

# FSB Roadmap for Addressing Financial Risks from Climate Change

2022 progress report

14 July 2022



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## Executive summary

One year after the G20 endorsed the FSB Roadmap for Addressing Climate-Related Financial Risks last July, policy action to address such risks is more urgent than ever. The increased frequency and intensity of extreme weather and climate-related events, and the intense debate about current and future energy policies in many jurisdictions, highlight that financial risks related to climate change, including transition risks, are not just a long-term issue or tail event. These developments also highlight the challenges that lie ahead, and underscore the importance of continued progress to embed effective risk management practices and build up financial system resilience to the risks posed by climate change.

Effective action continues to rest on strong international coordination. This first annual progress report on the Roadmap takes stock of progress by standard-setting bodies (SSBs) and other international organisations on the actions coordinated through the Roadmap, outlines areas for further attention, and provides updates where needed to the detailed Roadmap actions and timelines.

Encouraging progress has been made across all four blocks of the Roadmap:

- ***Firm-level disclosures:*** A milestone has been the publication by the newly established International Sustainability Standards Board (ISSB) of two Exposure Drafts, on climate and general sustainability-related disclosure standards. The timely issuance of a final global baseline climate reporting standard ready for market adoption is critical given the global market demand for consistent, comparable and decision-useful disclosures on climate-related risks and opportunities. Alongside a global baseline reporting standard on climate, there is also a growing recognition of the importance of global assurance standards to drive reliability of disclosures.
- ***Data:*** Work has continued on improving the availability and cross-border comparability of climate related data more broadly. A priority is to further coordinate the establishment of common metrics for financial risks (e.g. for financial stability analysis, supervisory reporting), including forward-looking metrics anchored in real-world climate targets. Going forward, it is important to establish data repositories that provide open access to data in a consistent form.
- ***Vulnerabilities analysis:*** Work here has continued to progress along three strands – ongoing monitoring using the tools currently available, development of conceptual frameworks, and further development of scenario analysis. Further experience with building and using climate scenarios can help the monitoring of financial risks to appropriately account for the longer time horizons that climate-related risks may involve.
- ***Regulatory and supervisory practices and tools:*** A number of initiatives have been completed or are well underway across the SSBs and relevant international bodies, including supervisory risk management expectations and supervisory guidance covering the banking, insurance and asset management sectors. Financial authorities should continue to embed the supervision of climate-related risks into overall supervisory frameworks, including the further development of the use of climate scenario analysis and stress testing exercises.

Notwithstanding this progress, the understanding of the financial risks arising from climate change and the policy approaches needed to address them remains at an early stage. The FSB Roadmap will support strong progress in this regard over the coming year (and beyond).

## 1. Introduction

In July 2021, the Financial Stability Board (FSB) published a comprehensive Roadmap to address climate-related financial risks.<sup>1</sup> The Roadmap was endorsed by G20 Finance Ministers and Central Bank Governors and subsequently by G20 Leaders at the Rome Summit. It addressed the need for coordinated action with the large and growing number of international initiatives underway by outlining key actions to be taken by SSBs) and other international organisations over a multi-year period in four key policy areas: firm-level disclosures, data, vulnerabilities analysis, and regulatory and supervisory practices and tools.

One year after the G20 endorsed the Roadmap, policy action to address such risks is more urgent than ever. The increased frequency and intensity of extreme weather and climate-related events, as reported by the Intergovernmental Panel on Climate Change in its Sixth Assessment Report, paints an alarming picture of the physical risks of climate change. It warns of unavoidable climate hazards over the next two decades even with global warming of the targeted 1.5 degrees. At the same time, the impact of Russia's invasion of Ukraine on energy and commodity markets, and intense debate about current and future energy policies in many jurisdictions, highlight that financial risks related to climate change, including transition risks, are not just a long-term issue or tail event. These developments also highlight the challenges that lie ahead, having profoundly changed global economic and financial conditions, and underscore the importance of continued progress to embed effective risk management practices and build up financial system resilience to the risks posed by climate change.

Effective policy action continues to rest on strong international coordination. The G20 has asked the FSB to deliver in July 2022 the first of its annual progress reports on the Roadmap. The objectives of this progress report are to:

- Take stock of progress made one year after the Roadmap was published in July 2021
- Identify and address areas requiring further attention
- Strengthen coordination across the different international initiatives
- Provide updates where needed to the detailed Roadmap actions set out in the **Annex**

This progress report has been prepared in consultation with SSBs and other relevant international bodies. The report also serves as input to broader international policy considerations, such as at the G20, G7 and UN, as well as to the work under the G20 Sustainable Finance Working Group (SFWG) roadmap on sustainable finance.

## 2. Progress made across the four blocks of the Roadmap

Public sector and private sector climate-related initiatives have further developed. Progress has been made across all four blocks of the Roadmap (on firm-level disclosures; data; vulnerabilities analysis; and regulatory and supervisory practices and tools). Areas of initial focus have

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<sup>1</sup> FSB (2021) *FSB Roadmap for Addressing Climate-Related Financial Risks*

included: capacity building within firms and across financial authorities; improving climate-related firm-level disclosures, including the issuance of an Exposure Draft for a global baseline climate-related disclosure standard; assessments of the availability of data more broadly as a basis for the understanding of financial risks arising from climate change; developing and piloting analytical tools, such as climate scenario analyses and stress tests; embedding climate change into risk management practices of financial institutions, and the development of principles for supervisory and regulatory approaches.

The momentum of policy actions taken across the four blocks is encouraging. Nevertheless, understanding of the financial risks arising from climate change and the policy approaches needed to address them remains at an early stage.

## 2.1. Block 1 – Disclosures

*Goal: Achieve globally consistent, comparable, and decision-useful public disclosures by firms of their climate-related financial risks.*

### 2.1.1. Progress made on firm-level disclosures

Work to strengthen the comparability, consistency and decision-usefulness of climate-related financial disclosures has moved forward rapidly. A milestone has been the publication by the newly established International Sustainability Standards Board (ISSB) under the IFRS Foundation of two Exposure Draft standards, on climate-related and general sustainability-related disclosure standards<sup>2</sup>, for public consultation with the aim to issue the final standards by end-2022, subject to feedback. The International Organization of Securities Commissions (IOSCO) is providing important support reviewing the standards, with the objective to consider endorsement for domestic and cross-border use by member market authorities across jurisdictions.

Both ISSB Exposure Draft standards build on the recommendations by the FSB's Task Force on Climate-related Financial Disclosures (TCFD) and the work of international sustainability bodies. The ISSB standards aim to establish a common global baseline that is interoperable with jurisdictions' frameworks through a building block approach that will drive more comparability and consistency on common climate disclosures across jurisdictions. The ISSB is putting in place governance arrangements to enable input from a wide range of stakeholders.

In the meantime, firms and jurisdictions have also made steady progress in the adoption and implementation of climate-related disclosures and requirements using frameworks based on the TCFD recommendations. Also individual jurisdictions have moved forward rapidly. For example, the US Securities Exchange Commission (SEC) proposed for public comment amendments to its rules that would require registrants to provide certain climate-related information in their registration statement and annual reports.<sup>3</sup> The European Union have launched public

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<sup>2</sup> ISSB (2022), *Exposure draft: IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information; Exposure Draft: IFRS S2 Climate-related Disclosures*

<sup>3</sup> SEC (2022), *Enhancement and Standardization of Climate-Related Disclosures for Investors* (March). In addition, the US Executive Committee of the National Association of Insurance Commissioners recently adopted a *revised Climate Risk Disclosure Survey* aligned with the FSB's TCFD for large insurers.



consultations on climate-related reporting standards and in the case of the EU on a broader range of sustainability matters<sup>4</sup>. The FSB and other bodies are continuing to promote consistent approaches among national and regional climate disclosure initiatives.

During the period until the ISSB global baseline standard is agreed and the implementation of that standard across jurisdictions begins to be monitored, there is a continuing need to maintain momentum by monitoring and reporting on progress in firms' climate disclosures. The FSB therefore requested in October 2021 that the TCFD continue its work to promote and monitor progress in firms' take-up of its recommendations, and publish in September 2022 a further status report on firms' disclosures that, by being TCFD-aligned, will be using a common basis with the planned global baseline standard.

The FSB will publish an overall progress report on climate disclosures in October 2022, which will report in further detail on the progress made by the ISSB, individual jurisdictions and firms in improving climate disclosures.

### 2.1.2. *Key areas for future work*

The timely issuance of a final global baseline climate reporting standard, and its interoperability with jurisdictions' requirements, are critical given the urgency of global market demand for comparable, consistent and decision-useful disclosures on climate-related risks and opportunities. Progress on standardising disclosures of metrics, including Scope 1, 2 and 3 Greenhouse Gas emissions, would drive comparability and better data. Disclosures on transition plans to measure progress and the impact of different climate scenarios on firms' business strategy would assist the assessment of resilience.

The work of the ISSB on the finalisation of its standards, IOSCO's work on endorsement and jurisdictions' work on implementation are important near-term priorities for disclosures. If IOSCO issues an endorsement of the ISSB standards, jurisdictions should take early action to consider the final global baseline reporting standards for use. IOSCO will seek to assist jurisdictions through a broad capacity building programme, working closely with the ISSB.

If IOSCO endorses the standards, sectoral SSBs intend to review their own standards for supervisory and regulatory disclosure requirements for climate-related financial risks, consistent with the new ISSB disclosure standards for publicly listed companies. The Basel Committee on Banking Supervision (BCBS) has announced that, in parallel with the ISSB's work, it will explore using Pillar 3 of the Basel Framework to promote a common disclosure baseline for climate-related financial risks across internationally active banks.

### *Assurance over sustainability-related reporting*

Alongside a global baseline reporting standard on climate, there is a growing recognition of the importance of global assurance standards to drive *reliability* of disclosures. Implementation of the global baseline climate reporting standard will create heightened expectations for the

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<sup>4</sup> European Financial Reporting Advisory Group (EFRAG) (2022), public consultation on the first set of *Draft European Sustainability Reporting Standards (ESRS)*, April.

reliability of climate-related disclosures and therefore, external audit firms and other third-party service providers will face increasing demand to provide external assurance.

Therefore, an important area for future work will be on the development of new sustainability assurance. ethics and independence standards, involving the work of the International Auditing and Assurance Standards Board (IAASB) and the International Ethics Standards Board for Accountants (IESBA) to develop robust standards and actions to promote consistency in practices. Transparency by reporting firms on the level of assurance obtained, and on what particular scope of disclosures, will be important to proactively address market expectations.

## 2.2. Block 2 – Data

*Goal: Establish a basis of comprehensive, consistent, and comparable data for monitoring climate-related financial risks globally.*

### 2.2.1. Progress made on data

Work in 2021-22 has so far focused on improving the availability and cross-border comparability of climate data. Data that is disclosed is meaningful if it is accessible and comparable across different jurisdictions. To facilitate this, the Network for Greening the Financial System (NGFS) has established a data directory of available climate data sources that are mapped to metrics required for specific use cases, such as for the purposes of financial stability monitoring and stress testing. Progress made on firm-level disclosures will also improve the availability and comparability of climate data.

At a macro-level, the new G20 Data Gaps Initiative (DGI) work plan, led by the International Monetary Fund (IMF) in close cooperation with the Inter-Agency Group on Economic and Financial Statistics (IAG) and the FSB, is focused on improving data availability on various climate exposures across different jurisdictions. There has also been a growing focus on developing data platforms (e.g. Organisation for Economic Co-operation and Development (OECD) Climate Action Dashboard<sup>5</sup> and World Bank Climate Change Knowledge Portal<sup>6</sup>) that offer a common access point to collect relevant climate data and compute metrics for a specific use case, such as exposures to physical risks. The IMF climate change dashboard provides another data source.

Where relevant climate data is not directly accessible, international organisations have also formulated plans to regularly collect data on financial sector exposures. For instance, the International Association of Insurance Supervisors (IAIS) collected sectoral data on insurance sector exposures across its membership as part of its quantitative study on the impact of climate risks and has embedded climate data elements in its Global Monitoring Exercise (GME).<sup>7</sup>

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<sup>5</sup> Available [here](#).

<sup>6</sup> Available [here](#).

<sup>7</sup> IAIS (2021) *Global insurance market report: The impact of climate change on the financial stability of the insurance sector: Special Topic Edition*.

Building on the NGFS data directory and other international efforts, FSB's work has progressed on two fronts: first, identifying data sources and gaps based on regulatory and supervisory practices through its interim report on regulatory and supervisory approaches to climate-related risks.<sup>8</sup> Second, the FSB has also worked towards taking practical steps to identifying specific climate-related vulnerabilities that warrant close monitoring and is identifying data sources that could be used for computing relevant metrics for its own internal vulnerabilities analysis.

## 2.2.2. Key areas for future work

### *Developing the climate data landscape*

The availability of high quality, sufficiently granular and comparable data will remain a priority as it is a prerequisite to monitoring the build-up of climate-related risks in the financial system. This will be shaped by a greater convergence in global climate disclosure standards and assurance mechanisms. The NGFS data directory will play a crucial role in assessing the progress made in filling data gaps to develop metrics.

Going forward, it is important to establish data repositories that provide open access to data in a consistent form. The establishment of such data infrastructures would facilitate development and use of metrics that reflect climate-related risks consistently and reliably across sectors and jurisdictions.

The focus of the Roadmap is on financial risk, and therefore in this block of the Roadmap the focus is on data for understanding financial risk. Data that is developed primarily for ESG or transition planning purposes may also be useful for financial risk purposes. To further improve data consistency and reliability, OECD and IOSCO are planning to establish frameworks and develop guidance for good market practices in ESG and climate transition frameworks.

### *Towards Forward-looking Metrics*

An important focus of future work should be to identify data needs for developing forward-looking metrics for the purpose of monitoring climate-related risks. A necessary first step in this direction would be the release of a new set of NGFS scenarios by July 2022 that would strengthen the modelling of physical risks and enhance sectoral granularity and geographical coverage.

Such metrics rely on the credibility of forward-looking data (e.g., transition plans and climate targets). The OECD is currently developing guidance on development of credible corporate transition plans and the recently launched One Planet Data Hub<sup>9</sup> aims to develop a global open data platform to consolidate and standardise information on firm-level transition plans and climate commitments towards a net-zero economy. These initiatives can provide important steps towards improving the data landscape to reflect the forward-looking nature of climate risks and developing metrics for assessing climate risks.

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<sup>8</sup> FSB (2022) *Supervisory and regulatory approaches to climate-related risks: Interim Report*, April.

<sup>9</sup> Available [here](#).

An important area of future work is to further coordinate the establishment of common metrics (e.g. for financial stability analysis, disclosures and supervisory reporting). The FSB's future work would also focus on developing metrics for climate-related financial risks for monitoring climate vulnerabilities across borders and sectors, and continuing to improve them through learning as the data landscape evolves.

## 2.3. Block 3 – Vulnerabilities analysis

*Goal: To more systematically assess and better understand climate-related financial vulnerabilities and potential financial stability impacts.*

### 2.3.1. Progress made on vulnerabilities analysis

Work on systematically assessing and better understanding climate-related financial vulnerabilities has continued to progress along three strands – ongoing monitoring, development of conceptual frameworks, and further development of scenario analysis. The analytical basis for understanding the nature of climate-related risks and vulnerabilities has been further strengthened. Building on earlier work by the FSB and its members, the FSB is conducting work to identify areas of current concern and associated metrics based on their materiality as well as their cross-border and cross-sectoral relevance, to be integrated into its surveillance framework for global financial risks. The NGFS has released a report on 'Scenarios in Action' highlighting members' experiences with stress testing and scenario-based risk assessment.

Alongside this, conceptual work on a monitoring framework has continued. The IAIS will continue to develop the climate risk aspects of its GME based on lessons learnt. The FSB has considered in particular how monitoring climate-related financial vulnerabilities may differ from regular vulnerabilities monitoring. Also, the OECD is periodically engaging in surveillance of climate transition data.

Experience with developing and applying climate scenario analysis continues to evolve. The NGFS in 2021 released a second vintage of reference scenario for central banks and supervisors and expects to provide a third vintage of these scenarios in July 2022. The FSB and the NGFS will publish a joint report in November 2022 on climate scenario analyses to draw lessons learnt for effective scenario analysis and to bring together a global perspective from the various national and regional scenarios conducted to date.

These improvements in developing analytical frameworks are being made use of in regular monitoring activities. The IMF and World Bank are conducting climate risk analyses through their Financial Sector Assessment Programs to help members better understand potential pressure points on their financial systems due to physical climate shocks and in the transition to a low-carbon economy. The IAIS is preparing a chapter on climate risks in the global insurance sector for its upcoming Global Insurance Market Report, using data collected in its 2022 GME. The FSB will implement first lessons learnt within a 'proof of concept' for incorporating climate into regular global vulnerabilities monitoring.

### 2.3.2. Key areas for future work

#### *Moving to regular monitoring in a timely yet flexible manner*

Although the development of analytical tools to understand financial vulnerabilities from climate change is still at an early stage, authorities are recognising the need to use the tools that are available today to incorporate regular monitoring and assessment of climate-related financial risks into overall financial risk monitoring. Authorities' financial stability assessments increasingly cite emerging financial vulnerabilities related to climate change. To monitor these, it is important to have a framework in place that can be used at least from a qualitative perspective, given the continuing data gaps and the incomplete picture in terms of geographic and risk coverage. This will also require close coordination with many of the data aspects covered in Block 2 of the Roadmap. The experience with conducting analysis can be used to further guide the work on conceptual foundations and analytical frameworks.

#### *Embedding climate scenarios into monitoring*

Further experience with building and using climate scenarios can help the monitoring of financial risks to appropriately account for the longer time horizons that climate-related risks may involve. Compared to traditional vulnerabilities monitoring, the time horizon that needs to be considered to understand climate-related risks is much longer and the outcomes more uncertain. Increased use of existing climate scenarios, such as those developed by the NGFS, will help better understand the nature of climate-related vulnerabilities. To promote the use of climate scenarios, it is important that these offer sufficient details in terms of risks considered, granularity of effects, and the range of macro financial impacts considered, including taking account of feedback loops between the financial sector and the real economy. Work on climate scenarios will need to be coordinated with the development of forward-looking metrics, as described under Block 2 of the Roadmap.

## 2.4. Block 4 –Regulatory and supervisory practices and tools

*Goal: Establish effective and, where useful and appropriate, consistent supervisory and regulatory approaches and tools to address climate-related risks, both within individual sectors and at the system-wide level.*

### 2.4.1. Progress made on supervisory and regulatory approaches

A number of initiatives on supervisory and regulatory approaches and tools have been completed or are well underway across the SSBs and relevant international bodies, including the BCBS, IAIS, IOSCO, FSB, Financial Stability Institute (FSI) and NGFS. These include capacity building initiatives, such as the launch of the Climate Training Alliance, and embedding climate change into risk management practices of financial institutions. The sectoral SSBs as well as the NGFS have developed supervisory risk management expectations on climate-related risks and supervisory guidance covering the banking, insurance and asset management sectors. IOSCO is calling on all voluntary SSBs and industry associations operating in financial markets

to promote amongst their members good practices stemming from the IOSCO recommendations for asset managers, and for ESG ratings and data providers<sup>10</sup>.

While climate-related risks present unique features, they can be integrated into existing risk management frameworks. SSBs and financial authorities are taking steps to evaluate whether the current prudential regulatory frameworks sufficiently capture the risks posed by climate change, including through gap analyses of the regulatory frameworks. The IAIS has concluded that the Insurance Core Principles (ICPs) are sufficiently broad to cover climate risks and plans to make a limited number of changes to the explanatory guidance in the ICPs and develop supporting material with more explicit integration of climate risk in the ICPs. The BCBS published in June 2022 its final Principles for the effective management and supervision of climate-related financial risks,<sup>11</sup> which seek to improve banks' risk management and supervisors' practices. The NGFS also published its study on credit risk differentials between 'green' and 'non-green' assets and activities, looking at potential adjustment of the existing capital framework.<sup>12</sup>

From a cross-sectoral and cross jurisdictional perspective, the FSB issued its consultative interim report in April 2022<sup>13</sup> (with a final report due in October 2022) that aims to assist supervisory and regulatory authorities in developing their approaches to monitor, manage and mitigate risks arising from climate change and promote consistent approaches. The FSB will consider in 2024 whether to conduct a peer review of supervisory and regulatory practices against its recommendations across jurisdictions.

#### 2.4.2. Key areas for future work

##### *Embedding climate-related risk into risk management and prudential regulatory frameworks*

Building on shared experiences, financial authorities should continue to embed the supervision of climate-related financial risks into overall supervisory frameworks.

Financial institutions themselves will need to place priority on, and dedicate sufficient resources to, embedding supervisory risk management expectations of climate-related risks into practices, including on strategy, governance, risk management processes and controls. Their management of climate-related risks will need to flow down to decision-making in front line business functions. As part of this work, firms' development of transition plans is an area of growing importance and the potential oversight role of supervisors is starting to be explored (e.g. through the NGFS).

Sectoral SSBs will continue their work on gap analyses and potential adjustments to standards or provide further guidance. For instance, the BCBS' work on regulation will continue to explore possible measures to address any identified gaps in the Basel regulatory framework, and the IAIS will make a limited number of changes to the explanatory guidance and develop supporting material, as mentioned above.

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<sup>10</sup> IOSCO (2021), *Environmental, Social and Governance (ESG) Ratings and Data Products Providers*, November; *Recommendations on Sustainability-Related Practices, Policies, Procedures and Disclosure in Asset Management*, June.

<sup>11</sup> BCBS (2022), *Principles for the effective management and supervision of climate-related financial risks*.

<sup>12</sup> NGFS (2022), *Capturing risk differentials from climate-related risks: A Progress Report*.

<sup>13</sup> FSB (2022).

Individual financial authorities will be undertaking further analysis to explore enhancements to their prudential supervisory and regulatory frameworks. For example, the appropriate use of supervisory tools is being considered by authorities, where financial institutions are assessed by supervisors as not sufficiently managing their climate-related risks and ensuring capital adequacy.

### *Expanding the use of climate scenario analysis and stress testing*

Further development of the use of climate scenario analysis and stress testing exercises to serve as a key tool within supervisory frameworks will help inform supervisory and regulatory actions. The use of these analytical tools has facilitated the initial identification and assessment of risk exposures and potential impacts of physical and transition risks on financial institutions and the financial system. These tools allow a forward-looking and flexible approach through different scenarios. BCBS members are engaged in an ongoing exchange of views on their experience with designing supervisory scenario analysis and using the results. Meanwhile, the IAIS is undertaking a capacity building initiative to support supervisors as they develop climate scenario analysis. Deepening the use of these tools and expanding their scope will contribute to identifying the risks arising from climate change and understanding the financial impacts. For financial stability purposes, further development of scenario analysis and stress tests will be needed, to develop a truly system-wide approach that covers key financial sectors, interdependencies between risks and systemic risk aspects such as indirect exposures, risk transfers, spillovers and feedback loops, including with the real economy. *Potential role of macroprudential tools*

Microprudential tools alone may not sufficiently address the cross-sectoral, global and systemic dimensions of climate-related risks. Given that the potential role of macroprudential tools remains at an early stage, financial authorities and SSBs are encouraged to undertake research and analysis on the appropriate enhancements to their regulatory and supervisory frameworks, including the use of macroprudential tools.

## 3. Engagement with external stakeholders

Engagement with external stakeholders, including the private sector, is essential to understand evolving risk management practices, firms' progress on their transition to net-zero by 2050 and how methodologies and analytical tools to measure and analyse climate-related risks can evolve over time. This engagement takes place through a variety of fora, including public outreach, conferences, workshops and bilateral contacts.

The FSB's engagement with the private sector began with the formation of the TCFD in 2015 and has further developed through a wide variety of fora since then. In 2021, the Glasgow Financial Alliance for Net Zero (GFANZ) briefed the FSB on its work to support an orderly transition to a net-zero financial system. The FSB asked GFANZ to continue to periodically report to the FSB on the progress of its initiative, so that the FSB can monitor the implications from a financial stability perspective.

## 4. Conclusion

This progress report presents a consolidated update on the progress made by the SSBs and relevant international organisations, across a wide variety of initiatives to assess and address the financial risk from climate change, and identifies the key areas that continue to require attention. There continues to be a need for strong international coordination of actions in the coming year (and beyond) because of the importance of this issue for the global financial system. The FSB will continue to publish annual progress reports and submit them to the G20, with the FSB Steering Committee continuing to act as the coordinating body for the overall Roadmap.

The Roadmap will continue to stay flexible over time to be able to respond to the deepening understanding of climate-related financial risks and to undertake further work, adjust priorities and timelines, and take action where needed. Meanwhile, understanding of the implications of other sustainability topics, such as biodiversity loss, is also deepening. The FSB will continue to consider whether to include a broader range of sustainability topics in its financial stability agenda in future years.

The Annex provides an update to the July 2021 detailed Roadmap description of the planned actions and deliverables across the SSBs and relevant international organisations.



## Annex: Key actions and deliverables for the Roadmap

### Block 1 – Disclosures

#### *Objective*

Establish a global minimum standard for disclosures on climate-related financial risks

- IFRS Foundation to develop, under robust governance and public oversight, consistent, comparable and reliable global baseline standards for sustainability-related financial disclosures, which include disclosure standards for climate-related financial risks built from the TCFD framework and the work of an alliance of sustainability standard setters, involving them and a wider range of stakeholders closely, including national and regional authorities, to foster global best practice and accelerate convergence. The standard to accommodate interoperability with jurisdiction-specific disclosure requirements, including those that may extend beyond the baseline. Towards that end, when considering the interoperability of these baseline standards, the multi-stakeholder consultative committee and jurisdictional working group under the ISSB should take into account existing national and regional requirements in terms of sustainability reporting, as well as ongoing national and regional efforts to develop such standards. Some jurisdictions' domestic efforts to adopt disclosure requirements may proceed in a more accelerated timeframe than the IFRS Foundation's work.
- Provided that official sector's expectations regarding the IFRS process and standards are satisfied and result in IOSCO's endorsement, sectoral standard-setting bodies to build on the ISSB standards through their own supervisory and regulatory reporting requirements, which may include public disclosure frameworks.
- FSB and other bodies to promote consistent approaches among national and regional climate disclosure initiatives in the meantime, fostering coordination and collaboration among financial authorities across jurisdictions.
- IAASB and IESBA to develop, under robust governance and public interest oversight, baseline global standards for assurance, ethics and independence on sustainability reporting, to enhance the confidence of users about mainstream, general-purpose reporting of sustainability information. Such a principles-based global solution would serve to improve consistency, comparability and transparency. The IAASB should consider existing assurance standards and guidance, and further develop the assurance concepts and principles.

The steps set out below in the roadmap are indicative and each step described to be taken is subject to the outcomes of necessary prior steps being satisfactorily achieved. Given this indicative status, they do not represent commitments either by jurisdictions or by international bodies to the individual actions or dates.

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<b>1. IFRS Foundation to develop baseline global standards for climate from an enterprise value creation perspective</b>		
(i) Establishment of the International Sustainability Standards Board (ISSB) under the IFRS Foundation, with an initial focus on climate-related reporting		
<ul style="list-style-type: none"> <li><i>Public consultation on changes to the IFRS Foundation constitution to accommodate the potential formation of the new ISSB</i></li> </ul>	Completed – Consultation opened March 2021 and closed July 2021	
<ul style="list-style-type: none"> <li><i>Establishment of ISSB (based on IFRS Foundation Constitution)</i></li> </ul>	Completed – announced at COP26 held in November 2021	
<ul style="list-style-type: none"> <li><i>Establishment of a multi-stakeholder expert consultative committee: (i) to provide input and strategic advice to the ISSB on potentially relevant sustainability topics from an enterprise value creation perspective and to (ii) to promote interoperability with jurisdiction-specific requirements</i></li> </ul>	<p>The Sustainability Consultative Committee was established with four multilateral core members IMF, OECD, UN, World Bank and with expert members from public, private and non-governmental organisations (due to be announced early July 2022).</p> <p>Jurisdictional Working Group established in April 2022, to enhance compatibility between global baseline and jurisdictional initiatives.</p>	Input of other standard setters will be needed, given importance of public disclosures to financial regulatory reporting, supervision and financial institutions' risk management

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(ii) Developing ISSB sustainability reporting standards, with an initial focus on climate from an enterprise value creation perspective		IFRS Foundation to promote connectivity between financial reporting standards and ISSB sustainability reporting standards
<ul style="list-style-type: none"> <li><i>IFRS Foundation establishment of the technical working group contributing to further developing the climate prototype standard<sup>14</sup>, with accompanying IOSCO Technical Expert Group to assess prototype.</i></li> </ul>	Completed – Established in March 2021	
<ul style="list-style-type: none"> <li><i>IFRS Foundation technical working group completion of <u>climate prototype standard</u></i></li> </ul>	Completed – November 2021	
<ul style="list-style-type: none"> <li><i>IOSCO initial assessment of climate prototype standard for use as a basis to develop an ISSB standard, including whether it provides a sound basis for the development of an assurance framework</i></li> </ul>	Completed	
<ul style="list-style-type: none"> <li><i>ISSB to publish Exposure Drafts for <u>Disclosure of Sustainability-related Financial Information</u> and for <u>Climate-related Disclosures</u> published March Exposure Draft of new standard</i></li> </ul>	Completed – March 2022	
<ul style="list-style-type: none"> <li><i>ISSB to publish public consultation on technical agenda</i></li> </ul>	Q4 2022	
<ul style="list-style-type: none"> <li><i>ISSB to publish final versions of standards, following on from Exposure Drafts</i></li> </ul>	Q4 2022 depending on feedback	
(iii) IOSCO to consider whether to endorse ISSB standard.	Following ISSB publication of its new standard	
<ul style="list-style-type: none"> <li><i>If standard is endorsed, IOSCO to encourage members to consider ISSB standards when setting</i></li> </ul>	Conditional upon IOSCO endorsement	

<sup>14</sup> An initial version of the prototype climate-related financial disclosure standard was published in December 2020.

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<p><i>sustainability reporting requirements for cross-border purpose and at the domestic level, taking account of their domestic legal frameworks</i></p> <ul style="list-style-type: none"> <li><i>IOSCO to develop guidance or toolkits in order to assist its members with regard to the implementation of the ISSB standards into their own legislative and regulatory frameworks.</i></li> </ul>	<p>Likely between Q3 2022 and Q1 2023</p>	
<p>(iv) If endorsed, making use of the new ISSB standard</p>		<p>The steps described in this section (iv) are subject to the prior steps being satisfactorily achieved, to IOSCO endorsement of the ISSB standard and to jurisdictions' expectations regarding the IFRS Foundation's process and standards being satisfied.</p> <p>If IOSCO issues an endorsement of ISSB standards, IOSCO would encourage IOSCO members and relevant authorities to consider the ISSB's standards for use for cross-border purposes and when setting sustainability-related disclosure requirements in their respective jurisdictions.</p> <p>Some jurisdictions' domestic efforts to implement climate disclosure requirements may have proceeded in a more accelerated timeframe</p> <p>Each jurisdiction will have its own legal framework for adopting, applying or otherwise utilising international standards, reflecting each jurisdiction's circumstances. These may involve, for example:</p> <ul style="list-style-type: none"> <li><i>Incorporation, utilisation or reference by securities regulators in developing offering/listing requirements and other</i></li> </ul>

Actions/deliverables	Indicative timeline	Interconnections within roadmap
		<p><i>ongoing and periodic reporting requirements.</i></p> <ul style="list-style-type: none"> <li>• <i>National and regional accounting standard-setters' adoption or utilisation of ISSB standards at the local level as a minimum.</i></li> <li>• <i>Other financial regulators' actions (including potentially covering companies that are not publicly listed).</i></li> <li>• <i>Steps may include possible industry-specific requirements, for types of either financial institutions or nonfinancial companies.</i></li> </ul>
<ul style="list-style-type: none"> <li>• <i>Effective dates of the new standard to be set out following consultation on ISSB climate-related standard</i></li> </ul>	Planned for Q4 2022, depending on feedback received	<p>IFRS standards typically are accompanied by dates from which they are effective.</p> <p>Early adoption would be an option.</p> <p>Timeline and types of actions will also depend on steps taken by individual jurisdictions and industry-specific standard setters in line with domestic legal and regulatory frameworks.</p>
<ul style="list-style-type: none"> <li>• <i>ISSB to publish consultation document on its future work programme on ISSB sustainability reporting standards, beyond climate</i></li> </ul>	Q4 2022	
(v) TCFD further work to promote take-up of, and provide guidance on, recommendations:		This work both helps prepare for rapid market take-up of the new ISSB standard and promotes fuller and more consistent disclosures in the meantime
<ul style="list-style-type: none"> <li>• <i>Participation on the IFRS Foundation technical working group to develop prototype standard</i></li> </ul>	Completed – April 2021	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<ul style="list-style-type: none"> <li>• <i>Guidance on metrics, targets, and transition plans</i></li> </ul>	Completed – October 2021	
<ul style="list-style-type: none"> <li>• <i>2021 Status Report on the implementation progress of TCFD Recommendations</i></li> </ul>	Completed – October 2021	
<ul style="list-style-type: none"> <li>• <i>TCFD-sponsored World Business Council for Sustainable Development consultation document on business reference scenarios for the energy system</i></li> </ul>	Completed – October 2021	
<ul style="list-style-type: none"> <li>• <i>2022 Status Report on the implementation progress of TCFD Recommendations</i></li> </ul>	October 2022	To be delivered to FSB and published
<b>2. IAASB to develop global standards for assurance on sustainability reporting</b>		
(i) Initial phase: Develop an overarching standard for assurance on sustainability reporting for use for all sustainability topics (e.g., climate, human rights, biodiversity), and with any underlying reporting standard.		
<ul style="list-style-type: none"> <li>• <i>IAASB to publish Exposure Draft of overarching standard</i></li> </ul>	Q4 2023	
<ul style="list-style-type: none"> <li>• <i>IAASB to publish final version of overarching standard</i></li> </ul>	Q2 2025	
(ii) Future work: Further develop the standard(s) for assurance on sustainability reporting. Topics selected would be based on priorities identified at the time, taking into account the public interest, and subject to consultation on the IAASB's Work Plan.		
(iii) IOSCO to set out its vision for a sustainability assurance framework	Q4 2022 / Q1 2023 (Likely publish a statement setting out the approach IOSCO intends to take in Q3 2022)	Engagement with SSBs on this work

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<b>3. Promoting consistent approaches among national and regional climate disclosure initiatives during the development of a global standard</b>		
(i) <u>FSB report</u> to G20, with high-level recommendations on promoting consistent climate-related financial disclosures based on the TCFD Recommendations	Completed – July 2021	
(ii) FSB and other bodies will promote consistent approaches among national and regional climate disclosure initiatives, using frameworks based on the TCFD Recommendations for climate-related financial disclosures, in line with domestic legal and regulatory frameworks, as work on the issuance of ISSB standards progresses	Update to be included in FSB October 2022 progress report on disclosures	FSB October 2022 progress report on disclosures is shown item 5(i) below
(iii) <u>NGFS Progress Report</u> on the implementation of the recommendations of its Guide for Supervisors will cover disclosure practices and include supervisors' expectations on disclosures by banks and insurers	Completed – October 2021	
(iv) <u>NGFS Guide on climate-related disclosure for central banks</u> to promote TCFD-aligned disclosure by central banks, allowing them to lead by example	Completed – December 2021	
<b>4. SSB work on sectoral standards for disclosure requirements</b>		Consistency between ISSB disclosures standards (if endorsed) and sectoral standards for disclosures will be important
(i) <u>IOSCO report on sustainability-related disclosures for issuers</u>	Completed – June 2021	
(ii) <u>IOSCO report, with recommendations, on supervisory and regulatory practices for asset managers, and related disclosures</u> , including greenwashing and other investor protection concerns	Completed – Consultation report in June 2021 and final report in November 2021	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(iii) BCBS to explore use of Pillar 3 framework to promote a common disclosure baseline for climate-related financial risks across internationally active banks	Ongoing	
(iv) IAIS to consider disclosure issues as part of the consultation on ICP supporting materials.	Q3 2023	
<b>5. Reporting on progress in disclosures</b>		
(i) FSB, coordinating with IFRS, IOSCO and others, to report annually to the G20 on progress in implementation by jurisdictions and firms of disclosures and reporting in line with international standards	October 2022 onwards (annually)	



## Block 2 – Data

### Objective

Establish a basis of comprehensive and robust international data for both the private sector and financial authorities to monitor and assess climate-related financial risks faced by individual entities and by the system as a whole.

- Assess the availability of data with which to monitor and assess climate-related financial risks, identify data gaps.
- Take steps to fill gaps, with a special emphasis on ensuring cross-sectoral and international consistency.
- Develop forward-looking metrics – anchored in real-world climate targets – that can translate climate, and the transitions to low-carbon economies, and other information into financial impacts.

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<b>1. Assessing data availability and identifying data gaps, with respect to both publicly available data and supervisory data</b>		
(i) Report by FSB on the <u>availability of data through which climate-related risks to financial stability</u> can be monitored, as well as any data gaps	Completed – Delivered to G20 FMCBG Meeting in July 2021.	
(ii) Report by NGFS identifying the climate-related data needs – and gaps – of financial sector stakeholders (e.g. central banks and supervisors, banks, asset managers) <ul style="list-style-type: none"> <li>• <u>Progress report</u></li> <li>• <u>Final report</u></li> </ul>	Completed – May 2021 Completed – June 2022	
<b>2. Filling data gaps</b>		
Further work to be included on steps to fill data gaps and establish consistent cross-jurisdiction and cross-sector data		Work to fill data gaps will inform, and be informed by, the work in Block 1 to develop standardised disclosures

Actions/deliverables	Indicative timeline	Interconnections within roadmap
sets relating to climate-related financial risks. Steps here could include:		
(i) FSB and NGFS to coordinate work by various bodies to fill data gaps identified by FSB and NGFS 2021 reports.	Ongoing	
(ii) IMF work on climate-related data availability and needs from a macroeconomic and financial policy analysis perspective (including further development of relevant information in its Climate Change Dashboard)	Ongoing	
(i) New G20 DGI workplan led by the IMF, in close cooperation with the FSB and IAG, that includes recommendations to address data gaps relating to climate, including indicators related to physical and transition risk	New DGI to be launched in 2022 following approval by G20 FMCBG	
(ii) Launch of <u>World Bank Climate Change Knowledge Portal</u> that acts as a platform for global physical risk data (historical and forward-looking) and country profiles for qualitative data on adaptation efforts	Completed – November 2021	
(iii) Report by IAIS on <u>assessing climate-related risks to the insurance sector</u> , with a focus on investment exposures, making use of an IAIS data collection amongst Members	Completed – September 2021	
(iv) IAIS to regularly collect and analyse data on exposure of insurance sector assets and liabilities to climate-related risks as part of its Global Monitoring Exercise (GME)	Conclusions to be published as part of Q4 2022 and onwards	
(v) IAIS will consider whether data needs to be collected from individual insurers to understand climate risk for the global insurance sector.	Q1 2023	
(vi) Report by BIS-IFC highlighting <u>data availability and gaps in sustainable finance data</u> from the perspective of the central banking community	Completed – December 2021	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(vii) Launch of <u>NGFS data directory</u> of data sources that can be mapped to different climate metrics. NGFS to engage with various bodies to advance the data agenda in that context.	Initial consultation: April 2022 Launch: TBD	
<b>3. Developing forward-looking metrics on the financial impacts of climate change and transition</b>		
(i) BCBS report on <u>climate-related financial risks - measurement methodologies</u>	Completed – April 2021	
(ii) BCBS considering appropriate risk metrics for banks as part of its development of a potential Pillar 3 framework	Ongoing	
(iii) FSB and NGFS joint report on scenario analysis and the financial metrics needed for this analysis, both at the level of the firm and the overall system.	November 2022	World Bank is also developing a technical note on physical climate risk assessment for EMDEs
(iv) NGFS to consider the suitability of the NGFS climate scenarios for financial institutions' disclosure purposes	2022-2024	
(v) FSB to develop consistent metrics for use in climate-related vulnerabilities monitoring (see Block 3) and identify data availability and gaps for metrics.	November 2022	
(vi) FSB to develop broader data-based methodology for monitoring of global climate vulnerabilities, including through the use of consistent classification	2023	The FSB will coordinate with the relevant SSBs to ensure consistency with any equivalent work they carry out.
(vii) IOSCO report on ESG ratings and ESG data providers. <ul style="list-style-type: none"> <li>• <u>Consultation Report</u></li> <li>• <u>Final Report</u></li> </ul>	Completed – July 2021 Completed – November 2021	
(viii) <u>OECD report</u> on the extent to which ESG metrics in disclosures and ratings align with climate transitions, and therefore can contribute to transition planning.	Completed – June 2022	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(ix) OECD to develop ESG risk policy framework, including policy recommendations on credible corporate transition plans	2023	
(x) <u>NGFS report on Market Transparency</u> , including an assessment of current methodologies and practices to incorporate climate transition metrics into environmental pillar assessments of ESG	Completed – April 2022	

## Block 3 – Vulnerabilities analysis

### Objective

Carry out systematic and regular assessments of climate-related financial vulnerabilities and financial stability impacts.

- Address open analytical issues in assessing climate-related financial risks
- Develop a monitoring framework for vulnerabilities, mitigants and the level of resilience
- Deepen scenario analysis
- Establish regular monitoring and assessment of climate-related financial risks and vulnerabilities

Actions/deliverables:	Indicative timeline	Interconnections within roadmap
<b>1. Analysing the nature of climate-related risks and vulnerabilities</b>		
(i) FSB report on the <u>implications of climate change for financial stability</u>	Completed – November 2020	Informs work on identifying and addressing data gaps
(ii) BCBS report on <u>climate-related risk drivers and their transmission channels</u>	Completed – April 2021	
(iii) BCBS members exchange views on key supervisory issues and climate-related financial vulnerabilities	Ongoing	
(iv) IAIS GIMAR will include a chapter that assesses climate risks in the global insurance sector using data collected in 2022 GME.	Q4 2022	
(v) IAIS report on assessing <u>climate-related risks to the insurance sector</u> , with a focus on investment exposures	Completed – September 2021	
(vi) NGFS report (“ <u>Scenarios in Action</u> ”) compiling case studies highlighting members’ experiences with stress	Completed – October 2021	

Actions/deliverables:	Indicative timeline	Interconnections within roadmap
testing and scenario based risk assessment and presenting preliminary conclusions from these early experiences		
(vii) Multilateral surveillance work of the IMF (including several GFSR chapters on climate risks)	Ongoing	
<b>2. Developing a monitoring framework</b>		
Building on steps to fill data gaps and establish metrics to gauge the financial impacts of climate risk, actions here should include:		The development of a monitoring framework would not only build on work to fill data gaps but would in turn inform further consideration of the data needed to assess risks
(i) IAIS to integrate climate risk data elements into the GME and therefore put a climate risk monitoring framework in place.	Completed – March 2022. The framework will continue to be developed as lessons are learnt.	
(ii) Work by the FSB to identify specific issues related to climate-related vulnerabilities that warrant close monitoring at the cross-sectoral and macroprudential level, and to develop tools to carry out such monitoring	November 2022	
(iii) FSB to develop a data-based methodology/framework for regular monitoring of climate-related financial vulnerabilities including channels through which climate risks can affect the financial system, amplifiers, mitigants and potential for transmission and feedback loops across borders and sectors. (through including climate-related risks in its Surveillance Framework)	2023	
(iv) IMF to incorporate climate-related risks in its assessments of global financial stability in the GFSR	Ongoing	

Actions/deliverables:	Indicative timeline	Interconnections within roadmap
(v) OECD to develop a surveillance tool to monitor climate-related financial and transition risks and their potential impact on financial performance, natural capital, and sustainable growth	Tool established by mid-2022, to be used to provide periodic updates on surveillance	OECD will seek to develop this further, including to contribute to the development of the One Planet Data Hub.
<b>3. Deepening scenario analysis</b>		
(i) NGFS to publish <u>second vintage of reference scenarios</u> for central banks and supervisors, with updated companion documents (detailed presentation, technical documentation).	Completed – July 2021	
(ii) NGFS to update its <u>scenario user's guide</u>	Completed – October 2021	
(iii) NGFS to publish updated sets of reference scenarios	Mid-July 2022	
(iv) NGFS to continue improving and updating NGFS climate scenarios on a regular basis.	2022-2024	
(v) IAIS is undertaking a capacity building initiative to support supervisors as they develop climate scenario analysis.	Ongoing, including consideration in 2023 of whether to develop more supporting material	This work includes a number of region-specific capacity building workshops, additional materials on the Climate Training Alliance hub and integration into training from the Financial Stability Institute.
(vi) BCBS members to exchange views on climate-related scenario analysis	Ongoing	
<b>4. Establishing regular monitoring and assessment of risks and vulnerabilities</b>		
(i) FSB and NGFS jointly to publish a report synthesising outputs of analysis done by jurisdictions so far on the	November 2022	Regular monitoring will not only be informed by data (Block 2) and disclosures (Block 1), but will also in turn help to inform further refinement of data needs (Block 2) and supervisory and regulatory approaches (Block 4)

Actions/deliverables:	Indicative timeline	Interconnections within roadmap
implications of possible future climate scenarios for the financial system		
(ii) NGFS to provide methodological guidance on scenario-based climate risk analysis for macroeconomic and financial stability surveillance	2022-2024	
(iii) FSB to regularly report on monitoring of climate-related financial vulnerabilities at the global level (including steps taken to mitigate these financial risks)	Annually, beginning end 2022	
(iv) IAIS has integrated climate monitoring and assessment of risks and vulnerabilities related to climate change risk into the GME	Ongoing	
(v) IMF to incorporate climate-related risks in its assessments of global financial stability in the GFSR	Ongoing	
(vi) IMF and World Bank to incorporate climate-related risks in their assessments of financial systems in the context of the FSAP	Ongoing	
<p>World Bank to conduct Country Climate and Development Reports (CCDRs) in EMDEs. These cover:</p> <ul style="list-style-type: none"> <li>• <i>The opportunities and risks that climate change (both physical risks and transition risks) create for the country's development path;</i></li> <li>• <i>The existing climate commitments, policies and institutional arrangements in the country to improve resilience and promote decarbonisation;</i></li> <li>• <i>The macroeconomic implications of climate change and policies in terms of growth, poverty reduction, fiscal sustainability, and stability of the financial system;</i></li> </ul>	Ongoing (country assessments were launched in July 2021). A first CCDR was published in June 2022 for Turkey. About 24 CCDRs are being prepared, with most of them expected to be published ahead of COP27.	



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<b>Actions/deliverables:</b>	<b>Indicative timeline</b>	<b>Interconnections within roadmap</b>
<ul style="list-style-type: none"><li data-bbox="264 242 972 376">• <i>The prioritisation of sectoral and macro-fiscal policies to address climate change in the context of development objectives, and identification of operational recommendations.</i></li></ul>		

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## Block 4 – Supervisory and regulatory practices

### Objective

To promote consistent and effective supervisory and regulatory approaches and tools to address climate-related risks, both within individual sectors and at the system-wide level.

- Develop effective regulatory and supervisory practices and tools
- Achieve cross-sector and cross-jurisdiction consistency of approaches
- Build regulatory and supervisory capacity

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<b>1. Developing effective regulatory and supervisory practices and tools</b>		
Steps to develop consistent and effective supervisory and regulatory practices:		
(i) NGFS report on capturing risk differentials from climate-related risks. A <a href="#">Progress Report</a> : lessons learned from the existing analyses and practices of financial institutions, credit rating agencies and supervisors.	Progress report completed - May 2022. Further work still to be undertaken on the elaboration of consistent granular quantitative forward-looking metrics.	
(ii) NGFS to conduct deep-dives into the prudential supervision of specific climate-related and environmental risks (including litigation and reputational risks).	2022/24	
(iii) NGFS to examine the role of supervisors in assessing financial institutions' transition plans.	2022/24	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(iv) <u>BCBS published Principles for the effective management and supervision of climate-related financial risks</u>	Completed – June 2022	
(v) BCBS to monitor implementation of the principles across member jurisdictions.	2023 and ongoing	
(vi) BCBS to conduct a gap analysis of Basel framework and explore possible regulatory proposals / options to address any identified gaps	Ongoing	
(vii) <u>IAIS Application paper on the supervision of climate-related risks</u>	Completed – May 2021	
(viii) IAIS gap analysis of IAIS supervisory material, including the ICP	Completed End-2021. As a result, the IAIS will undertake a limited number of changes to the ICP guidance.	
(ix) IAIS to develop new supporting material to help supervisors understand the risks.	Consultation reports in Q1 and Q3 2023	
(x) IOSCO work on sustainability-related supervisory and regulatory practices and related disclosures in in the asset management industry, including recommendations <ul style="list-style-type: none"> <li data-bbox="309 1023 582 1054">• <u>Consultation paper</u></li> <li data-bbox="309 1078 492 1110">• <u>Final report</u></li> </ul>	<p>Completed – June 2021</p> <p>Completed – November 2021</p>	
(xi) IOSCO work on compliance and voluntary carbon markets – IOSCO is developing a set of recommendations for the development of transparent, liquid and well-structured compliance carbon markets and a discussion paper/ diagnostic report on the state of play of voluntary carbon markets and the vulnerabilities that may require regulatory intervention.	Q3 2022 (ahead of COP27)	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(xii) OECD to update its principles and frameworks on Corporate Governance, Due Diligence, and Effective and Efficient Financial Regulation.	2022/23. Initiatives are at various stages of discussion and stakeholder engagement.	
<b>2. Achieving cross-sector and cross-jurisdiction consistency of approaches</b>		
<i>Cross-jurisdictional consistency within sectors</i>		
(i) <u>NGFS Progress Report</u> on the implementation of the recommendations of its Guide for Supervisors, involving a stock-take of NGFS members' progress in integrating climate and environmental risks within their supervisory frameworks, and identify best practices.	Completed – October 2021	
(ii) NGFS to update the mapping of supervisory practices for integrating climate-related and environmental risks into micro-prudential supervision.	2022/24	
(iii) IAIS work on scenario analysis and developing supporting material for the ICPs on climate risk will increase cross-jurisdictional consistency.	Ongoing	
(iv) IOSCO work on promoting good industry and supervisory practices based on its 2021 recommendations on asset managers and ESG ratings and data providers, including: <ul style="list-style-type: none"> <li>• <i>to collaborate with relevant industry associations to support market participants' implementation of the IOSCO recommendations based on a Call for Action.</i></li> <li>• <i>to hold industry roundtables to support this objective.</i></li> <li>• <i>to organise supervisory roundtables for sharing regulatory and supervisory practices, including main challenges and data gaps hindering the implementation of the IOSCO recommendations.</i></li> </ul>	Q3-Q4 2022/Q1 2023	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
<i>Cross-sectoral consistency and interactions between sectors</i>		
<p>(v) FSB report promoting consistent regulatory and supervisory approaches to addressing climate-related risks at financial institutions and supporting efforts to incorporate the interactions between sectors in regulatory and supervisory approaches, including recommendations</p> <ul style="list-style-type: none"> <li>• <i>Interim Report for public consultation</i></li> <li>• <i>Final Report</i></li> <li>• <i>FSB to consider conducting a peer review of regulatory and supervisory practices against the FSB recommendations on supervision and regulation of climate risks.</i></li> </ul>	<p>Completed – April 2022</p> <p>October 2022</p> <p>Consideration in 2024</p>	<p>This work took place in coordination with SSBs and international organisations, using their existing work as a basis</p>
(vi) FSB update of its guidance and recommendations	Consideration in 2025	
(vii) IMF and World Bank to incorporate climate-related risks in their assessments of financial supervisory and regulatory frameworks in the context of the FSAP	Ongoing	
<b>3. Macroprudential tools</b>		
(i) Macroprudential tools. Development of supervisory tools (if any are needed), either for individual sectors or at the cross-sectoral jurisdiction-wide level. This would complement the forward-looking scenario analysis, using NGFS scenarios, coordinated by the FSB under block 3. Ongoing consideration of the need for additional macro prudential tools to address additional issues impacting financial stability that may be identified.	June 2024	
<b>4. Capacity building</b>		

Actions/deliverables	Indicative timeline	Interconnections within roadmap
(i) IMF and World Bank work to assist with capacity building on incorporating climate-related risks in the prudential framework and on supervisory practices and development challenges	Ongoing	
(ii) NGFS capacity building initiative	Action plan focused on supervision completed in June 2022. Implementation of broader work programme in 2022/24	
(iii) IAIS joint work with several partners (UN Sustainable Insurance Forum, Access to Insurance Initiative and FSI) to develop training materials based on the Application Paper on the supervision of climate-related risks in the insurance sector.	Various initiatives, from June through October 2021, and ongoing thereafter	This has now been embedded into the Climate Training Alliance
(iv) IAIS to engage with EMDE members and members of its Financial Inclusion Forum to consider the impacts of climate risks on jurisdictions and on protection gaps.	Q3/Q4 2022	
(v) IOSCO capacity building: <ul style="list-style-type: none"> <li data-bbox="264 935 981 1110">• ISSB Standards: Develop a capacity building programme to assist its members, notably those from emerging market jurisdictions, in their understanding and implementation considerations of the ISSB standards</li> <li data-bbox="264 1118 981 1294">• Supervision of asset managers and the oversight of ESG ratings and data product providers: Develop capacity building programmes for its members, in order to assist them in implementing the IOSCO recommendations in these areas.</li> </ul>	Q3 2022  H1 2023	
(vi) OECD capacity-building regarding ESG and climate transition practices (due diligence, metrics and	Beginning September 2021	

Actions/deliverables	Indicative timeline	Interconnections within roadmap
methodologies, alignment of objectives and tools), as well as climate and biodiversity loss and financial systems, for central banks and regulatory bodies.	Launched at COP26, November 2021 and still ongoing	
(vii) BIS, NGFS, SIF, and IAIS to enhance training opportunities for central banks and supervisors under the Climate Training Alliance, coordinated under COP26		