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G20 Sustainable Finance Working Group Deliverables, 2023



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Introduction

This report assimilates the work carried out by the Sustainable Finance Working Group (SFWG) under the Indian G20 Presidency in 2023, in its pursuit to identify institutional and market barriers to sustainable finance, and to develop options to overcome such barriers, and contribute to a better alignment of the international financial system to the objectives of the 2030 Agenda and the Paris Agreement.

In 2023, the G20 Finance Ministers and Central Bank Governors mandated the SFWG to continue monitoring progress in the implementation of the G20 Sustainable Roadmap (the “Roadmap”) and work on three priority areas to advance the actions envisaged in the Roadmap, namely 1) Mechanisms for mobilisation of timely and adequate resources for climate finance; 2) Enabling finance for the Sustainable Development Goals (SDGs); and 3) Capacity building of the ecosystem for financing toward sustainable development.

The document consolidates recommendations for voluntary consideration by jurisdictions, international organizations, and other actors. Relevant policy and regulatory environments along with country-specific circumstances should be taken into account when considering these recommendations. The recommendations cover deliverables related to the three priority areas:

Priority areas	Deliverables
Priority 1 - Mechanisms for mobilisation of timely and adequate resources for climate finance	Mechanisms for mobilisation of timely and adequate resources for climate finance
	Policy measures and financial instruments for catalysing the rapid development and deployment of green and low-carbon technologies
Priority 2 - Enabling finance for the Sustainable Development Goals	Analytical framework for SDG-aligned finance and priorities under India’s G20 Presidency <ul style="list-style-type: none"> • Scaling-up the adoption of social impact investment instruments • Improving nature-related data and reporting
Priority 3 - Capacity building of the ecosystem for financing toward sustainable development	Technical Assistance Action Plan
	Overcoming data-related barriers to climate investments

The SFWG is also reviewing progress on the Roadmap and preparing two compendia on (1) non-pricing policy levers to support sustainable investment and (2) case studies on financing for SDGs by jurisdictions, International Organizations (IOs), and private sector. The reporting on progress on the Roadmap will be discussed at the 4th SFWG meeting. The progress on the Roadmap and the two compendia will be appended to these deliverables in September 2023 to form the 2023 G20 Sustainable Finance Report.

1 Mechanisms for Mobilisation of Timely and Adequate Resources for Climate Finance

1.1 Mechanisms for mobilisation of timely and adequate resources for climate finance

Context

G20 members recognise the need for accelerated climate action and that significantly increasing finance from multiple sources is crucial in this regard. It is estimated that investment of at least USD 4–6 trillion per year will be required for a global transformation to a low-carbon¹ economy in line with Paris Agreement objectives.² Both the public and private sectors play important roles for scaling up climate finance.

The public sector plays a critical role in advancing policies that can enable the scaling up of finance from all sources for the climate transition, and in providing catalytic public finance. The Roadmap recognizes the importance of public policy levers and their implications to send market signals that influence sustainable investment decisions and incentivize the participation of private capital in sustainable investments. For example, the SFWG built on this work in 2022 with the development of a Transition Finance Framework, which contains high-level principles for jurisdictions and financial institutions to consider when developing policies and financial services to support the whole-of-economy climate transition.³

The private sector is a crucial complement to public sector actions and has a vital role in contributing to the scale of climate finance required for global transformation to a low-carbon economy and for meeting ambitious net-zero emissions targets.

However, private sector climate investment is often constrained by real or perceived risks, such as currency fluctuations, macroeconomic conditions, unpredictable business environment, political risks, some of which may be linked to the efficiency of capital markets, and a lack of conducive policy and regulatory environments, lack of projects, etc.

In the face of the risks mentioned above, there are innovative financial mechanisms to mobilise private capital, including through a mix of concessional and non-concessional loans,

¹ Throughout this report, “low-carbon” refers to “low-carbon equivalent,” as to capture all GHG emissions.

² United Nations Environment Programme (2022). [Emissions Gap Report 2022](#): The Closing Window – Climate crisis calls for rapid transformation of societies.

³ See Principle 17 of the SFWG’s Transition Finance Framework, in the [SFWG’s 2022 Synthesis Report](#): “Policy makers could design appropriate policies, incentives and regulatory environments and work to ensure they are effective in improving the bankability of transition activities and crowding in more private sector investment, taking into account national circumstances and in the context of sustainable development and efforts to eradicate poverty. Authorities should also consider providing forward guidance on the implementation of such policies to provide regulatory certainty to investors.”

equity participation, guarantees, dedicated trust funds, and blended finance. Blended finance involves the strategic use of public or philanthropic capital to mobilize additional private finance towards sustainable development. Blended finance offers flexibility in raising resources and rebalancing risk-reward structures to make investments more attractive to private finance.

Further actions should be taken to scale up blended finance and enable risk-sharing operations for climate investments, taking into consideration existing and future work such as by multilateral institutions, forums,⁴ and other G20 Working Groups.⁵ Financial risk-sharing tools include guarantees, insurance, first-loss capital, etc. In general, enabling policy environments aligned with local contexts are needed to support the creation of a pipeline of bankable climate-related projects.

Against this backdrop, the G20 Sustainable Finance Roadmap in its Action 14 encourages Multilateral Development Banks (MDBs) to raise their ambition on climate action, in addition to their support for SDGs. In its Action 15, the Roadmap also encourages international financial institutions (IFIs) including MDBs, relevant IOs, and public funds, to mobilize private finance by developing and scaling up blended finance instruments and mechanisms and engineering risk-sharing facilities including adequate risk management schemes as well as other actions to eliminate barriers to sustainable investments with the objectives of promoting private sector investment. Action 15 also encourages MDBs to assist countries in aligning domestic financial flows with the goals of the Paris Agreement and national climate action plans and funding needs. This was further emphasized by the SFWG's work in 2022. However, IFI resources alone cannot mobilize the scale of capital needed to achieve the goals of the Paris Agreement. Therefore, blended finance schemes should be introduced and scaled up, as appropriate, as well.

This year, the SFWG has discussed emerging options, mechanisms, and instruments of resource mobilisation for climate finance. The SFWG has also developed a set of

⁴ For Example, see:

- DFI Working Group Paper (2021). Enhanced blended finance principles for DFI private sector operations,
- OECD (2018). [OECD DAC Blended Finance Principles for Unlocking Commercial Finance for the Sustainable Development Goals](#).
- OECD (2022). [OECD Blended Finance Guidance for Clean Energy](#).
- Forthcoming NGFS Blended Finance Handbook with key lessons from past case studies on blended finance projects and practical guidance on scaling up blended finance in EMDEs.
- Coalition of Finance Ministers for Climate Action Work Programme 2023 will look at blended finance opportunities for mobilization of adaptation finance.
- IMF Resilience and Sustainability Trust (RST) cooperation with [Rwanda](#) and [Barbados](#).

⁵ Scaling up catalytic financial solutions, including blended finance, was also a main theme in the G20 Infrastructure Working Group in 2022. See the Global Infrastructure Facility's (GIF) Stocktake of approaches that leverage private sector investment in sustainable infrastructure. Further, the [G20 Principles to Scale-up Blended Finance in Developing Countries including LDCs and SIDS](#) have been delivered by the G20 Development Working Group in 2022.

recommendations for scaling up blended finance and risk-sharing facilities, including a set of options for enhancing the role played by MDBs in mobilizing climate finance.

Challenges

Finance from all sources has not yet achieved the scale to address the climate goals established by countries, especially flows directed to developing countries. Major challenges and constraints to scaling up finance include:

- a. Lack of clear and predictable public climate policy and regulatory frameworks that could create an investment environment conducive to scaling up private finance.
- b. Scarcity of public concessional funding to serve as catalytic capital.⁶
- c. Public and private capital flows to climate investments are often constrained by the lack of investment-ready or bankable projects, which is particularly the case for climate adaptation,⁷ and they are geographically concentrated in developed countries and a few emerging market countries.
- d. Adaptation financing and financing of small- and medium-sized enterprises (SMEs) for climate actions face inherent difficulties including mobilisation of finance for multiple, small-scale investments.
- e. The lack of interoperable alignment approaches may impede a marked increase of private climate finance.

Policy recommendations

The SFWG makes the following recommendations, with a view to encouraging mobilization of private finance, including through developing blended finance instruments and mechanisms and engineering risk-sharing facilities. These recommendations are a non-exhaustive list of actions that could be used according to country specific circumstances.

Recommendation 1: Where consistent with institutional mandates, policy makers should develop effective policy and regulatory frameworks that create an environment conducive to the origination of a pipeline of climate-related bankable projects including transition-related projects, that can attract private resources. This could include voluntary implementation of the SFWG's 2022 Transition Finance Framework.

⁶ As Convergence (2022) mentioned, catalytic capital usually comes from public and philanthropic financial sources.

⁷ UNDP (2020). [The Ecosystem of Private Investment in Climate Action](#)

Recommendation 2: Policy makers should enable more effective, efficient, and sustainable use of fiscal resources, such as direct investments, expenditure, subsidies, and official development assistance.

Recommendation 3: Providers of public finance should create frameworks, instruments and innovative incentive mechanisms, including structured finance instruments, to steer efforts towards mobilizing private capital to finance climate projects.⁸ In that sense, MDBs, development finance institutions (DFIs), and other development banks, if applicable and as appropriate, should introduce internal incentives mechanisms, such as key performance indicators (KPI) and/or other performance-based evaluation methods, that can incentivise an increase in their private capital mobilization for climate projects, in line with goals of the Paris Agreement and keeping in mind climate impact and additionality achieved.

Recommendation 4: Governments should enable philanthropic participation in blended finance structures by encouraging philanthropic foundations to align objective with other involved development partners, such as MDBs, DFIs, and other development banks, if applicable and as appropriate.

Recommendation 5: MDBs, DFIs, and other development banks should consider scaling up, as appropriate, and while retaining adequate risk management, emerging innovative risk sharing mechanisms, such as climate structured funds⁹ or the use of capital market instruments such as Green Social and Sustainability (GSS) bonds and other climate finance strategies like co-investments or layered risk deals¹⁰, which could enable them to mobilize more private capital. MDBs, DFIs, and other development banks could develop private capital mobilization targets (for example, in terms of percentage of total project finance) for climate projects¹¹.

Recommendation 6: Providers of climate finance should evaluate and promote the scaling up, and/or creation, as appropriate, of multi-donor investment facilities dedicated to providing customized guarantee volumes, and, where appropriate, help enable access to such facilities for national and subnational development finance actors.¹²

⁸ For example, Green Bonds. See the World Bank (2022), [World Bank Impact Report. Sustainable Development Bonds & Green Bonds 2022](#)

⁹ See, for example, the Amundi Planet Emerging Green One (EGO), the world's largest targeted green bond fund focused on emerging markets, launched with cornerstone investments of \$256 million from IFC and \$100 million from EIB. See an IMF article on [How Blended Finance Can Support Climate Transition in Emerging and Developing Economies](#).

¹⁰ Layered-risk deals in which public funds take a bigger portion of the risk in a project and, thus, make an investment more attractive for private capital.

¹¹ In accordance with the G20 Blended Finance principles, blended finance should catalyze market development without distortion, aim to gradually reduce the concessionality and be eventually replaced by the private investment.

¹² An example of such a facility is the Asian Development Bank's (ADB) Innovative Finance Facility for Climate in Asia and the Pacific (IF-CAP), which will increase ADB's sovereign lending capacity through leverage.

Recommendation 7: Providers of blended finance for climate investments should seek to ensure minimum concessionality,¹³ taking into consideration country specific circumstances; avoid crowding out private capital; and ensure sufficient transparency and accountability¹⁴ on the effectiveness and impact of financial flows, tranching, financial performance, sustainability outcomes, additionality, and absence of adverse impacts and development results of blended finance operations. Providers should also maximize the effect of concessional resources, such as those of the multilateral climate funds, in order to crowd in private capital. Providers of blended finance for climate investments should also take note of the G20 Principles to Scale up Blended Finance.

Recommendation 8: MDBs, DFIs, and other development banks should explore applying active risk management approaches to climate projects and expanding and customizing guarantee instruments, if applicable, to mitigate risks to investors and better leverage their existing resources.

Recommendation 9: Relevant stakeholders should cooperate, as appropriate, to raise awareness of blended finance mechanisms for climate investments, share best practices, build expertise, identify barriers, and seek to address the distinct needs of sectors and geographies for scaling up blended finance for climate investments across the public and private sectors, as well as for developing bankable projects for adaptation.

¹³ The concessionality embedded in a financing package should not be greater than necessary to induce the intended investment (“minimum concessionality” principle of the DFI Working Group of Blended Concessional Finance for Private Sector Projects).

¹⁴ OECD principles and standards for Responsible Business Conduct (RBC) (see [updated MNE guidelines 2023 version](#)) have been embedded in the OECD DAC Blended Finance Principles for Unlocking Commercial Finance for the SDGs, which recognize that blended finance projects should integrate high corporate governance, environmental and social standards, as well as RBC instruments to support the development of functioning and efficient markets. The Principles are accompanied by the Blended Finance Guidance, which stresses the importance of RBC in two ways: first to guide donors in selecting blended finance partners with the highest possible levels of business integrity; and second to help donors support enterprises in developing countries in improving their RBC practices.

1.2 Policy Measures and Financial Instruments for Catalysing the Rapid Development and Deployment of Green and Low- Carbon Technologies

Context

Consistent with Action 16 of the G20 Sustainable Finance Roadmap, the SFWG has pursued work in previous years to explore the range of both pricing and non-pricing policy levers available to help incentivize sustainable finance and investment and acknowledges that a combination of both measures, consistent with country circumstances, can help to incentivize sustainable finance at scale. Further analysis on the effectiveness and interactions of different policy levers is key to accelerate emission reduction in line with the transition to a low emissions world. This year, the SFWG hosted side events on (a) non-pricing policy levers for mobilizing sustainable investment¹⁵ and (b) policy measures and financial instruments for catalysing the rapid development and deployment of green and low-carbon technologies¹⁶. The discussions in these side-events contributed to inform the recommendations in this section.

In the IEA's Net-Zero Emissions by 2050 Scenario,¹⁷ nearly half of the modelled global emissions reductions in 2050¹⁸ come from technologies that have not yet moved beyond the demonstration phase. These relate in particular to technologies for sectors with emissions that are most difficult to avoid, such as heavy industry and long-distance transport, and carbon removal. The advancement of early-stage technologies focused on adapting and building resilience to climate change — for example, those in the areas of water efficiency and climate-resilient agriculture — is increasingly important as the impacts of climate change intensify. While continuing to promote the widespread deployment of commercialized climate technologies, it is critical to leverage policies and financial instruments, as encouraged by Roadmap Actions 16 and 15, respectively, to support the development, demonstration, and commercial launch of those green and low-carbon technologies that have not yet reached level 9 of the technology readiness scale (hereafter “*early-stage climate technologies*”).¹⁹ At the same time, it is also important to acknowledge that certain technologies may currently be unlikely to be deployable soon, costly, and/or may divert key resources from other uses or sectors.

¹⁵ A compendium on non-pricing policy levers for mobilizing sustainable investment will be included as an annex to the 2023 G20 Sustainable Finance Report.

¹⁶ Outcomes of the side event on policy measures and financial instruments for catalysing the rapid development and deployment of green and low-carbon will be annexed to the 2023 G20 Sustainable Finance Report.

¹⁷ International Energy Agency (IEA) (2021). [Net Zero by 2050: A Roadmap for the Global Energy Sector](#)

¹⁸ Note that most global emissions reductions through 2030 in the IEA's Net-Zero Emissions by 2050 Scenario “come from technologies readily available today”.

¹⁹ Technology readiness levels 1-9, referred to as “early-stage” in this section, occur prior to market scaling and include activities such as proof of concept, prototyping, technology scaling, and early commercial sales. Climate technologies are explicitly focused on mitigating emissions, removing emissions, or addressing the impacts of climate change. See PwC's [State of Climate Tech 2022](#) report. See, for example, the UNFCCC report, [Emerging Climate Technologies in the Energy Supply Sector](#).

Challenges

Despite growth in global investment in early-stage climate technologies over the past decade,²⁰ persistent barriers to scaling up the finance needed to develop and commercialize such technologies remain. Foundationally, the private returns on research and development of climate technologies tend to be below social returns, a phenomenon that has been termed a “double externality,” reflecting “not only that clean production is underpriced but also that the private returns to innovation are below the public returns.”²¹ Relative to other sectors, a high share – around three-quarters – of investments in early-stage energy start-ups are for “hardware” developers, and these technologies also tend to have characteristics that can limit their appeal to traditional market-rate investors, including high upfront capital costs and long-term time horizons.²²

Specific challenges include:

- a. Lack of clarity over long-term regulatory frameworks and policy pathways towards carbon neutrality and climate adaptation.
- b. Lack of shared understanding among investors of the full potential of technological improvements across the whole landscape of climate change mitigation and adaptation to make the achievement of Paris-aligned pathways smoother and less costly.
- c. Effective practices for the appropriate allocation of risk between public and private actors at the earliest stages of climate technology readiness are not well understood or shared.
- d. Uneven and uncertain domestic policy and regulatory environments within and across jurisdictions.²³
- e. Lack of a clear scale up pathway from prototype to full-scale demonstration, especially for large unit size technologies that require new standards and institutional frameworks, and which often encounter “valley of death” funding famines between projects.
- f. Limited data and evaluation on the effectiveness and scalability of climate technology accelerators and incubators, which is more pronounced in developing countries.²⁴

²⁰ Global investment in early-stage climate technologies over the past decade has grown across corporate clean energy research and development (R&D), public clean energy R&D, and venture capital (VC) and private equity (PE) investment in climate start-ups. See, for example, [IEA’s World Energy Investment 2023](#) report, PwC’s [State of Climate Tech 2022](#) report, and BloombergNEF’s 2022 Climate-Tech VC/PE Investment report.

²¹ William Nordhaus (2021). The Spirit of Green. “The Double Externality of Green Innovation”.

²² IEA (2023). [World Energy Investment 2023](#)

²³ PwC (2020). [State of Climate Tech 2020](#)

²⁴ See the UNFCCC Technology Executive Committee’s paper, [Climate Technology Incubators and Accelerators](#).



Given these challenges, enabling greater capital flows at the earlier and more risky stages of technology readiness remains a challenge.²⁵ As a result, fewer innovative ideas are able to compete for scaling up funding, hindering potential breakthroughs in efficiency and performance. Some groups of technologies, such as carbon removal, remain comparatively underfunded when considering their forward-looking potential in enabling Paris-aligned pathways.^{26,27} Reflecting broader market trends, financing for early-stage climate technologies is also concentrated in select markets—namely, the United States, Canada, China, and Europe²⁸—while ventures in most emerging markets generally have difficulty securing access to capital.²⁹ IEA estimates that, in 2022, EMDEs (excluding China) accounted for just 5% of public energy R&D, 3% of corporate energy R&D (by country of headquarters) and 5% of energy VC (by country of startup).³⁰

Policy recommendations

The SFWG makes the following voluntary recommendations to encourage greater private capital flows to early-stage climate technologies:

Recommendation 1: Governments should provide clarity over their long-term policy pathway towards carbon neutrality and climate adaptation. Both pricing and non-pricing climate policies, depending on country-specific circumstances, (including, for example, mechanisms to support clean energy sources, schemes for rationalizing and phasing out inefficient fossil fuels subsidies, carbon pricing mechanisms, incentives, subsidies, regulation, and financial sector policies, etc.)³¹ can influence sustainable investment decisions and can help correct for the aforementioned “double externality,” leaving only the knowledge externality³², which is experienced by innovators across all sectors.

Recommendation 2: Governments should consider, in line with country circumstances, an appropriate policy and regulatory framework that incentivizes corporate investments in R&D for climate innovation, facilitates business set-up, and incentivizes support for climate technology start-ups, including those focused on early-stage climate technologies. These

²⁵ According to BloombergNEF’s 2022 Climate-Tech VC/PE Investment report, the transport sector captured the plurality of 2022 climate technology investment. Small deals (under \$5 million), which generally finance the development of technologies at earlier stages of readiness, have been on the decline since 2019. See PwC’s [State of Climate Tech 2022](#) report.

²⁶ IEA (2020). [Clean Energy Innovation](#)

²⁷ In 2022, technologies directed at reducing emissions in sectors responsible for 85% of emissions attracted just 52% of total financing. See PwC’s [State of Climate Tech 2022](#) report

²⁸ BNEF (2022). Research on [climate tech and venture capital and private equity investment](#).

²⁹ Green Climate Fund (2021). Working paper: [Accelerating and scaling up climate innovation](#)

³⁰ IEA (2023). [World Energy Investment 2023](#)

³¹ These example policy levers are reference in Roadmap Action 16. The compendium on non-pricing policy levers for mobilizing sustainable investment will be included as an annex to the 2023 G20 Sustainable Finance Report and will include further details on the outcome of the relevant SFWG workshop.

³² Knowledge externality means that not all financial returns on innovation will go to the initial innovator as knowledge diffuses.



policies can help reduce investment uncertainty, promote cross-border financial flows, incentivise or drive private sector support for climate technologies. Governments should collaborate and share policy and regulatory best practices for bringing key technologies to market, including unique considerations for supporting innovation in EMDEs.

Recommendation 3: Public and private climate technology investors should engage with relevant experts and platforms, including, for example, the International Energy Agency’s Tracking Clean Energy Progress (TCEP) assessment, to develop a shared understanding of those technologies whose levels of technology readiness may be currently off-track for achieving Paris-aligned pathways, and to consider which of those technologies may require more targeted climate finance interventions.

Recommendation 4: Public sector authorities should consider future emissions reduction and/or adaptation potential when supporting early-stage climate technologies. This support should seek to accelerate a technology’s pathway to bankability and could include tools such as direct R&D investment, including from innovation funds, technology-specific calls for grants, long-term or flexible loans, loan guarantees, common facilities/ infrastructure, support for intellectual property filings and management, procurement, offtake agreements, and the introduction of tax incentives. Financed technologies should be properly evaluated based on their lifecycle, limiting negative environmental and social impacts. As technologies advance in readiness, public sector authorities should incentivize private investors to take on, as appropriate, higher shares of risks, so as to preserve scarce public capital, such as grants and direct R&D investments, to support more nascent technologies, and to continue incentivizing, as appropriate, private investment in the deployment phase.

Recommendation 5: Relevant public sector authorities, corporate investors, and PE/VC investors should collaborate to consider or develop, as appropriate, financing structures³³ that are tailored to specific stages of technology readiness in order to leverage a higher volume of private capital participation in earlier stages of funding, as well as for deployment. In addition, financial institutions should consider the financing of low carbon technologies in their lending or investment strategy subject to their regulatory framework in which they operate.

Recommendation 6: Relevant public sector authorities, including public development banks and multilateral funds, and private investors should pursue public-private climate technology incubators and accelerators, including projects that facilitate the flow of capital to enterprises in emerging and developing markets.³⁴ In doing so, public sector authorities and private

³³ For example, investors might consider pre-purchasing agreements – an advance market commitment that guarantees future demand – for carbon removal.

³⁴ See, for example, the Green Climate Fund’s approved Project Preparation Facility funding for the Korean Development Bank’s preparation of a [funding proposal for a climate technology accelerator in Southeast Asia](#). Another example is the [Luxembourg-European](#)

investors should carefully consider how to appropriately address technology risk. Incubators and accelerators should assess and transparently report on their results in bringing climate technologies to market, as to establish successful models that can be more readily replicated or scaled up, as appropriate.

[Investment Bank Climate Finance Platform](#), which supports climate change mitigation and adaptation projects around the world using innovating, high-impact financing solutions and attracting private sector investors.



2 Enabling Finance for the Sustainable Development Goals: Analytical Framework for SDG-aligned Finance and Priorities under India's G20 Presidency

Context

The Covid-19 pandemic widened the annual SDG financing gap in 2020 from an estimated USD 2.5 trillion to USD 3.9 trillion³⁵ in developing countries. To bridge the SDGs financing gap, especially for developing nations, there is a need to enhance additional financial resources. Public finance mechanisms like Official Development Assistance (ODA) and domestic resource mobilization, as well as innovative financing approaches such as blended finance and risk-sharing tools could be used to mobilize additional resources, thus scaling up sustainable finance.

With only 7 years remaining to achieve our shared goals set out in the Agenda 2030, it is essential to work towards closing the financing gap by fostering global cooperation and aligning financial resources towards these goals to address the funding needs for all, including developing countries.

The Roadmap recognizes the full range of sustainability issues. While continuing to work on scaling up finance to support climate transition, in 2023, the SFWG dedicated a workstream to other sustainability issues. In this context, the SFWG developed an analytical framework to guide future analysis on the progress made on the 17 SDG against the five focus areas outlined by the Roadmap.

The table below is an indicative illustration of the analytical framework. Considering the limited timeframe and technical complexity to include all 17 SDGs, parallel discussions in other G20 working groups, as well as not all SDG-related investments are attractive to private sector investors, and based on the readiness of relevant analytical tools and methodologies, the SFWG in 2023 focused on two broad topics: financial instruments for social impact investing and nature-related data and reporting in line with the Roadmap. In line with the framework, the selected SDGs are analysed (based on the stocktaking analyses) against two of the five focus areas of the G20 Sustainable Finance Roadmap. Nature and biodiversity related SDGs (6, 13, 14 and 15) are mapped against the 'data and reporting' pillar. Social-related SDGs (1-8, 10) are mapped against the 'financial instruments' pillar. Pillars are derived from the focus areas of the Roadmap.

³⁵ OECD (2022). [Global Outlook on Financing for Sustainable Development 2023](#). No Sustainability Without Equity

The other focus areas/SDGs may be examined in the future, complementing the SFWG Analytical Framework subject to the decisions of incoming G20 Presidencies, working group Co-Chairs, and members.

Illustrative table of SFWG Analytical Framework for SDG-aligned Finance

SDGs	Biosphere/Planet			Society/People						Economy/Prosperity					Peace	Partner-ship		
	13	14	15	6	1	2	3	4	5	7	8	10	9	11	12	16	17	
Pillars	Climate Action	Life in Water	Life on Land	Clean Water	No Poverty	Zero Hunger	Health	Educatio n	Gender Equalit y	Affordable Energy	Decent Work	Reduced inequality	Industry Innovatio n	Sustainabl e Cities	Responsible consumption n Production	Strong Institution	Partner- ships	
Alignment Approach																		
Financial Instruments				Social Impact Investing														
Data and Reporting	Nature-related Data & Reporting																	
Risk Assessment and Management																		
Policy Incentives																		

Note: This table is designed mainly for illustrative purposes and is not meant to serve as an exhaustive demonstration. This is a simplified classification of the SDGs and does not define or scope “social” or “nature”.

The table does not capture the interactions between climate, nature and social aspects, which is an important factor to be cognisant of moving forward.



2.1 Scaling-up the adoption of social impact investment instruments

Context

The scaling up of the adoption of social impact investment instruments can help to align more finance with social SDGs and promote sustainability-aligned finance, particularly for developing economies and MSMEs. Inclusive and innovative approaches can mobilize private finance towards social SDGs. In accordance with Action 5 of the Roadmap³⁶, in 2023, the SFWG focused on the scaling up of sustainability-aligned financial instruments and analysing how relevant instruments support various social goals in areas such as health, education, poverty eradication and gender.

Social impact investments provide finance to organisations addressing social and possibly additional goals with the explicit expectation of a measurable social, as well as financial, return. Social impact investments are distinguished from other investments based on a) intent to achieve social goals, without exclusion of possibly other goals, through investment, b) credible narrative by which investment contributes to achievement of the intended goals and c) reference to a measurement system that links investment to improvements in social and possibly additional outcomes. The impact investment market has grown quickly in recent years. Based on recent estimates, the total impact investment market, of which social impact investing is a portion, is estimated to be USD 1.16 trillion in Assets Under Management³⁷.

Challenges

Major challenges to scaling up social impact investments include:

- a. Relatively poor common understanding of the definitions and concept of social impact investment and the qualitative nature of many social indicators, which creates higher risk perception and uncertainty for investors, hampers widespread adoption and creates a potential risk of “social washing.”
- b. Insufficient awareness about methodological tools for investors to integrate social SDGs into their investment policies, especially to measure the contribution of social impact instruments or funds to one or several SDGs.

³⁶ G20 Sustainable Finance Roadmap Action 5: “G20 and relevant IOs to identify opportunities to promote scaling up of climate and sustainable-aligned financial instruments, products, and markets, including sustainable capital market instruments”.

³⁷ GIIN (2022). [GIINsight: Sizing the Impact Investing Market 2022](#)



- c. Limited integrated assessment by investors of the costs and benefits of social impact investment projects to identify trade-offs or co-benefits between the SDGs, reflecting that the SDGs are interdependent.
- d. Limited and fragmented measurement and reporting frameworks for social impact investment instruments, hindering comparability and transparency.
- e. Absence of or nascent investment enabling environments and vibrant ecosystems necessary to drive innovation, in some jurisdictions and particularly in developing countries.

Policy recommendations

The SFWG developed the voluntary recommendations set out below, aimed at scaling up social impact investment instruments (such as bonds, loans, impact investment funds, guarantees, catalytic first loss capital, impact crowdfunding platforms, and microfinance) as appropriate and considering country-specific needs and circumstances. These recommendations are based on SFWG’s stock-taking analysis of financial instruments for social SDGs, feedback received during the G20 workshop for enabling finance for SDGs, the SFWG meetings and research work done by various IOs and financial institutions. Aligned with the G20 Roadmap, these recommendations intend to complement the work done under past Presidencies and by other Working Groups.

Recommendation 1: Governments and IOs should consider measures leading to the development of a robust pipeline of investment-ready social impact projects, with associated financing solutions. Such measures could include a) introducing or continuing policy levers³⁸ to increase the availability of capital for social impact projects, in line with country specific objectives; b) facilitating blended finance through public-private partnerships to attract private investors through risk-sharing and encouraging their participation in social impact initiatives; c) project preparation facilities and platforms at local, national and global levels to finance specific projects, including for developing countries and micro, small and medium-sized enterprises; d) scaling up existing and promoting new approaches for identifying and supporting investment in social impact projects (e.g., guiding principles, definitions, indicators, classifications, labels, programs, and transparency measures etc.) to better channel finance in relevant projects, in line with country specific objectives; and e) strengthening national and subnational investment environments.

³⁸ Potentially such as public procurement, voluntary reporting frameworks, fiscal incentives, certifications, etc. GSG (2023). [Impact investment perspectives and opportunities to support the social agenda](#). Input paper to the SFWG. OECD (2019). [Social Impact Investment 2019: The Impact Imperative for Sustainable Development Policy levers to foster social impact investing](#)

Recommendation 2: Governments and IOs should encourage efforts to improve the interoperability and credibility of voluntary impact measurement and management frameworks, as appropriate, for the measurement and reporting of social outcomes. Such efforts could include developing clear and coherent guidelines for impact management with components such as impact screening, benchmarking, forecasting and reporting; to promote the transparency and accountability of social impact investments.

Recommendation 3: MDB finance should be leveraged for financing sustainability-aligned projects that are tailored to the needs of various countries, including by catalysing private capital flows to make more social impact investment projects commercially viable, where appropriate.

Recommendation 4: Governments, IOs, and financial market participants should utilize technology that can support the scaling up of social impact investments while monitoring and mitigating the risks, as appropriate and considering national priorities. This may include, for example, a) establishing dedicated innovation funds or challenge funds³⁹ to provide resources and support for research and development, experimentation and piloting innovative approaches and instruments to achieve well-defined social impact objectives and b) the use of financial technology (FinTech), digital platforms, and other emerging technologies.⁴⁰ Technological innovations and solutions may introduce associated risks, including to the intended beneficiaries of social impact investments, and such risks should be assessed, monitored and mitigated.

Recommendation 5: Governments, IOs, and financial market participants should foster innovation in the development of social impact instruments and investment opportunities, as appropriate and considering national priorities. For example, consider creating specialised intermediaries, such as specialised investment vehicles, banks or trading platforms, and strengthening existing ones in social impact investment markets to lower transaction costs and allow better matching of investor and investee risk-return profiles.⁴¹ Another example is the development by some jurisdictions of Social Stock Exchanges as mechanisms to channel funding towards social projects.

³⁹ “A challenge fund is a funding instrument that distributes grants (or concessional finance) to profit-seeking projects on a competitive basis. A challenge fund subsidizes private investment in developing countries where there is an expectation of commercial viability accompanied by measurable social and/or environmental outcomes”. Source: UNDP. [Enterprise challenge funds | SDG Finance \(undp.org\)](#)

⁴⁰ FinTech solutions may include digital crowdfunding platforms or impact investment marketplaces to mobilize capital and better match supply and demand.

⁴¹ OECD (2015). [Social Impact Investment: Building the evidence base](#)

Recommendation 6: Governments, IOs, and other stakeholders should cooperate to share best practices, build expertise across the public and private sectors, and seek opportunities to collaborate on voluntary approaches for designing and scaling social impact investment instruments, recognizing country contexts. Fora such as SDG impact policy dialogues and social impact investor convenings or conferences are opportunities for collaboration. Such fora could discuss data-related challenges, inclusive and country-tailored innovative tools and techniques, creating awareness, capacity building and sharing of best practices for scaling-up social impact investment.

2.2 Improving Nature-related Data and Reporting

Context

The G20 Bali Leaders' Declaration included a commitment to halt and reverse biodiversity loss by 2030. To achieve this, the Kunming-Montreal Global Biodiversity Framework estimates the biodiversity finance gap at \$700 billion per year. Biodiversity loss can also be a source of financial risk and a potential threat to financial stability.⁴² With only 7 years remaining to reach global nature and biodiversity targets, improving data and reporting will play a critical role in timely incorporation of nature-related risks, opportunities, dependencies and impacts on decision-making. Importantly, this year's work directly builds on the actions identified in the Roadmap, which encourages relevant IOs, networks, and initiatives to further advance the understanding of nature- and biodiversity-related metrics and indicators used in disclosure by corporates and financial institutions (Action 10), as well as to explore the potential financial risk and financial stability implications of nature- and biodiversity-related risks (Action 11). It also encourages the ISSB to extend coverage over time from its initial focus on climate-related information to include other sustainability-related topics such as nature and biodiversity (Action 6).

The Kunming-Montreal Global Biodiversity Framework,⁴³ among other aspects, in relevant parts, calls for the alignment of all financial flows with its 4 goals and 23 targets⁴⁴, as well as an increase in the level of financial resources from all sources. For example, Target 15(a) states that Parties should “take legal, administrative or policy measures to encourage and enable businesses, and in particular to ensure that large and transnational companies and financial institutions regularly monitor, assess and transparently disclose their risks, dependencies and impacts on biodiversity including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios”. Section H of the Global Biodiversity Framework also mentions that “The actions set out in each target need to be initiated immediately and completed by 2030. Together, the results will enable achievement towards the outcome-oriented goals for 2050”. Actions to reach the goals and targets of the Framework should be implemented taking into account national circumstances, priorities and socioeconomic conditions.

NGFS research⁴⁵ finds that climate change and biodiversity loss are closely linked and recommends central banks and financial supervisors consider an integrated approach to

⁴² NGFS-INSPIRE (2022). Central banking and supervision in the biosphere: An agenda for action on biodiversity loss, financial risk and system stability. [Final Report of the Study Group on Biodiversity and Financial Stability](#)

⁴³ The G20 SFWG recognizes that not all G20 members are parties to the Convention on Biological Diversity.

⁴⁴ 23 GBF targets covering reducing threats to biodiversity (Target 1-8); meeting people's needs through sustainable needs and benefit-sharing (Target 9-13); and tools and solutions for implementation and mainstreaming (Target 14-23).

⁴⁵ NGFS-INSPIRE report (abovementioned, footnote 42)



address these risks. Climate change is worsened by nature loss and vice versa, and these interactions can compound risks. Moreover, climate change goals achieved through nature-based solutions have also important co-benefits in terms of biodiversity and ecosystem protection.

A number of global and jurisdictional sustainability reporting frameworks, standards and approaches are underway to improve nature-related data, reporting and risk assessment. These include work done, being undertaken, or under consideration by Taskforce on Nature-related Financial Disclosure (TNFD), International Sustainability Standards Board (ISSB), Partnership for Biodiversity Accounting Financials (PBAF), Global Reporting Initiative (GRI), Network for Greening the Financial System (NGFS), Carbon Disclosure Project (CDP) and European Financial Reporting Advisory Group (EFRAG). Various international organizations, such as the World Bank, the World Wildlife Fund, and United Nations Environment Program (UNEP) are also working to develop or improve data collection tools, approaches and platforms. The MDB Joint Nature Statement⁴⁶ released at COP26 in Glasgow provides a common framework for ten MDBs to advance on the nature agenda. MDBs will work together under five pillars of commitment, including “Pillar 4: Valuing nature to guide decision making”, as well as on “Pillar 5: Reporting”. A joint MDB Nature Working Group has been established to this end. Other development banks are developing tools to integrate biodiversity into their strategies and operations⁴⁷.

Challenges

Key challenges to improving nature-related data and reporting include:

- a. The complex linkages between nature degradation, biodiversity loss and climate change are not completely understood by financial market participants including the design of scenarios for financial stability assessments. Improving this understanding could enhance the ability of financial policymakers to incorporate the consideration of nature and biodiversity loss into their existing mandates or responsibilities. In addition, it could help policymakers understand the extent to which addressing climate change could deliver positive nature related outcomes, and vice versa⁴⁸ or where trade-offs might exist and when climate mitigation solutions could negatively affect nature and biodiversity.

⁴⁶ The MDB Joint Nature Statement refers to the 2021 [Joint Statement by the Multilateral Development Banks: Nature, People and Planet](#)

⁴⁷ IDFC (International Development Finance Club) Toolbox on Integrating Biodiversity into Strategies and Operations of Development Finance Institutions

⁴⁸ NGFS-INSPIRE report (abovementioned, footnote 42)



- b. Nature-related data covers a wide variety of environmental indicators and is complex, multi-dimensional, and location-specific, making it difficult to summarize into simple metrics across varied geographies and countries. Further, this makes collection of such data in a comprehensive manner often onerous, leaving gaps in availability or prevalence of certain types of data. Nevertheless, current work is being done by several institutions, to facilitate the access to these data to businesses and financial institutions.
- c. Notwithstanding existing initiatives to assess nature and biodiversity-related risks and opportunities with existing data, many investors still lack easy access to decision-useful data to make informed decisions regarding the environmental impact of, or on, their investments and business operations.
- d. The financial sector is relatively nascent in its comprehension of nature related risks and opportunities. The lack of capacity and understanding of how to make use of available data, how the information derived from the data can be used by decision-makers, and what additional data that may be needed also presents a challenge. There remain gaps for effective communication and collaboration between data analysts and decision-makers. Nevertheless, there are many examples where this challenge has been taken up and has enabled people to take ownership of the issue.
- e. Incorporating nature-related reporting across different sustainability reporting initiatives is quite challenging and can hinder the uptake of sustainability-related reporting on wide scale. With a number of global reporting initiatives expanding into nature-related reporting, a lack of interoperability or comparability among these efforts could pose a challenge for businesses, investors, and policy makers. The variety of reporting frameworks for climate, sustainability and nature poses further challenges to the private sector, especially those in developing countries, particularly in relation to the capacity and resources needed to remain up-to date on the evolving reporting expectations.

Policy recommendations

Recommendation 1: Relevant authorities, international organizations, initiatives, and networks are encouraged to support and further develop nature-related reporting standards and frameworks with the goal of promoting greater interoperability and accessibility of nature-related data and reporting, while preserving flexibility that considers country specific circumstances. Initiatives, such as the TNFD and ISSB, should continue to work collaboratively toward achieving inclusive globally interoperable reporting frameworks.

Recommendation 2: Relevant country authorities, international organizations, initiatives and other stakeholders are encouraged to develop and strengthen frameworks, systems and tools to identify, measure, address and monitor nature -related risks, opportunities and impacts. These efforts should be in line with country specific circumstances, take into account costs and benefits and recognize that there are some linkages between climate change, biodiversity loss and nature. As part of this, work is encouraged to transform nature and biodiversity related data into decision useful information, including the development of metrics and indicators suited to the needs of financial institutions and corporates to identify, assess, and monitor these risks, opportunities and impacts.

Recommendation 3: Relevant country authorities, international organizations, and market participants should explore options to devote resources to the collection and analysis of high-quality nature related data, as appropriate, especially spatial data to inform decision-making and policy development, taking into account country specific circumstances. Detailed location data are critical for identifying and assessing nature-related risks, dependencies, and impacts. The development and use of tools, such as satellite imagery and artificial intelligence (AI) can help to monitor and evaluate the health of ecosystems.

Recommendation 4: Climate, nature and biodiversity data platforms should collaborate to promote nature and biodiversity data sharing and enable easy access subject to meeting national data security requirements, including through the alignment of data collection and presentation methods, and the development of consistent and inclusive metrics and indicators, as appropriate, that can capture the range of contexts across geographies/countries. Efforts to develop and share data should build on existing initiatives recognizing the interlinked global challenges of climate change and biodiversity loss.

Recommendation 5: Governments should consider taking steps to encourage and enable financial institutions and corporates to identify, assess, regularly monitor, and report on nature- and biodiversity-related risks, dependencies and impacts, where consistent with domestic legal and regulatory frameworks, with the aim of improving the availability and decision-usefulness of such data for businesses, as well as to promote the interoperability of reporting through global efforts.

Recommendation 6: Governments, IOs, or agencies responsible for sustainability reporting frameworks, standards or approaches should collaborate to promote activities and initiatives that help build the skills and technical capacity of financial institutions and corporates to improve nature related reporting and allow for the consideration of nature-related aspects into decision making and processes.

Recommendation 7: Voluntary actions by financial institutions and corporates to identify, assess, and report on nature and biodiversity related risks, dependencies, opportunities and impacts should be encouraged.

3 Capacity Building of the Ecosystem for Financing toward Sustainable Development

Context

Overcoming institutional barriers, strengthening skills, abilities, processes and resources, as well as the underpinning data ecosystem that drives financial decision making can help accelerate the alignment of investments to sustainability goals, appropriate assessment, pricing and management of sustainability-related risks as well as the understanding of its opportunities and impacts.

The Roadmap emphasizes the importance of capacity building, including in relation to EMDEs, but not only, in supporting orderly just, and affordable climate transition. It also encourages IOs and other technical assistance providers to coordinate and align their capacity building efforts with the priorities identified in the Roadmap (Action 19).

This section on Capacity Building of the Ecosystem for Financing Towards Sustainable Development responds to the FMCBG mandate to provide “recommendations for scaling up capacity-building and technical assistance in sustainable finance, including areas such as transition finance framework and climate and sustainability data, in line with country specific needs and circumstances”. In doing so and based on the stocktakes conducted, it presents a Technical Assistance Action Plan that focuses on creating an enabling environment for enhancing capacity building services.

This section also builds on previous SFWG workstreams to support transition finance and the credibility of voluntary financial sector net-zero commitments. As an issue that cuts across several priority areas, this section — as well as recommendations included in previous sections on “Scaling-up the adoption of social impact investment instruments” and “Improving Nature-related Data and Reporting” — provides recommendations for capacity building to identify and overcome data-related barriers to scaling investments for climate action and SDGs, also recognizing this as a key area where the international community at large needs to continue to take action and build capacities.

3.1 Technical Assistance Action Plan

Context

A key bottleneck to further scaling up sustainable finance is the lack of capacity for policy design, implementation and accountability mechanisms, and development and assessment of financial products and bankable projects, including in both developed and developing countries and for MSMEs. The G20 SFWG has recognized that capacity building and technical assistance plays a crucial role in easing this bottleneck.

The G20 Sustainable Finance Roadmap highlights the importance of capacity building in Actions 9, 14, and 19. Recommendation 12 of the 2022 G20 Sustainable Finance Report recommends that technical assistance providers “enhance and expand capacity-building services, including via training of officials, regulators and financial sector professionals, to support the design of sustainable finance policies and roadmaps in developing countries, and enhance capacities of local FIs.” The G20 SFWG has, therefore, identified capacity building of the ecosystem for financing toward sustainable development as a key area in 2023, and intends to deliver practical recommendations for capacity building providers to improve capacity building offerings and foster complementarities across existing and future global initiatives.

Challenges

- a. Although many efforts have already been made in building capacity for sustainable finance, significant gaps remain across various sectors and geographies, especially for developing countries and MSMEs. Existing capacity building initiatives have been constrained by providers’ limited resources and expertise, and thus may focus largely on what can be readily offered, rather than what may be most needed.
- b. While some existing capacity building efforts are in place and carried out in various formats, yet there is a lack of shared understanding of what content and delivery methods are most impactful within specific contexts.
- c. Lack of consistent funding support for capacity building. PDBs and MDBs have been a major provider of technical assistance for economic policies and investment project preparation in EMDEs, but their resources alone cannot meet the scale of demand for capacity building for sustainable finance. Many governments also face significant financial constraints in supporting technical assistance and capacity building activities. Due to scarce funding, capacity building programs for sustainable finance offered by

NGOs, educational institutions, and industrial associations have not been able to meet demand.

- d. Lack of coordination and collaboration among capacity building programs limits their capacity to expand coverage of countries, topics and audiences. This can also result in duplication of efforts and scarcity of meaningful and context-relevant investments in high-quality knowledge products.

Recommended Actions

The following recommendations constitute the Technical Assistance Action Plan (TAAP) under the 2023 G20 Presidency. The TAAP is a multi-year document, to be reviewed periodically, subject to the decisions of incoming G20 Presidencies, working group Co-Chairs, and members, and taking into consideration the developments of sustainable finance markets and needs of sustainable finance practitioners. Relevant actors should consider the TAAP when carrying out capacity building services and initiatives, and relevant IOs may consider implementing the recommendations and periodically reporting on progress with respect to the recommendations. These providers should seek to mobilize financial resources to carry out these activities.

A. Creating an enabling environment for enhancing capacity building services

Recommendation 1: Governments, regional and international fora and IOs should acknowledge the critical role of capacity building in creating the conditions for orderly, just, and affordable transitions. Accordingly, public authorities in collaboration with private sector actors, research and academic institutions, NGOs, and industrial associations should coordinate amongst themselves to strengthen and synergize the delivery of capacity building for sustainable finance in a manner consistent with national sustainable development plans and priorities.

Recommendation 2: Financial market participants should consider enhancing internal capacity to increase investments in the climate transition and SDGs. They should also consider developing sustainable finance competency frameworks to help measure and align relevant governance processes with the gaps identified in employee skills, knowledge, and attributes with relevant climate- and sustainability-aligned plans.

Recommendation 3: Financial institutions should consider raising awareness of financial products available to clients, including MSMEs, to identify, understand, and manage sustainable-related risks.

Recommendation 4: Relevant IOs, regional and international fora, MDBs, DFIs, and other development banks should encourage and support the development of a well-coordinated international network of capacity building service providers to help scale-up their efforts, foster exchange of best practices, develop higher-quality contents for global usage, and better connect content providers with countries and audiences in need⁴⁹.

B. Tailoring capacity building services

Recommendation 5: Relevant public sector authorities, PDBs and IOs should work in collaboration with professional technical assistance and training providers as well as with the recipients of technical assistance, as appropriate, to support capacity building services tailored to local sustainable finance ecosystem needs. Topics could include:

Areas of Focus	Major Topics
Sustainability Alignment Approaches, Frameworks	Sustainable finance alignment approaches (e.g., taxonomy-based approach, principles-based approach, and other alignment approaches) and frameworks. Guidance should be taken from the G20 Sustainable Finance Roadmap and relevant deliverables.
Sustainability Disclosure	Data collection and reporting in alignment with the relevant standards and frameworks, such as ISSB, TCFD, TNFD, GRI.
Financial Product Innovation	Green bonds and loans, social bonds and loans, sustainability bonds and loans, transition products, green insurance products, and blended finance.
Risk Analysis, Regulation	Risk assessment frameworks, scenario analysis, metrics and monitoring, impact measurement, macroprudential analysis, stress testing
Transition Planning	Project preparation and implementation of transition plans and green projects. Transition planning and emissions reduction of key industries, as per country-specific circumstances. Guidance should be taken from the G20 SFWG Transition Finance Framework.

⁴⁹ As an example, the International Development Finance Club (IDFC) has developed a technical assistance facility (Climate Facility) to strengthen knowledge, build capacities and leverage resources in the field of climate change mitigation and adaptation. Moreover, the NGFS has setup a task force that identifies good practices on how central banks and supervisors can design and develop an in-house training/capacity building strategy, map training needs and supply, and facilitate the upskilling of central bankers and financial supervisors.

Recommendation 6: Capacity building service providers, including IOs, are encouraged to focus their offering on the most relevant/critical topics – including, but not limited to, implementation of the transition finance framework, sustainability risk analysis, data collection/ reporting, and issuances of Green Social and Sustainability (GSS) bonds, with a focus on MSMEs, and considering specific needs of EMDEs.

Recommendation 7: Capacity building service providers should strengthen their engagements with recipients to provide more structured and tailored learning programs based on international best practices and learnings, including in local languages, and to expand access through digital technologies and on-line platforms, that may allow for increases in the scale and quality of service delivery.

C. Capacity building on transition finance and other SDGs

Recommendation 8: Capacity building service providers should seek to strengthen their capacity building efforts in promoting the transition finance framework developed by the SFWG in 2022 and in broader topics related to SDGs. They can do this by prioritising capacity building and knowledge sharing under the 5 pillars of the framework, covering identification of transition finance activities and investments, reporting/ disclosure including of transition plans supported by credible pathways, transition-related financial instruments, incentive policies and other supporting measures, and just transition considerations by mitigating potential negative social and economic impact.

Recommendation 9: Financial institutions should consider building capacity in transition planning based on forward-looking data, including but not limited to developing transition finance products, engagement with clients, and developing and disclosing transition plans supported by credible pathways, taking into account country specific circumstances, to set out the steps they will take to achieve their respective transition targets.

3.2 Overcoming data-related barriers to climate investments

Context

An increasing number of initiatives have emerged to support and assess the alignment of private sector finance to the goals of the Paris Agreement.⁵⁰ This diversity calls for improved understanding of the range of data, metrics and methods (e.g., transition planning) needed to support climate investments, considering varying contexts and assessing areas in which specific data, metrics and methods are most useful. In line with actions 4, 8, and 9 of the Roadmap, the SFWG is pursuing work to identify and overcome data-related barriers to climate investment,⁵¹ an issue that cuts across several priority areas. This section on data-related barriers to climate investments builds on previous SFWG workstreams to support transition finance and the credibility of voluntary financial sector net-zero commitments. This section is sequenced under the SFWG priority “Capacity building of the ecosystem for financing toward sustainable development”.

Challenges

Data and metrics that financial sector actors use to communicate alignment with climate action could be crucial to scaling up climate investments. However, challenges remain, including:

- a. Whether data are (a) available, (b) accurate, and (c) comparable (e.g., over time and across different providers).
- b. When measured emissions data are unavailable, the methodologies and assumptions or proxies that are deployed to estimate emissions across a financial institution’s client and portfolio companies are often unclear and can face

⁵⁰ Some examples of initiatives to support and assess the alignment of private sector finance with a net-zero transition are provided in (i) the [SFWG’s 2021 Synthesis Report](#) work on improving the comparability and interoperability of approaches to align investments to sustainability goals (e.g., taxonomies, definitions, ESG ratings, labels, certification/verification, indices, benchmarks, alignment metrics, portfolio tools), in (ii) the [2022 G20 Sustainable Finance Report](#) section on improving the credibility of private sector financial institution commitments, and (iii) during the 2023 SFWG side event, initiatives mentioned such as DGI, UN-PRI Data Portal, the Net Zero Data Public Utility, that seek to increase the availability and accessibility of data were highlighted. Climate-disclosure standards and voluntary reporting frameworks – though often designed for purposes that are distinct from scaling up aligned investments (e.g., objectives such as promoting investor protection, improving risk management) – can also improve data availability and thereby support of climate-aligned investments. Examples also include the revised [G20/OECD Principles of Corporate Governance](#) – which will be delivered to G20 Finance and Central Bank Governors in July 2023 – which contain a new chapter on sustainability and resilience with recommendations. Finally, the OECD also has ongoing work to support international efforts to improve the transparency, comparability, credibility and integrity of climate-related metrics to support tracking and assessments of progress against the financial sector’s net zero commitments and released in 2022 the [OECD Guidance on Transition Finance](#) which has supported SFWG discussions in 2023.

⁵¹ Data-related barriers to scaling investments for select non-climate SDGs are covered in earlier sections on “Scaling-up the adoption of social impact investment instruments” (see recommendation 2) and “Improving Nature-related Data and Reporting” (see all recommendations and note recommendation 6 on capacity building for reporting of nature-related data and information). This section focuses specifically on climate-related data.

- transparency challenges. Commonly used benchmarks often fail to consider country specific circumstances, including capacities of emerging market companies, the effects of which are something we need to be much more aware of.
- c. Financial actors may lack clarity on the link between metrics used to understand the climate alignment of companies and activities and the metrics used to understand the climate alignment of the financial sector actor itself.
 - d. Financial institutions with intentions to support the climate transition may have limited capacity to interpret and use climate-related metrics and data in their decision-making processes, or to assess investments in transition finance, climate solutions, and emissions reductions of hard-to-abate sectors.

Policy Recommendations

In an effort to promote data and metrics for climate-aligned private capital investments, the SFWG makes the following recommendations:

Recommendation 1: Relevant organizations should take stock of data and metrics that financial institutions are using to communicate and understand their approaches to transition finance and other climate solutions. The stocktake should identify any data- and metrics-related gaps.

Recommendation 2: Public authorities should take measures to support financial institutions and corporates in making decision-useful climate-related disclosures. Such measures, which could include the development of national disclosure frameworks, should strive for interoperability with other disclosure frameworks and the standards of the International Sustainability Standards Board (ISSB).

Recommendation 3: Governments and relevant organizations, as appropriate, should convene stakeholders, such as financial institutions, corporates (including MSMEs), relevant public authorities, and academic institutions, to identify options to improve the availability, quality and comparability of data and methodologies such as capital expenditures, GHG-emissions, and transition plans. These data and methodologies should include forward-looking transition-related data and methods, such as from transition plans. Governments and relevant organizations, as appropriate, should account for companies of different sizes, business models and with different starting points in the transition in their convenings.

Recommendation 4: Relevant country authorities, IOs, and private sector institutions, as appropriate, should work together to overcome climate transition-related data and metrics constraints. Relevant country authorities, IOs, and private sector institutions, as appropriate, should also include continued assessment of capacity gaps to ensure agility in response to changing market and policy conditions, and dynamic factors affecting the transition. For example, capacity building for MSMEs to make climate related information available should be considered.

Recommendation 5: Financial institutions and corporations should consider, on a voluntary basis, developing and disclosing transition plans, which have the potential to provide decision useful forward-looking data on the alignment of financial flows and business operations with the goals of the Paris Agreement.

Recommendation 6: Relevant authorities and IOs, as appropriate, should raise awareness among financial institutions about how forward-looking client information can be used to assess, manage, and monitor transition risks and physical risks.