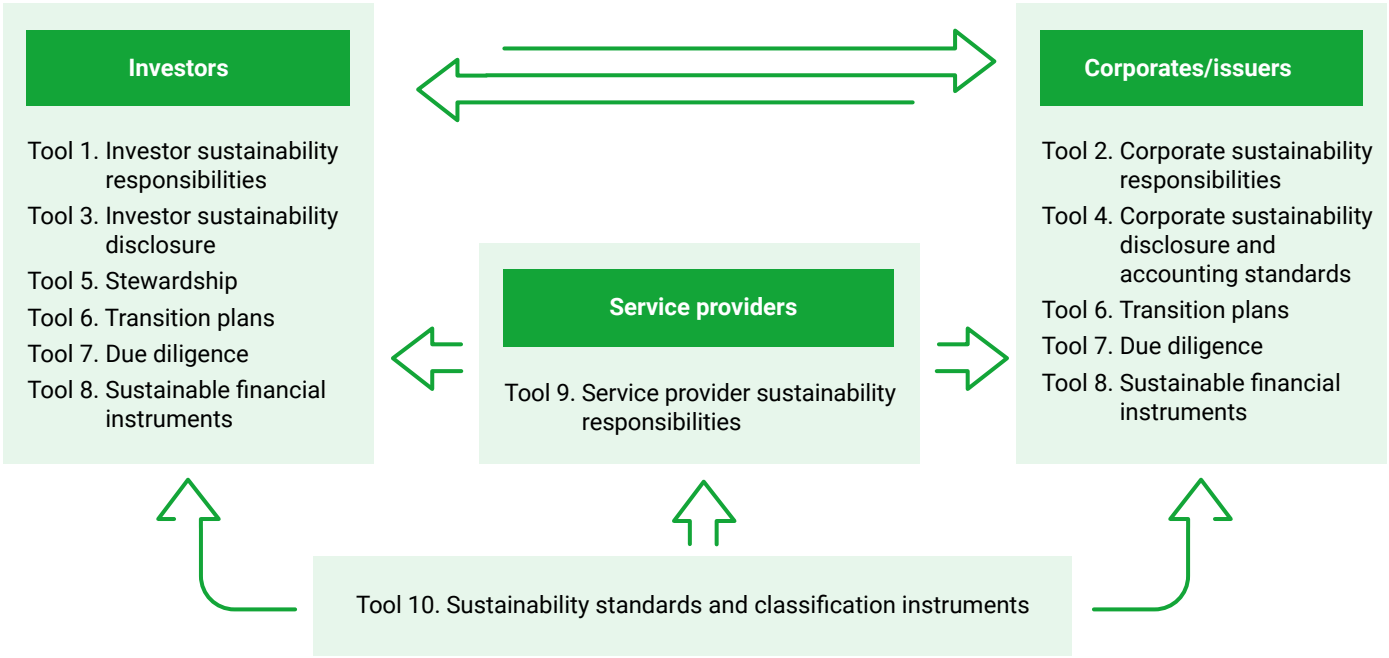
- The first level of ambition focuses on addressing sustainability-related risk exposure.
- The second aims to address the underlying drivers of these risks, particularly system-level risks.
- The third and most ambitious level involves supporting the government in driving an economy-wide transition towards sustainability.

These three levels build on one another and exist along a continuum rather than being distinct categories; they are also deeply interconnected. Addressing investors' exposure to sustainability-related risks is essential for improving resilience at the micro level. However, focusing on this alone may jeopardise the stability of broader economic, environmental and social systems.

To enhance systems stability and support a healthy capital market that sustains long-term financial returns, financial authorities need to consider investment impacts that may drive system-level sustainability-related risks. Yet, the effectiveness of impact management by investors may be constrained if the investment outpaces the progress of the transition in the real economy; financial policy reform alone won't shift the investment universe.

Effectively addressing system-level sustainability-related risks is likely to require a fundamental transition of the economy towards a sustainable and equitable future that respects planetary and social boundaries. The implication is that for sustainable investment policy to be effective, financial authorities need to take a holistic view of the feedback loop of sustainability-related risks and be mindful of the potential consequences of neglecting any of the feedback effects. This requires financial authorities to integrate all levels of sustainability ambition.

Figure 2. Key sustainable investment policy tools adopted by financial authorities



Tool 1. Investor sustainability responsibilities: requiring investors to integrate sustainability factors into their investment decision-making, with the aim of contributing to financial stability, investor protection and market integrity.

Tool 2. Corporate sustainability responsibilities: setting out expected or required sustainability practices for non-financial companies (or the non-investment activities of financial companies).

Tool 3. Investor sustainability disclosure requirements: outlining the methodologies, key metrics and processes for sustainability reporting.

Tool 4. Corporate sustainability disclosure and accounting standards: establishing what should be covered in disclosure and analysis of current and forward-looking data regarding companies' strategies, operations and performance on sustainability issues.

Tool 5. Regulatory frameworks for effective stewardship: defining expectations around investors' stewardship practices and reporting, and removing obstacles to effective collaboration around systemic issues.

Tool 6. Transition plans: requiring financial and non-financial entities to describe their strategy to transition their processes, operations and business models to meet sustainability commitments within a specified timeframe.

Tool 7. Human rights and environmental due diligence requirements: supporting investors' risk and impact analysis, enabling better-informed investee engagement and levelling the playing field for responsible corporate and investor practice.

Tool 8. An enabling policy environment for sustainable financial instruments: mobilising public and private capital to finance the just transition and solutions to tackle sustainability-related risks.

Tool 9. Service provider sustainability regulations: ensuring that service providers serve the best interests of their clients, taking sustainability-related risks into consideration.

Tool 10. Sustainability standards and classification instruments: for example taxonomies, scenarios, pathways and impact assessment standards, built on scientific consensus and international norms, providing clarity on key terminologies and tools for identifying what is sustainable.

For each level of ambition, we provide figures to describe the feedback loops, examples of commonly adopted financial policies and tables summarising:

- the priorities of the financial authority;
- their expectations for investors;
- the challenges that would be addressed if these prioties and expectations were met;
- the policy tools to achieve this; and
- the possible unconsidered consequences of pursuing that level of ambition.

We explicitly distinguish between policy tools which set guardrails and those that create an enabling policy environment.

- **Guardrails** remediate disincentives to addressing system-level risks and other market failures (such as a lack of accountability for negative externalities, free riding or racing to the bottom, etc). Guardrails help to create a level playing field by establishing a coherent baseline of accountability, ensuring fairness across the sector. For guardrails to be effective, they must be established and enforced consistently across all relevant market participants within the investment and supply chain, aligning their incentives, responsibilities and actions. It is also important to ensure that guardrails are both necessary and proportionate, avoiding excessive compliance burdens that fail to deliver meaningful real world outcomes.
- A **supportive policy environment** enables investors to take action. The creation of an enabling policy environment includes providing resources for capacity building and infrastructure development, and mechanisms to identify and address investment barriers.

Together, these measures ensure that both the rules and the support systems are in place to drive meaningful progress.

LEVEL 1

ADDRESSING EXPOSURE TO SUSTAINABILITY-RELATED RISKS

Priority of financial authorities	Enhance the resilience of investments, investors and the financial system by supervising and enabling investors to identify, measure and manage the impacts of sustainability-related risks on their investments, organisations and the broader system.
Expectations on investors	Identify, measure and manage exposure to sustainability-related risks at the product and entity level to achieve risk-adjusted returns and improve resilience at the micro level.
Challenges this level of ambition addresses	**Challenge A. Lack of incentives for investors** to incorporate long-term and system-level sustainability-related risks into investment decisions. **Challenge B. Incomplete capital markets** that fail to sufficiently calibrate and hedge sustainability-related risks. **Challenge C. Policy inconsistency and uncertainty** which make assessing and integrating transition risks and opportunities more difficult. **Challenge D. Lack of transparency and credibility** in companies'/investors' exposure to sustainability-related risks and risk management performance. **Challenge E. Principal and agent challenges** which prevent asset owners and shareholders from effectively monitoring portfolio and corporate performance. **Challenge F. Lack of awareness, capacity and expertise** in assessing and managing risk exposure.
Policy tools that have been adopted to achieve this level of sustainability ambition[24]	**1. Set guardrails for investors and corporates to address disincentives.** ■ Clarify **investor responsibilities (tool 1)** and **corporate responsibilities (tool 2)** at all relevant levels (including financial conduct regulations and prudential regulations) to establish baseline expectations and provide guidance on incorporating material sustainability-related risks into investment and business decisions. ■ Expect investors and corporates to **disclose and account for (tools 3 and 4)** exposure to sustainability-related risks and their plans, activities and progress towards and outcomes on enhanced resilience. ■ Expect and guide investors and corporates to consider conducting **stewardship (tool 5)** and **due diligence (tool 7)** on material sustainability-related risks throughout their supply chains. ■ Expect and guide investors and corporates to adopt **transition plans (tool 6)**, focusing on addressing exposure to sustainability-related risks to enhance business resilience.

24 Policy reform priorities are summarised primarily based on the PRI regulation database which tracks policy development in G20 countries.

	2. Create an enabling environment for investors to address risk exposure. ■ **Establish best-practice standards (sits across policy tools 5, 6 and 7)** for the development of credible strategies or plans to address exposure to sustainability-related risks. These standards may cover due diligence, risk management, transition plans and stewardship and capital allocation. ■ **Improve service provider regulations (tool 9)** to ensure service providers accurately integrate material sustainability-related risks into services and business operations and to enhance transparency, governance and accountability. ■ Provide **classification instruments (tool 10)**, such as publishing guidance for selecting scenario models or setting materiality standards to support risk assessment. ■ Provide **resources and guidance (sits across all policy tools)** to build capacity for risk assessment, risk management, due diligence, stewardship and disclosure.
Feedback effects likely to be neglected	The financial sector indirectly influences the drivers of sustainability-related risks through its impact on the non-financial sector. These influences may exacerbate or mitigate sustainability-related risks, ultimately affecting the financial returns of investment portfolios and financial stability. The following outlines how incentivising reduced risk exposure could inadvertently delay economic transition. 1. **Incentivising reduced exposure**: institutional investors may decrease investments in high-risk entities or regions to enhance resilience against sustainability-related risks at the micro level. → 2. **Constraining finance for transition and adaptation**: this may limit the financial services available to high-risk entities or regions needing to transition or adapt. → 3. **Delaying economic transition and adaptation**: collectively, these factors may delay the overall transition and adaptation of the economy, exacerbating drivers of sustainability-related risks.
Possible unconsidered consequences of implementing this level of policy ambition	■ **Financial stability**: when individual institutional investors seek to manage their own sustainability-related risks, these risks are likely to be transferred to other institutional investors that are less sensitive to sustainability-related risks, rather than being effectively mitigated. This may enhance the resilience of individual financial institutions but could potentially lead to inadequate risk management when looked at from the perspective of the financial system as a whole. When sustainability-related risk is not managed well within a financial system, it is likely to generate destabilising dynamics due to fire sales (e.g. run on brown), correlated procyclical behaviour or common portfolio exposures. ■ **Market efficiency and integrity**: institutional investors may be incentivised to achieve portfolio alignment with sustainability standards on paper without delivering real world changes. This may lead to reduced confidence in responsible investment. ■ **Investor protection**: reducing exposure to high-risk entities or regions helps to address idiosyncratic risks for clients but is less helpful in addressing undiversifiable system-level sustainability-related risks which substantially influence financial returns in the short and long term.

Figure 3. The feedback loop of sustainability-related risks when financial policies focus on managing risk exposure

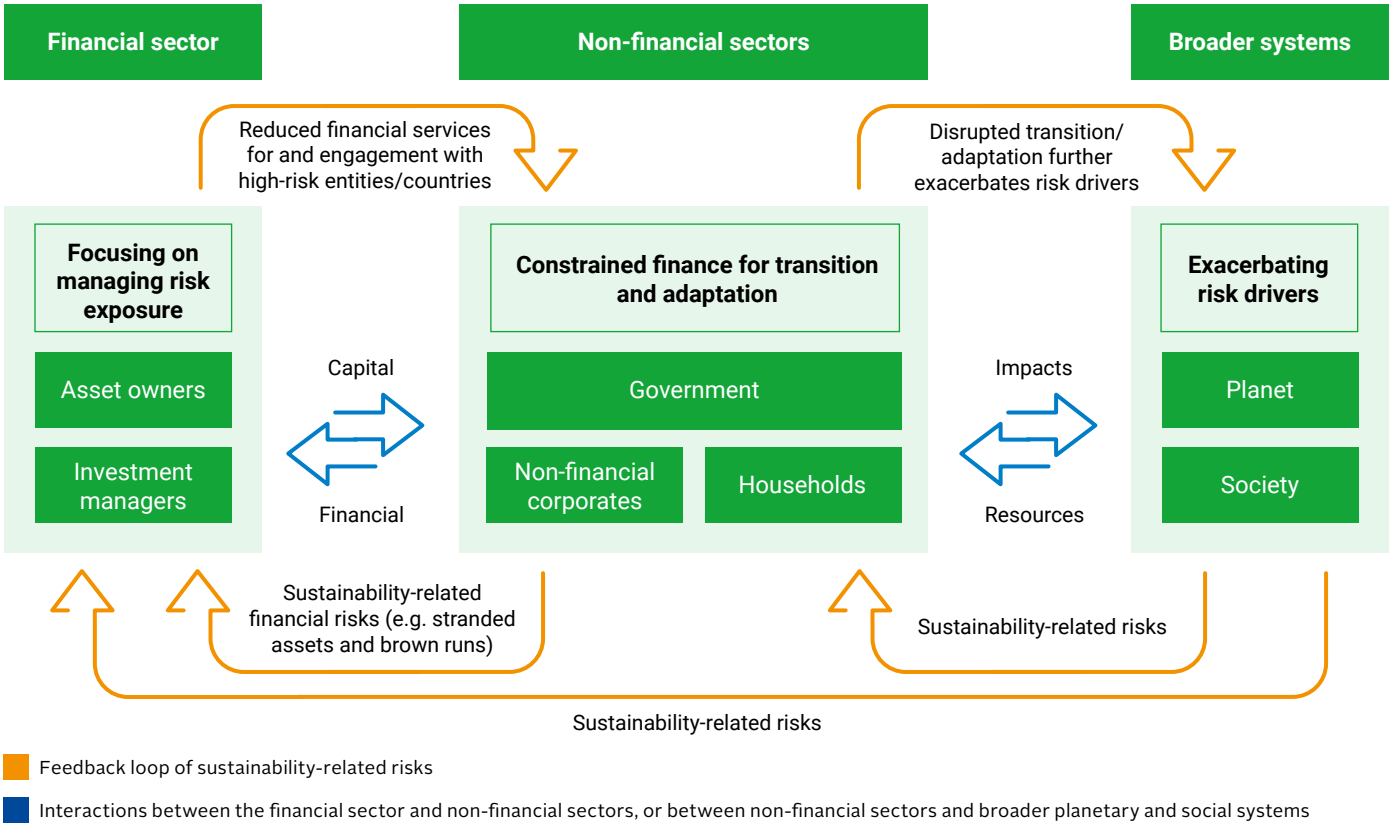


Table 2. Examples of commonly adopted financial policies to manage exposure to sustainability-related risks

Mandates	Financial stability	Market efficiency and integrity	Investor protection
Relevance of sustainability factors	Identify, measure and monitor exposure of investors to sustainability-related risks that may threaten the stability of the financial system and individual institutions.	Support and enable investors to effectively identify and calibrate sustainability-related risk exposure and integrate such risks into capital allocation and stewardship decisions.	Clarify the financial materiality of sustainability-related risks and expect institutional investors to identify, disclose and manage clients'/beneficiaries' risk exposure.
Financial policies and regulations (examples)	**Macro-prudential supervision**: processes, methodologies and scenarios are developed to assess systemic vulnerabilities. **Micro-prudential supervision**: investors are expected to identify and assess the impacts of sustainability-related risks and establish governance oversight, risk management processes and transition plans.	**Code of conduct for service providers**: service providers are expected to incorporate material sustainability-related risks into services and business operations and publicly disclose methodologies.	**Fiduciary duties**: investors are expected to identify and incorporate material sustainability-related risks into investment decisions and processes. **Issuer disclosure rules**: issuers are expected to disclose their exposure to material sustainability-related risk and their risk-management strategies.

LEVEL 2

TACKLING DRIVERS OF SUSTAINABILITY-RELATED RISKS

Priority of financial authorities	Enhance the resilience of investments, investors and the financial system against sustainability-related risks, particularly undiversifiable system-level risks, and place the jurisdiction in a good position to tackle the drivers of such risks by: ■ helping investors identify and understand how system-level risk is driven by the negative and positive impacts of their investments on sustainability factors; and ■ guiding and enabling investors to manage such impacts to mitigate against and enable adaptation to system-level sustainability-related risks, and to enhance overall market returns.
Expectations on investors	Pursue risk-adjusted returns without compromising systems stability by managing investment impacts at the portfolio, sector and market level in order to tackle drivers of sustainability-related risk, particularly system-level risks.
Challenges this level of ambition addresses	**Challenge A. Lack of incentives for investors** to address system-level sustainability-related risks that involve contributing to sustainability outcomes or internalising adverse externalities. **Challenge B. Incomplete capital markets**, reflected in a shortage of investable projects and restricted access to capital for projects involving high risk and substantial upfront costs but which could have substantial positive sustainability impacts to mitigate system-level risks. **Challenge C. Lack of awareness, capacity and expertise** in impact management, through the use of capital allocation and stewardship to tackle risk drivers. **Challenge D. Policy inconsistency and uncertainty** that further discourage efforts to address system-level sustainability-related risks and hinder effective investor actions to tackle risk drivers. **Challenge E. Principal and agent challenges** that prevent asset owners and shareholders from effectively monitoring portfolio and corporate performance in tackling system-level sustainability-related risks. **Challenge F. Lack of transparency and credibility** around how companies'/investors' impacts may exacerbate, mitigate or enable adaptation to system-level sustainability-related risks.

Policy tools to achieve this level of sustainability ambition[25]	**1. Set guardrails for investors and corporates to address disincentives.**
	
	■ Clarify **investor responsibilities (tool 1)** and **corporate responsibilities (tool 2)** at all relevant levels (including financial conduct regulations and prudential regulations) to establish baseline expectations and guide investors to consider how to manage investment impacts that:
	  ■ drive system-level sustainability-related risks;
	  ■ create value through enhancing systems stability.
	■ Expect and guide (with materiality criteria) investors and corporates to **disclose and account for (tool 3 and 4)** investment impacts, at entity and product level, that may drive or mitigate system-level sustainability-related risks, as well as plans to address risk drivers.
	■ Expect and guide investors and corporates to conduct **stewardship (tool 5)** and **human rights and environmental due diligence (tool 7)** to support:
	  ■ the assessment, mitigation and prevention of actual or potential investment impacts that drive system-level risks;
	  ■ alignment of investment impacts with pathways towards greater systems stability.
	■ Expect investors and corporates to develop and disclose credible **transition plans (tool 6)** focusing on reducing or mitigating adverse impacts and enabling adaptation, to build resilience to system-level risks.

25 Policy reform priorities are summarised primarily based on the PRI regulation database which tracks policy development in G20 countries.

	2. Create an enabling environment for investors to address risk exposure. ■ Update **macro-prudential frameworks (tool 1)** to reflect the feedback loop between investment decisions and systems stability. Develop methodologies and processes for identifying, assessing and managing investment impacts that may drive system-level risks. ■ **Establish best-practice standards (sits across tool 5, 6 and 7)** for the creation of credible strategies or plans to manage impacts. These standards may cover due diligence, risk management, transition plans, and stewardship and capital allocation. ■ Facilitate innovation and the deployment of **sustainable investment instruments (tool 8)** to finance the transition and projects that could provide solutions to sustainability-related risks. ■ Update **service providers' regulations (tool 9)** to align the incentives and responsibilities of service providers with those of their clients across the investment chain. Expect service providers to identify and manage their (facilitated) impacts that drive system-level sustainability-related risks. ■ Develop **classification instruments (tool 10)** to support the identification and assessment of impacts on key sustainability factors at all relevant levels (e.g. taxonomies, transition pathways and product labels) and establish a classification framework for transition finance. ■ Provide **resources and guidance (sits across all policy tools)** to build capacity for impact assessment and management, due diligence, stewardship and disclosure.
Feedback effects likely to be neglected	While the financial sector can influence the non-financial sector through capital allocation and stewardship, the transition of the non-financial sector is also influenced by factors such as real economy policies and market competition. If these factors are not managed well and become out of sync with the expectations of the financial sector, this may create destabilising dynamism in the financial system and the transition.[26] ■ **Tackling risk drivers**: institutional investors provide capital and engagement for investees to tackle risk drivers and transition, expecting an economy-wide transition in response to sustainability crises. ■ **Transition in the real economy is out of sync with the expectations of sustainable investors**: real economy policies lag behind financial sector expectations in facilitating the transition. ■ **Discouraging sustainable investment**: this misalignment creates market volatility, lowers financial returns and enables free-riding and race-to-the-bottom behaviour, making it difficult to sustain investment in tackling risk drivers and supporting the transition. ■ **Delaying and disrupting the economic transition**: this may lead to disruption in the transition, weakened confidence in responsible investment and exacerbation of planetary and social conditions, such as crossing tipping points, driving sustainability-related risks.
Possible unconsidered consequences of implementing this level of policy ambition	■ **Financial stability**: the misalignment between the financial sector's expectations and real economy policy development could lead to market volatility or green bubbles. Exposure to such risks may undermine financial stability. ■ **Market efficiency**: entities and regions at higher risk of generating adverse sustainability impacts have increased difficulty in attracting capital to manage the transition. ■ **Investor protection**: as a result of misalignment, responsible investment may fail to achieve sustainability or financial objectives and experience backlash. This will weaken the credibility of responsible investment and further discourage efforts to price in sustainability-related risks and impacts that are instrumental to achieving financial returns.

26 Dimitri Demekas and Pierpaolo Grippa (2022) Walking a Tightrope: Financial Regulation, Climate Change, and the Transition to a Low-Carbon Economy; Claudio Borio, Stijn Claessens and Nikola Tarashev (2022) Finance and climate change risk: managing expectations

Figure 4: The feedback loop of sustainability-related risks when financial policies focus on drivers of these risks without coordinating with real economy policies

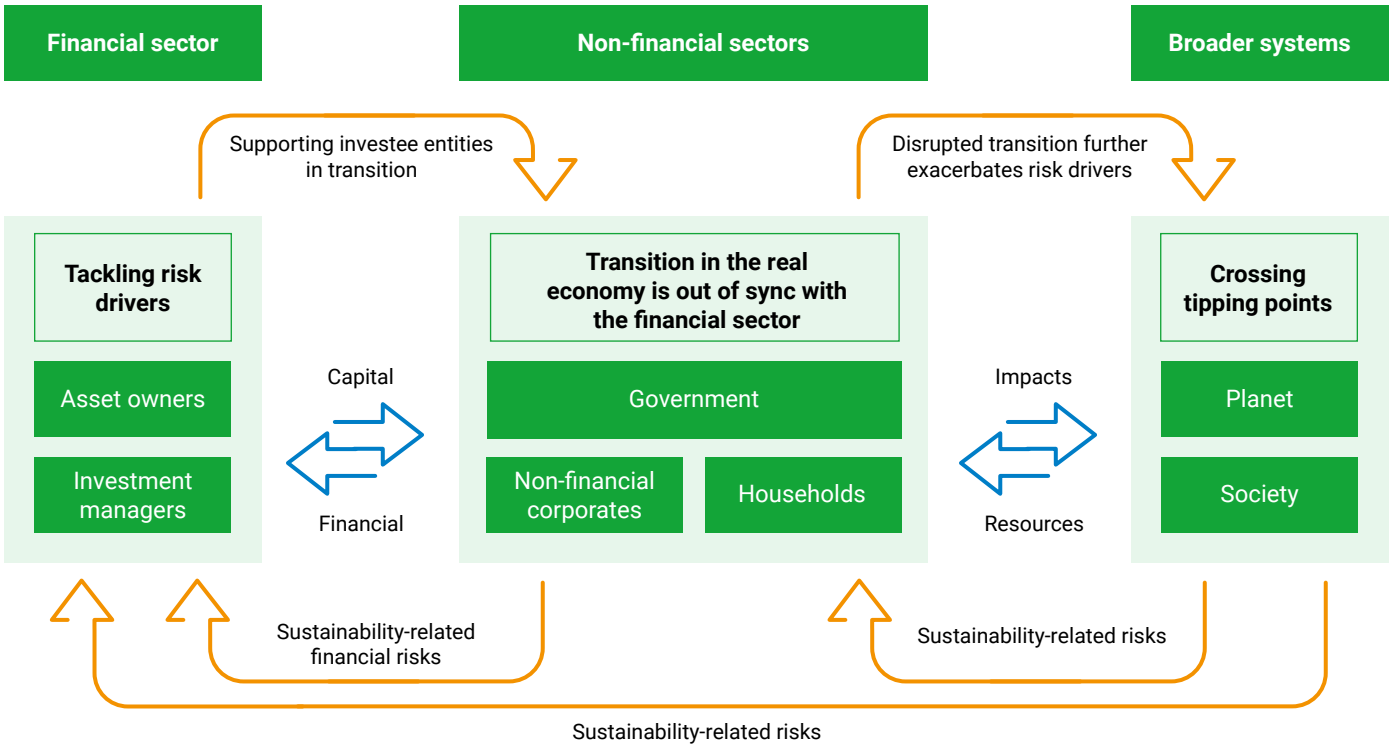


Table 3. Examples of financial policies commonly adopted to tackle drivers of sustainability-related risks

Mandates	Financial stability	Market efficiency and integrity	Investor protection
Relevance of sustainability factors	Identify and monitor investment impacts that may exacerbate, mitigate or enable adaption to system-level sustainability-related risks. Guide investors to manage such impacts.	Support effective impact management by players in capital markets. Tackle abusive behaviours and collective action problems by establishing baseline expectations and a level playing field.	Oversee and support investors to disclose and manage investment impacts that may drive material sustainability-related risks or create value.
Financial policies and regulations (examples)	**Macro-prudential supervision**: enable investment that facilitates adaptation to or mitigates system-level sustainability-related risks. Monitor adverse impacts. **Micro-prudential supervision**: investors are expected to manage investment impacts on investee entities to mitigate risks and enable adaptation.	**Enabling framework for effective stewardship**: investors are guided and enabled to, individually and collectively, engage with investee entities and key stakeholders to support the transition towards sustainability targets. **Taxonomies for sustainable activities**: investors and issuers are supported to identify sustainable activities and enhance alignment.	**Fiduciary duties**: investors are expected and permitted to consider managing investment impacts that are instrumental to achieving financial objectives. **Human rights and environmental due diligence**: financial and non-financial entities are expected to identify, assess, prevent, mitigate and disclose adverse impacts.

LEVEL 3

SUPPORTING THE ECONOMY-WIDE TRANSITION

Priority of financial authorities	Support a whole-of-government approach to driving the transition (see Box 1 on page 25). In the face of sustainability-related risks, the resilience of investment, institutional investors and the financial system ultimately depends on the whole economy successfully transitioning towards a sustainable and equitable future that benefits the economy and natural and social systems. Financial authorities alone cannot achieve this. Aligned and coherent financial sector and real economy policy reforms enable the government as a whole to tackle barriers and incentivise investors to align capital flows with transition pathways towards sustainability goals.
Expectations on investors	Pursue risk-adjusted returns, create long-term value and enhance systems stability by leveraging transition finance strategies which align financial incentives with the achievement of sustainability goals. Engage with policy makers to highlight policy inconsistencies and barriers that are creating clear market failure which is preventing effective delivery of sustainability goals.
Challenges this level of ambition addresses	**Challenge A. Lack of incentives for investors** to address system-level sustainability-related risks that involve contributing to sustainability outcomes or internalising adverse externalities in line with national transition strategies and sectoral pathways. **Challenge B. Incomplete capital markets**, reflected in a shortage of investable projects and restricted access to capital for projects involving high risks and substantial upfront costs. **Challenge C. Policy inconsistency and uncertainty** in national transition strategies and sectoral pathways that further discourage efforts to support the transition. **Challenge D. Lack of transparency and credibility** in companies'/investors' alignment with transition goals. **Challenge E. Principal and agent challenges** that prevent asset owners and shareholders from effectively monitoring investee companies' transition performance. **Challenge F. Lack of awareness, capacity and expertise** in allocating and stewarding capital in line with transition pathways toward sustainability goals.
Policy tools to achieve this level of sustainability ambition[27]	**1. Complement guardrails set out at levels 1 and 2 with enhanced policy alignment to address disincentives to supporting the economy-wide transition.** ■ Clarify public financial institutions' leadership role in supporting the transition **(tool 1)**. ■ Develop a shared framework that enables macro-prudential and real economy policy makers to collaboratively monitor and forecast transition progress and associated risks **(tool 1)**. ■ Align expectations for investor sustainability regulations, corporate sustainability responsibilities and service provider sustainability regulations to manage (facilitated) impacts in line with planetary and social boundaries/safeguards set in the transition strategy **(tools 1, 2, 5, 6, 7 and 9**). ■ Enhance the consistency between corporate and investor disclosures and better integrate them with classification instruments and national transition strategies **(tools 3 and 4)**. ■ Establish feedback channels so that investors and companies can conduct policy engagement to flag gaps and inconsistencies in financial and real economy policies that may prevent action for transition **(tools 3, 4 and 5)**.

27 Policy reform priorities are based on the PRI regulation database, and the IMF, World Bank and OECD paper (2023) Activating Alignment: Applying the G20 Principles for Sustainable Finance Alignment with a Focus on Climate Change Mitigation

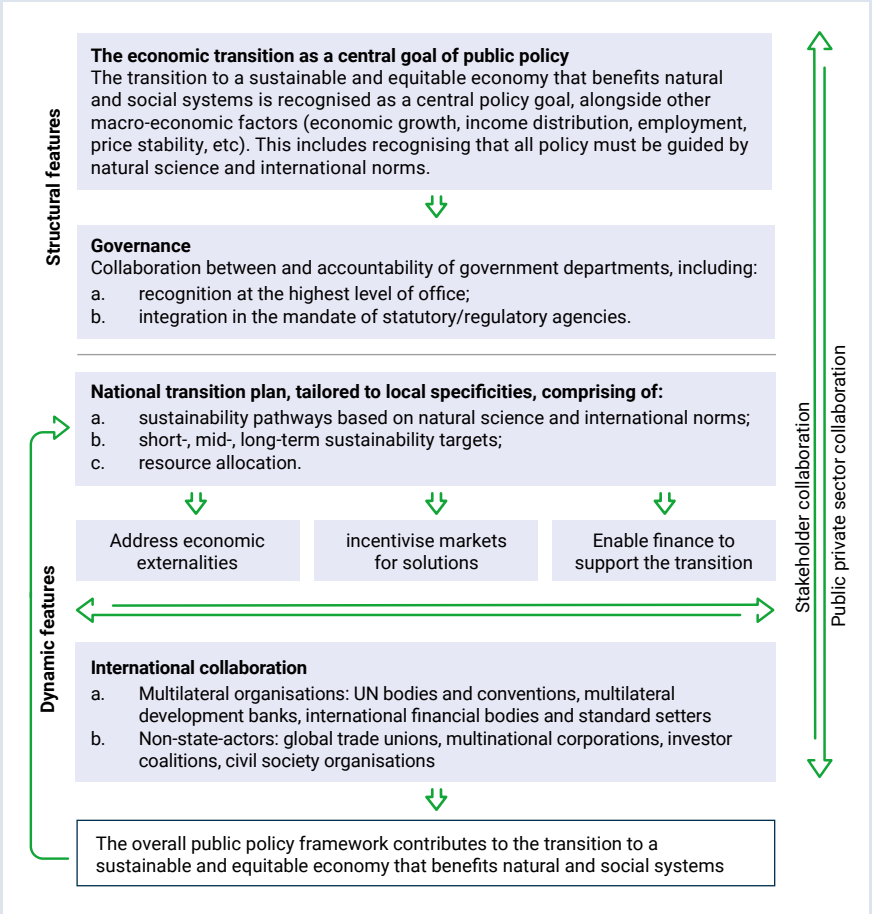
	■ Enhance the interconnection across national transition strategies[28] and commitments, sectoral transition pathways and financial institution and corporate-level transition planning. These plans should all be informed by scientific consensus and international norms to enable material positive contributions to sustainability goals **(tool 6)**. ■ Establish a platform to scale up the deployment of blended finance to support the transition. Link the platform to policy reform, project pipeline development and integration **(tool 8)**. ■ Work towards global alignment to improve the interoperability of classification instruments, disclosure frameworks and label schemes established in different jurisdictions and set a global baseline for investor sustainability regulation, corporate sustainability responsibilities and service provider sustainability regulation to prevent regulatory arbitrage **(for all tools)**.
Possible unconsidered consequences of implementing this level of policy ambition	Policy reform will not be effective if the economy-wide transition is driven primarily by a top-down regulatory approach that mandates alignment with national transition strategies. Without sufficient engagement with market players (investors and companies) to identify and address market and policy barriers, this approach may struggle to effectively mobilise capital at scale.

BOX 1: A WHOLE-OF-GOVERNMENT APPROACH TO THE ECONOMIC TRANSITION

Financial policies or regulations to deliver real world outcomes will only reach their potential if they are connected to wider policy reform that addresses economic externalities and builds markets for solutions. Financial regulators should therefore consider how they can help to enable finance in support of the transition to a sustainable economy in a joined-up, whole-of-government approach as the most efficient means to safeguard financial returns.

Such an approach sets out a high-level conceptual framework for the transition as a central goal of public policy (see Figure 5), stressing the importance of collaboration and consistency. It requires governments to develop and implement a balanced set of policy instruments that activate the right levers across sustainability domains.

Figure 5. A high-level policy framework for a whole-of-government approach to the economic transition



Source: PRI (2024) Investing for the economic transition: the case for whole-of-government policy reform

28 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 range of factors, including economic context and 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 policy development and implementation.

Figure 6: The feedback loop of sustainability-related risks when financial authorities support a whole-of-government approach to transition

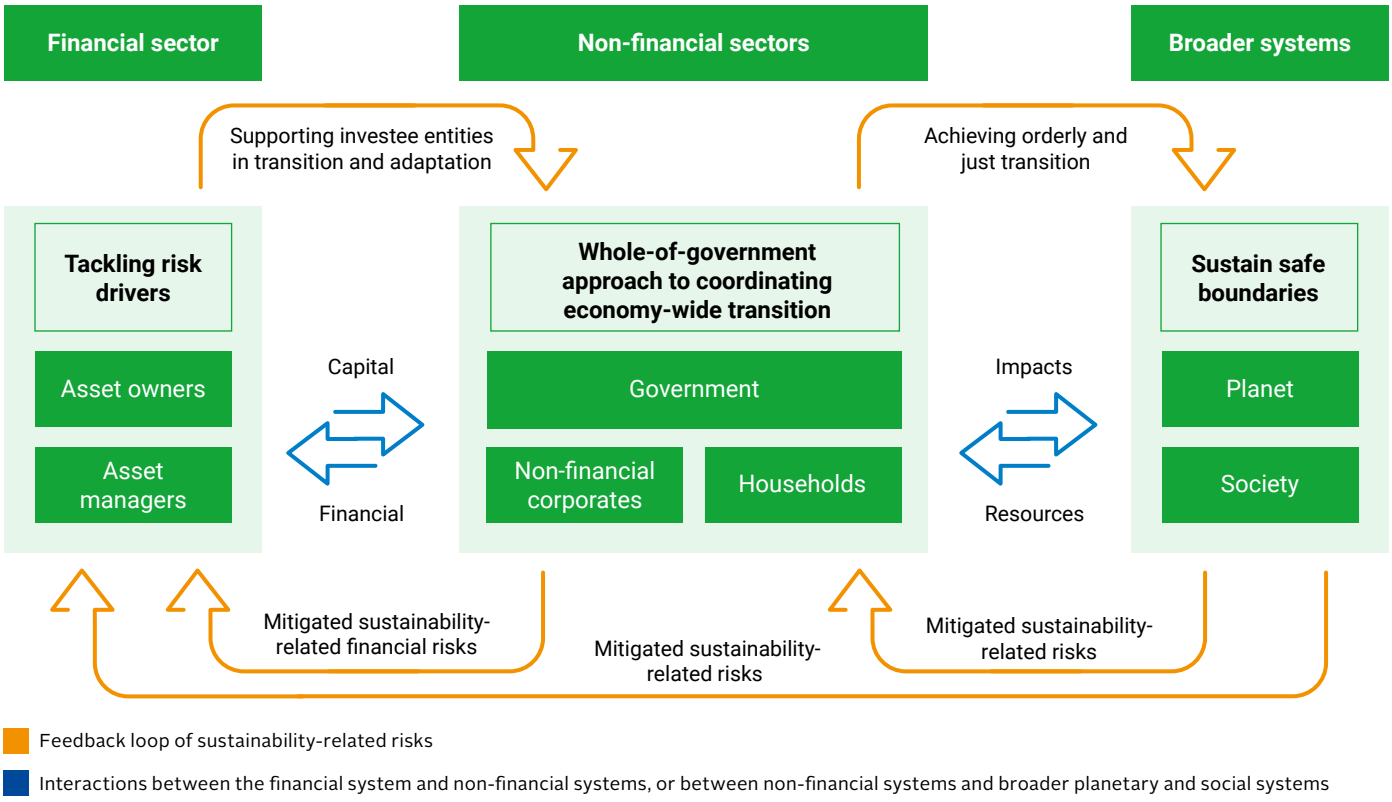


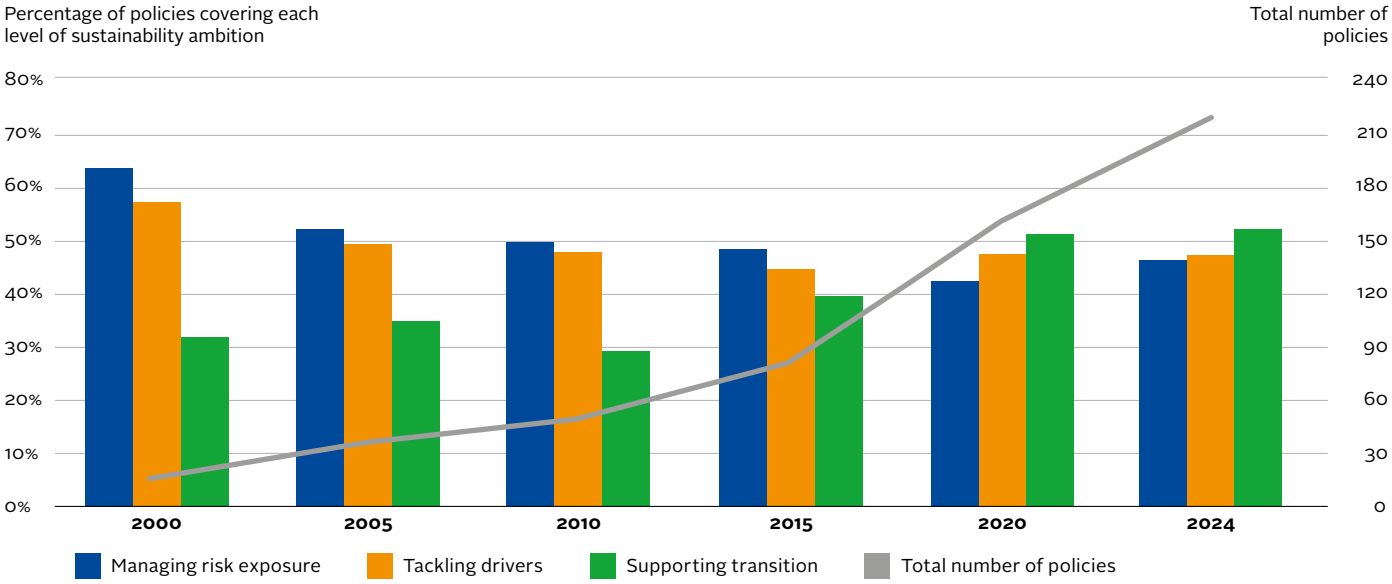
Table 4. Examples of financial policies that can be adopted to support the economy-wide transition

Mandates	Financial stability	Market efficiency and integrity	Investor protection
Relevance of sustainability factors	Identify, monitor and address systemic vulnerabilities to transition risks, including risks of a chaotic, unjust and delayed transition.	Develop capital markets and address barriers to meeting capital needs for the economy-wide transition, including misalignment of incentives across the investment chain.	Enhance transparency and credibility for transition finance. Guide and support investors to identify and manage transition risks with due regard to national transition strategies.
Financial policies and regulations (examples)	**Macro-prudential supervision**: establish cross-department initiatives to monitor transition progress, forecast transition risks and assess investment needs and transition speed across different sectors to inform transition policy making.	**Scale up blended finance**: establish a platform that brings together relevant stakeholders to negotiate concessional and commercial funding packages for coordinated project portfolios. The funding packages are tied to the government's commitment to implementing necessary policy reforms to drive the transition.	**Transition plans**: support efforts to make national transition strategies investable and transparent. Guide investors and issuers to develop and implement credible transition plans by connecting them with national transition strategies and sectoral transition pathways.

TOWARDS A HOLISTIC APPROACH

Analysis of the PRI regulation database shows a trend for financial policies increasingly covering all three levels of sustainability ambition.[29] Based on the financial and corporate policies in the database, we can see that the proportion of policies that include an approach to support the transition has increased from one-third in 2000 to over half (51%) in 2024. (Note some policies cover more than one level of sustainability ambition.) The total number of sustainable investment policies has been steadily increasing since 2000.[30]

Figure 7. Sustainability ambition in financial and corporate policies



Source: PRI regulation database

CASE STUDY – JAPAN'S ECONOMIC TRANSITION

Japan has taken important steps towards establishing a whole-of-government approach to the economic transition.

It has committed to international sustainability goals, and progress has been most notable since 2020 when it established a goal to achieve net zero by 2050, enshrined in law in 2021. The Cabinet, the highest level of executive power in the Japanese Government, has adopted overarching strategies and action plans that provide policy direction for the economic transition. *The Grand Design and Action Plan for a New Form of Capitalism* (henceforth *Grand Design*) sets out the Government's economic priorities. The *Grand Design* is further supported by a dedicated climate strategy – the *GX Promotion Strategy* (the *Strategy for Promoting Transition to a Decarbonized, Growth-Oriented Economic Structure*).

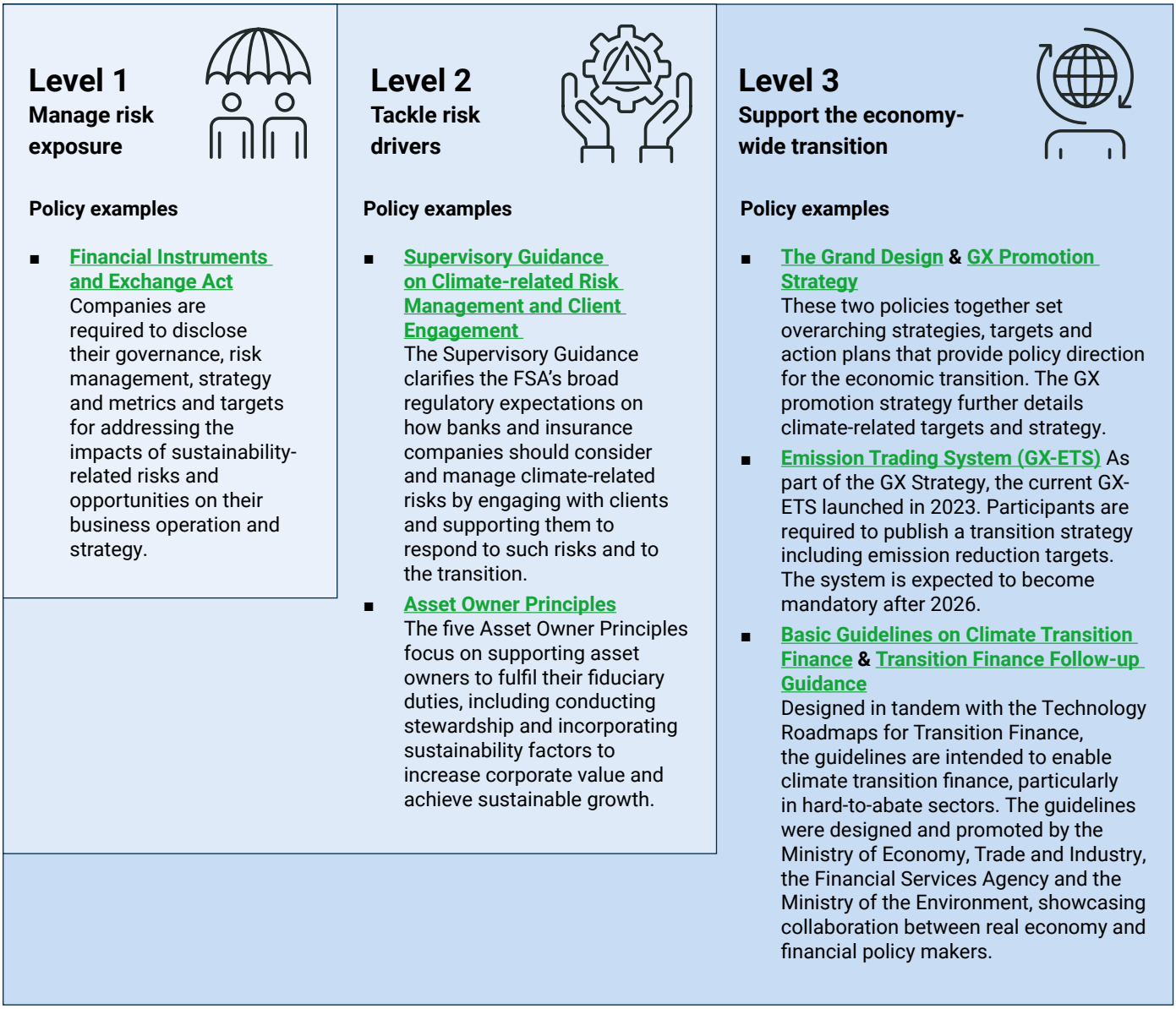
While the Financial Services Agency is not formally mandated to drive the economic transition, it supports it within its existing remit – enhancing financial stability, improving transparency and market efficiency – to enable and guide investors to integrate material sustainability-related factors into investment decisions and support investee companies in managing transition risks and opportunities in light of national transition strategies. The FSA has played a key role in shaping a broad range of sustainable finance policies, including the *Stewardship Code, Transition Finance Basic Guidelines*, *Social Bond Guidelines*, ESG fund name rules and impact investment frameworks.

In addition, the FSA recognises the feedback loops between investment and sustainability-related risks, as well as the importance of policy coordination in creating an enabling environment for a just economic transition. As a result, financial policy reform is increasingly being co-designed with real economy policy makers, placing a strong emphasis on fostering constructive engagement between investors and investee entities and leveraging both pricing and non-pricing signals generated by real economy policies to align capital flow with transition targets.

29 The database covers top 20 countries by PRI signatory count, plus the G20 members and the European Union.

30 The Principles for Responsible Investment (2021) 88 new policies added to PRI's regulation database

Figure 8. Examples of how Japan's policies link to each level of sustainability ambition



CONCLUSION AND NEXT STEPS

This report illustrates the relevance of sustainability to investors and financial authorities, based on a growing awareness of the material risks that sustainability crises pose to the economic, environmental and social systems which support financial value creation.

Through close examination of the challenges faced by investors in addressing sustainability-related risks, the role and level of sustainability ambition of financial regulators and subsequent expectations of investors, the report demonstrates why it is in regulators' interests to consider and pursue all three levels of sustainability within the context of their mandates. By adopting all three levels of sustainability ambition, regulators can help to ensure a stable, sustainable financial system that rewards long-term, responsible investment. This will benefit the environment and society as a whole, thereby unlocking the full potential of the financial sector to contribute to resilient, sustainable and inclusive economic growth.

Part II presents a policy toolkit, detailing 10 key policy tools that financial authorities can apply to help address the challenges faced by investors while supporting financial regulatory objectives, including enhancing financial stability, protecting consumers and improving market efficiency and integrity.

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The Principles for Responsible Investment (PRI)

The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of sustainability-related issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating sustainability-related issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: www.unpri.org

PRI Principles for Responsible Investment