

Network for Greening the Financial System  
Annual report

# Annual report 2023

July 2024



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# Acknowledgements

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As we look back on an event-full and productive year, we would like to acknowledge the work of all the Members and Observers who engaged with the NGFS and participated in making this initiative a success. The Membership depends on the effort of its committed members and on the ClimateWorks Foundation that has been supporting our edge-cutting innovative work since 2019.

# Foreword by the Chairs of the NGFS – Handing on the NGFS torch



Ravi Menon  
Chair of the NGFS  
until 2023

***T**ime is running out. The early stages of climate change are already upon us. It is imperative that the world steps up the pace of decarbonisation and slows down the erosion of nature. The global financial industry and the community of central banks and supervisors cannot solve the climate crisis on their own. But acting in concert with governments and real economy players, we can make an impactful change.*

*The NGFS made good progress last year in helping to better prepare central banks and financial supervisors for the challenges posed by climate change. We advanced further our pioneering work on climate scenarios, to better understand the climate and nature-related risks facing the financial sector. We began work on how supervisors can support effective transition planning by financial institutions towards decarbonisation. The NGFS also delved into the implications of climate change for monetary policy and examined best practices in blended finance to support transition efforts in the economy.*

*Besides a steady stream of publications, the NGFS continued to step up engagements and contributed to relevant discussions at other international fora such as the G20, G7 and COP28. It is heartening to note the good recognition being given to the work of the NGFS and the growing role that the NGFS has been playing as part of global climate action.*

*I am humbled and honoured to have served as the Chair of the NGFS, witnessing first-hand how the NGFS has indeed become a 'coalition of the committed'. I am fully confident that Sabine and Fundi will lead the NGFS to achieve even more in the years to come.*



Sabine Mauderer  
Vice-Chair of the NGFS  
until 2023  
New Chair of the NGFS  
since January 2024

***T**hanks to the outstanding leadership of our outgoing Chair Ravi Menon, 2023 was another remarkable chapter in the NGFS success story. Continued growth in membership underpinned our role as a truly global network. The tremendous conceptual work done within all our workstreams – such as the publications of our work on blended finance at COP28 – underscored the high level of expertise that is rightfully attributed to our organisation.*

*Looking ahead, the NGFS will continue to play a major role in addressing climate and nature-related risks and in supporting the green transition. Our commitment is twofold: we identify and work towards closing knowledge gaps, provide thought leadership and push the international agenda on sustainable finance. Furthermore, we are committed to closing implementation gaps by analysing barriers to sustainable finance and identifying best practices as well as scalable solutions that can help mobilise the capital needed for the transition of our economies.*

*I am honoured to lead the NGFS and look forward to working together with Vice Chair Fundi Tshazibana and all NGFS members. We are determined to ensure that we remain a frontrunner paving the way for a sustainable financial system and create the greatest possible benefit for our members. One example is the development of new short-term scenarios to model the immediate effects of climate change on our economies. These scenarios can further deepen our collective understanding of climate-related risks and help to climate-proof the financial system.*



Fundi Tshazibana  
Vice-Chair of the NGFS  
since January 2024

*It is a real privilege to join the NGFS as a vice chair. Over the last two years, under the leadership of Ravi Menon and Sabine Mauderer, the NGFS has recorded an extraordinary growth in membership. High quality and a policy relevant work programme has positioned the NGFS as an important partner to central banks, regulators, governments, and financial institutions in tackling the risks of climate change and helping economies transition.*

*The work of the network has expanded to take into account the diverse needs of its members. The problems faced by emerging and developing economies are often different to those faced by central banks and financial sector regulators in advanced economies. Alongside the NGFS scenarios that have both public and private institutions think through how climate related risks could materialise, the NGFS work on blended finance instruments is highly regarded and is particularly important for developing countries. The ability of the network to generate relevant and timely analytical work and training for all members reflects the strong commitment to work together in identifying challenges and designing solutions.*

*Tackling climate change risks remains difficult as the global economy has continuously faced varying economic and geo-political shocks in recent year. Strong headwinds such as rising geoeconomic fragmentation, pose risks to finding consensus on important global issues, while increasing financial and price stability risks. In this environment, networks such as the NGFS provide a much-needed platform for central banks and financial regulators to learn, collaborate and develop solutions to climate change and nature-related risks.*

*I look forward to working with Sabine and the NGFS Secretariat in building the network and helping members understand climate and nature -related risks, develop solutions to increase the resilience of their economies and financial systems, and remove obstacles to sustainable finance.*

# Section 1

Overview

# The NGFS Journey: the key milestones of the NGFS

## Origin of the NGFS



**8 central banks and supervisors** established a Network of Central Banks and Supervisors for Greening the Financial System.



As of December 2023, the NGFS consists of

**134** Members **21** Observers

### The NGFS is a coalition of the willing.

It is a voluntary, consensus-based forum whose purpose is to share best practices, contribute to the development of climate-related and environmental risk management in the financial sector and mobilise mainstream finance to support the transition toward a sustainable economy.

### The NGFS issues recommendations

which are not binding but are aimed at inspiring all central banks and supervisors and relevant stakeholders to take the necessary measures to foster a greener financial system.



In November 2021, the NGFS published the **NGFS Glasgow Declaration**, no longer being just a coalition of the willing but also a coalition of the committed.



### The NGFS is committed to:

- Strengthening supervision of financial institutions' climate-related risks
- Developing climate scenarios for financial system
- Achieving net zero for central banks
- Examining impact of climate change on monetary policy
- Bridging climate-related data gaps
- Stepping up efforts on capacity building and training
- Advancing global discussions collaboratively with private and public sector

# NGFS in 2023: Executive Summary

## 2023: a year at a glance

The year 2023 was, once again, a very active and productive year for NGFS members all around the globe. Over the past year, the NGFS has organised over 45 high-level meetings, webinars and conferences and published 13 reports and one occasional paper, including a first report on nature-related financial risks, which paves the way for further analysis on the importance of nature in our economy.

The NGFS Membership continued to grow in 2023, with the NGFS warmly welcoming 13 new members and two new observers.<sup>1</sup> The NGFS is glad to see a larger number of members from EMDEs joining the initiative, making the Network a truly global endeavour to develop and facilitate climate action in the central banking and supervisory community.

Taking stock of the various dimensions in which climate change can impact the missions and business lines of a central bank, the NGFS structured its efforts around four Workstreams, three Task Forces and three Expert Networks which are meant to serve as collective fora for NGFS members to share insights and hands-on experiences. This set up covered a wide array of topics relevant to central banks and supervisors (including but not limited to monetary policy, supervision, nature-related risks, blended finance and scenarios).

In brief, during 2023, the Membership explored the potential use of transition plans from a micro prudential perspective.<sup>2</sup> Since climate-related litigation has rapidly increased over the past years, the Membership also advanced on their understanding of trends and developments in climate-litigation risks, and proposed a toolbox for supervisors, through the publication of two complementary reports.<sup>3</sup>

Building up on its first public feedback survey, the NGFS also enhanced its long-term climate scenarios and set up a conceptual note to develop a first set of short-term climate scenarios,<sup>4</sup> which should help the financial system assess the economic impact of climate-related risks.

In 2023, the NGFS also launched its first works on nature-related risks, and confirmed that they require an ad-hoc analysis framework. The [NGFS Conceptual Framework](#) (September 2023) and [Recommendations toward the development of scenarios for assessing nature-related economic and financial risks](#) (December 2023) illustrate how central banks and supervisors can start addressing these risks. In parallel, the NGFS published a [report on blended climate finance](#) in the EMDEs (December 2023), in an effort to raise awareness on good practices worldwide and to explore ways to help mobilise private capital for climate mitigation and adaptation.

Members also continued substantive works on various other fronts. To name only a few, they deepened their collective understanding of climate change and its macro-economic implications for monetary policy,<sup>5</sup> with the aim of reinforcing central banks' analytical toolkits. They also bolstered capacity building within all working groups, through a series of knowledge and best practices sharing workshops. These included, for instance, workshops on how to step-up sustainable practices within central banks' own operations and on climate-related disclosures for central banks. Building off of these workshops, the NGFS will compile in 2024 an internal guide on greening central banks' own operations and an updated Guide on climate-related disclosures for central banks.

<sup>1</sup> Among the newcomers were mostly countries from central Asia, Latin America and Africa.

<sup>2</sup> [Stocktake on Financial Institutions' Transition Plans and their Relevance to Micro-prudential Authorities](#) (May 2023)

<sup>3</sup> [Report on micro-prudential supervision of climate-related litigation risks](#) (September 2023) and [Climate-related litigation: recent trends and development](#) (September 2023)

<sup>4</sup> [NGFS Climate Scenarios for central banks and supervisors - Phase IV](#) (July 2023)

<sup>5</sup> [Monetary policy and climate change: Key takeaways from the membership survey and areas for further analysis](#) (July 2023)



## The steps ahead

Since its beginnings, the NGFS has seen impressive growth in its membership and the substance of its work. It aims to be a driver of innovative works for all its members and will persevere in this endeavour. Over the next few years, the NGFS will continue to be in the vanguard of the works of central banks and supervisors on climate and nature-related risks and will continue to pick up new topics of interest, such as adaptation to climate change in 2024.

The NGFS will, of course, continue to improve the macro-financial scenarios to better reflect the physical impacts of climate change and account for possible adverse developments over the short term. The NGFS is keenly aware of the macroeconomic dimension of climate related developments and is committed to considering the implications of climate change and the transition for monetary policy.

The NGFS also considers that the net zero transition entails changes at the corporate level for central banks and supervisors. In this respect, the NGFS is committed to exploring relevant issues to inform the transition across all business lines and to propose to the central banking community appropriate approaches to design and disclose their own transition plans.

Capacity building and training will also remain a key priority for the NGFS, which is constantly considering how to better disseminate knowledge and good practices in a way that serves its Members' needs.



# Section 2

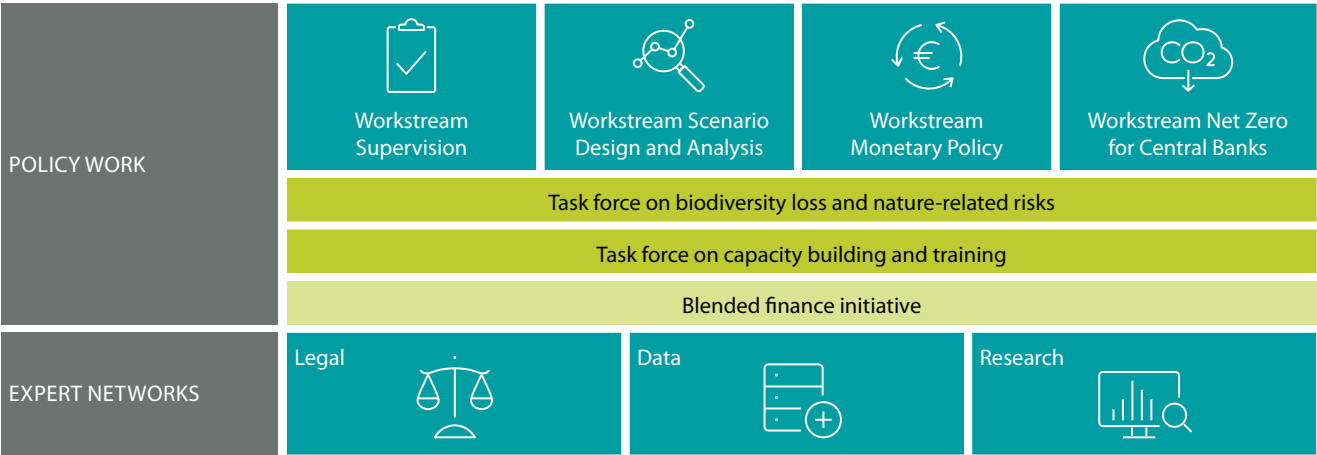
Working groups activities

# Work streams, Task forces and Expert Network’s activities

## 2023 saw a strengthening and consolidation of the collective efforts of the NGFS Membership

In 2022, the NGFS implemented a new biennial work programme, which effectively contributed to reorganising its processes around four Workstreams, two Taskforces, three Expert networks and one initiative (see below).

This allowed the Membership to take up and develop in-depth analysis on new topics and to better meet members’ wish of collaborating on key areas. After a whole year, it appears that the new structure has effectively boosted the sharing of best practices and the exploration of emerging topics.



# 1 Strengthening supervision of financial institutions' climate-related risks

**Chair:** Tolga Yalkin (Office of the Superintendent of Financial Institutions – Bureau du Surintendant des Institutions financières)

2023 has been a very fruitful year for the Workstream on Supervision, be it in terms of publications, knowledge-sharing across the community of supervisors or coordination with other international organisations.

In May 2023, the Workstream published a [first report on transition plans](#), which provided a stocktake on the emerging practices related to transition plans and assessed the role of microprudential authorities in relation to transition plans. Transition plans have the potential to provide much needed forward-looking visibility on the pathway to a net-zero future and the Workstream continued to progress on this critical topic, exploring cross-cutting and foundational issues related to transition plans.

The Workstream also issued a report in September 2023 on [the micro-prudential supervision of climate-related litigation risks](#). This document – published with a companion report on [the recent trends and developments of climate-related litigation](#) written by the NGFS Expert Network on Legal Issues – examines the potential impact of climate-related litigation on financial institutions and sets out potential guidelines for the micro-prudential supervision of climate-related litigation.

In addition to these publications, the Workstream has also launched monthly webinars to encourage knowledge-sharing among its members, who are invited to present their respective work on the supervision of climate and environmental risks. Lastly, the Workstream has ensured coordination with standard setters (ISSB, FSB, BCBS, IAIS, IOSCO) and other international organisations and initiatives (such as GFANZ, UK TPT, IIF) to advance the NGFS work on supervision in an efficient and complementary manner.

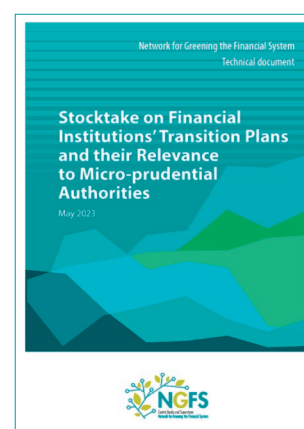
## Publications

### MAY 2023

*Stocktake on Financial Institutions' Transition Plans and their Relevance to Micro-prudential Authorities*

### SEPTEMBER 2023

*Report on micro-prudential supervision of climate-related litigation risks*



MAY 2023



SEPTEMBER 2023

## 2 Continuing to develop and enhance climate scenarios for the financial system

**Chair:** Livio Stracca (European Central Bank)

During 2023, the Workstream on Scenario Design and Analysis has enhanced its long-term climate scenarios, while setting up a conceptual framework to develop a first set of short-term climate scenarios. This complementary work aims to provide a common starting point for the financial sector to analyse the potential economic impacts of climate-related risks.

In June 2023, the Workstream published the [results of its first public feedback survey](#) on climate scenarios, displaying the main areas for improvements identified by users from both private and public institutions. The top three user priorities for improving the NGFS scenarios were:

- Increasing sectoral granularity and geographical coverage;
- Introducing short-term scenarios in the NGFS framework;
- Better representing acute physical risk.

A first step in addressing these shortcomings was the publication of a [conceptual note on short-term climate scenarios](#), presenting the NGFS views on potential shocks that may arise in a short-term horizon, and proposing narratives

to reflect this diversity of possible futures. A dedicated group is now working with a modelling consortium to calibrate a first set of short-term climate scenarios.

In November 2023, [the fourth vintage of the NGFS scenarios](#) was released. The scenarios were updated to account for the latest country-level climate commitments and economic developments (including the energy crisis following the war in Ukraine) and benefited from substantial modelling improvements, especially on acute physical risk. The phase IV package also includes [a note](#) which explores the materiality of compound shocks and provides initial thoughts on a framework for incorporating compound risks in climate physical risk scenario analysis.

Finally, the Workstream put significant efforts in the dissemination of its scenarios through outreach events, development of data visualisation tools and communication materials, while also revamping the scenarios' technical documentation, so as to accommodate the needs and feedback brought by the broad scope of users of the NGFS scenarios.

Looking ahead to 2024, the NGFS will publish a new vintage of its long-term climate scenarios.

## Publications

### JUNE 2023

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*Key Findings on the NGFS Survey on Climate Scenarios*

### OCTOBER 2023

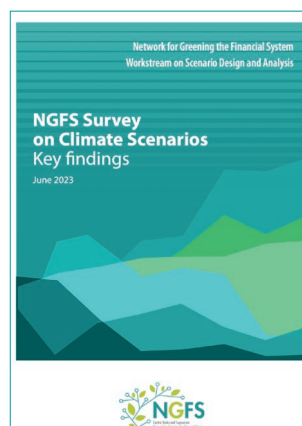
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*Conceptual note on short-term climate Scenarios*

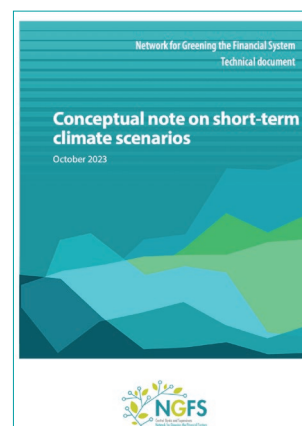
### NOVEMBER 2023

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*NGFS Climate Scenarios for central banks and supervisors –s  
Phase IV*



JUNE 2023



OCTOBER 2023



NOVEMBER 2023

### 3 Further examining the impact of climate change on monetary policy

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**Chair:** James Talbot (Bank of England)

In 2023, the Workstream on Monetary Policy has continued its work to deepen the collective understanding of how climate change and the actions designed to mitigate it, should be considered in relation to the conduct of monetary policy. Following a survey of the NGFS membership, [a first report](#) was published in July 2023 that explored the current state of progress of members.

These survey results contributed to the next steps of the Workstream, which aims to help central banks better understand the macroeconomic impact of climate change and the net zero transition and their impact on monetary policymaking. The Workstream will publish in 2024 a series of reports that will further analyse these macroeconomic impacts, with the aim of reinforcing central banks' analytical toolkits. Another publication, based upon a series of case studies from Members, will also be released in 2024 and will dive into recent measures adopted by central banks to account for climate-related risks.

#### Publications

##### JULY 2023

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*Report on on Monetary Policy and climate change: Key takeaways from the membership survey and areas for further analysis*



JULY 2023

## 4 Providing further guidance on central banks and supervisors' own transitions to net zero

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**Co-Chairs:** Paolo Angelini (Banca d'Italia) and Simone Robbers (Reserve Bank of New Zealand)

The NGFS Workstream on Net Zero for Central Banks focused on three key areas in 2023, namely sustainable and responsible investment for central banks, greening central banks' own operations, and climate-related disclosure for central banks.

Throughout 2023, the Workstream pursued its efforts on capacity building within central banks. It organised a number of knowledge-sharing workshops to step-up sustainable practices for central banks' own operations and to share best practices on climate-related disclosures for central banks. The Workstream thus served as a collective forum for NGFS members, with the goal that, by sharing insights and practical experiences, NGFS members will find the right tools to address the practical challenges related to the transition to a net zero economy.

The Workstream conducted a survey on Sustainable and Responsible Investment (SRI) practices within the NGFS Membership, covering a total of 55 central banks from five continents and three observers of the NGFS, in the run-up to the publication of a package of reports on the topic in 2024. The survey results were presented during a dedicated workshop in Rome in September 2023, and showed that SRI considerations are progressively being adopted.

Building up on this work, the Workstream will publish a package of reports in 2024, including a report on SRI practices in central banks' portfolios and another one on decarbonisation strategies for corporate portfolios. For the upcoming years, the Workstream will pursue its work and integrate considerations related to transition planning for central banks as well as nature-related risks.



## 5 Providing a framework on how to assess and address nature-related risks

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**Co-Chairs:** Emmanuelle Assouan (Banque de France) and Marc Reinke (De Nederlandsche Bank)

The NGFS TF Nature, created in 2022, was tasked with an overall objective to help mainstream the consideration of nature-related risks across the NGFS. It acted as an incubator that explores, develops, and harmonises relevant nature-related considerations and efforts in collaboration with the NGFS workstreams, expert networks and members.

In 2023, the TF Nature published 2 key documents: [the NGFS Conceptual Framework](#) (initial version released in September 2023, see focus, p. 27) and [Recommendations toward the development of scenarios for assessing nature-related economic and financial risks](#) (December 2023).

The documents illustrate how actions can be taken by central banks and financial supervisors to start addressing nature-related financial risks.

Looking ahead to 2024, the TF Nature will complete the publication of its final Conceptual Framework (supplemented with illustrative cases), and evolve into a centre of expertise for the NGFS. It will coordinate closely with the other NGFS working groups to continue mainstreaming nature-related considerations, while pursuing specific activities (such as capacity building) to ensure that the momentum of work on nature is not lost.

## Publications

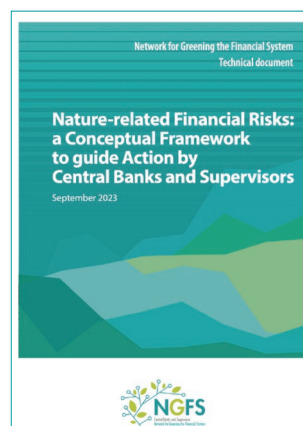
### SEPTEMBER 2023

*NGFS Conceptual Framework for nature-related risks to guide policies and action by central banks and financial supervisors*

### DECEMBER 2023

*NGFS Recommendations toward the development of scenarios for assessing nature-related economic and financial risks*

*Occasional paper “The green Scorpion: The Macro-Criticality of Nature for Finance”*



SEPTEMBER 2023



DECEMBER 2023



DECEMBER 2023

## 6 Stepping up efforts on capacity building and training

**Co-Chairs:** Madelena Mohamed (Bank Negara Malaysia) and Jeffery Yong (Bank for International Settlements)

In 2023, the Task Force on Capacity Building and Training continued delivering on its mandate to identify good practices on how central banks and supervisors can design and develop in-house training and capacity building strategies in the area of climate-related and environmental risks.

The NGFS SKILL (Sustainability Knowledge and Information Learning Library), launched at the end of 2022 provides the NGFS membership with a listing of climate and environment-related training resources put in place by other members and observers as well as contact points in those organisations. In addition, the NGFS STaR (Sustainability Training Reference) Guide, published in 2023, consolidates the collective experience and good practices of NGFS members, observers and stakeholders on how to establish an effective capacity building and training framework on climate-related and environmental risks. It offers central bankers and supervisors a systematic approach to building climate-related and environmental capacities, and allows them to tailor the content to their institution's specific needs and strategic goals.

The Task Force also further developed its collaboration with key external partners and training providers to meet the needs identified by its members, which was inter alia reflected in the online workshop on climate and biodiversity loss risks, jointly organised with the Toronto Centre in October 2023. In addition, the second BIS-NGFS Climate and Environmental Risks Online Course (CEROC), launched in May 2023, was expanded from a banking focus to cover insurance-related topics that are relevant for banking and insurance supervisors.

As more capacity building and training material is being developed by the NGFS, a dedicated space was created on the [Climate Training Alliance \(CTA\) Portal](#), the online platform jointly established by the Bank for International Settlements (BIS), the International Association of Insurance Supervisors (IAIS), the NGFS and the UNDP Sustainable Insurance Forum (SIF). Both the NGFS SKILL and STaR Guide are available on the CTA Portal.

### Publications

#### NOVEMBER 2023

##### *STaR Guide*



NOVEMBER 2023

## 7 Raising awareness about *blended finance* and exploring potential regulatory and practical barriers to its scaling up in emerging market and developing economies (EMDEs)

**Co-Chairs:** Cindy van Oorschot (De Nederlandsche Bank) and Leong Sing Chiong (Monetary Authority of Singapore)

The NGFS Blended Finance Initiative was tasked to complement ongoing international work to promote and scale climate financing, particularly in emerging economies and developing economies, which are most vulnerable to the consequences of climate change. The initiative is part of the NGFS' effort to use its convening power to help mobilise private capital for effective climate mitigation and adaptation. The NGFS aims to raise awareness of good practices and principles that underpin the scaling up of climate blended finance and rally key public and private stakeholders around the issue.

In 2023, further to the publication of a [conceptual note](#) (June 2023), the NGFS published the [Technical document on scaling up blended finance for climate mitigation and adaptation in EMDEs](#) during COP28 in December.

Looking ahead to 2024, the NGFS aims to build on this publication and to further work on adaptation issues where it intends to offer complementary views to current works. The importance of climate adaptation is becoming increasingly clearer as physical risk events caused by climate change become more commonplace. In this regard, the NGFS has established a new Task Force on Adaptation Finance to take this work forward.

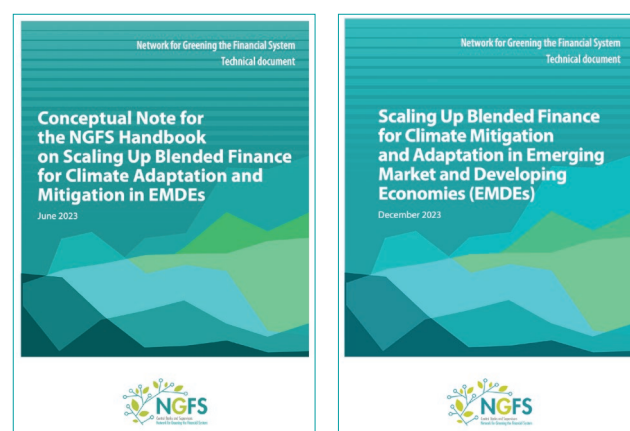
### Publications

#### JUNE 2023

*Conceptual note for Blended Finance Handbook*

#### DECEMBER 2023

*Scaling up Blended Finance for Climate Mitigation and Adaptation in Emerging Market and Developing Economies (EMDEs)*



JUNE 2023

DECEMBER 2023

## 8 Monitoring climate-related litigations and legislation

**Chair:** Chiara Zilioli (ECB)

In 2023, the Expert Network on Legal Issues continued to monitor developments on climate-related legal topics, and focused in particular on climate-related litigation and legislation. This monitoring is key since climate-related litigation is growing rapidly, not only in terms of volume of cases but also in terms of legal arguments used and diversity of addressees of such claims.

With the objective of raising awareness on this topic, the Network has published a [report on the recent trends and developments in climate-related litigation](#) in September 2023. The key takeaway is that climate-related legal risks are rising and financial institutions are now being targeted directly. The report outlines the most recent trends and developments that have occurred since the publication in 2021 of the NGFS [report on raising awareness of climate-related litigation as a growing source of risk](#).

### Publications

#### SEPTEMBER 2023

*Climate-related litigations: recent trends and developments*



SEPTEMBER 2023

## 9 Advancing global discussions collaboratively with private and public sector

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### Researching emerging topics

**Co-Chairs** : Benoît Mojon (BIS) and Zhang Xuechun (People's Bank of China)

Launched in March 2023, the Expert Network on Research aims to consolidate the research community within the NGFS Membership and to develop strong engagement with the academic community. Bringing together over 40 researchers on a regular basis, this initiative is key to anchoring the NGFS analyses in innovative, cross-cutting, evidence-based research. The Expert Network is currently structured around two priority research areas, namely, the macroeconomic implications of climate change and of the transition to net zero, and the way in which transition risks can be addressed through finance.

In August 2023, the Expert Network launched an internal monthly webinar series, focusing on disseminating climate-related research among NGFS members. These webinars, which highlight recent studies in macroeconomics and finance are led by the Bank for International Settlements and the People's Bank of China respectively. Four webinars took place from August to November 2023. The Expert Network also organised its inaugural research workshop at the Banque de France's Green Finance Research Advances conference in Paris on 12th December 2023.

In 2024, the Expert Network intends to maintain its monthly webinars and organise two research workshops; it also plans to put an emphasis on developing macroeconomic models to analyse the effects of climate change on the business cycle.

### Bridging the data gap by providing information on existing resources

**Co-Chairs** : Ong Li Ming (Bank Negara Malaysia) and Elena Triebkorn (Deutsche Bundesbank)

The Expert Network on Data was established in the beginning of 2023, with the aim of consolidating the NGFS community of statisticians and data scientists, while also fostering a regular dialogue on climate data-related topics between members to sharpen their expertise.

In 2023, the Expert Network conducted regular webinars for members and external experts to present relevant data work. The Expert Network also dived deeper into three spin-off projects on (i) building national data directories, (ii) improving emissions Data, and (iii) setting-up green finance data hubs in central banks. The Expert Network documented the knowledge, experience and lessons learnt from these sharing sessions in the form of internal information notes.

The Expert Network also followed up on the work of the [NGFS Data Directory](#), which was developed by the NGFS in 2022. A series of design-thinking workshops were conducted from September to December 2023 with the aim of enhancing the NGFS Data Directory into an improved "version 2.0".

Looking ahead to 2024, the Expert Network will continue its work on the NGFS Data Directory, while also analysing new topics on (i) improving data on physical risks, (ii) exploring nature-related data, and (iii) leveraging the use of technology. The Expert Network will also continue its regular webinar sharing sessions to share knowledge and experience.

# Section 3

Highlights

# 2023 NGFS highlights

## FEBRUARY

Steering Committee meeting (via videoconference)

## APRIL

*Publication of the 2022 Annual Report*

Plenary meeting, *Workshop* and Steering Committee Retreat in Singapore

## MAY

*Green Swan conference* co-organised by the Bank for International Settlements, the Central Bank of Chile, the NGFS and the South African Reserve Bank

Second BIS-NGFS Climate and Environmental Risks Online Course (CEROC)

## JUNE

*Publication of a Conceptual note the Blended Finance Handbook*

First Plenary Outreach session with NGFS African Members (via videoconference)

Steering Committee (via videoconference)

## SEPTEMBER

*Launch event and Publication of the NGFS Conceptual Framework for nature-related financial risks to guide policies and action by central banks and financial supervisors*

Plenary Outreach session with NGFS European Members and Steering Committee meeting in Rome (hybrid format)

Workshop on the trends and frontiers of sustainable investment organised in Rome by the workstream on net zero for central banks



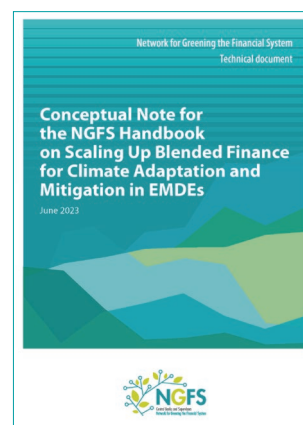
FEBRUARY 2023



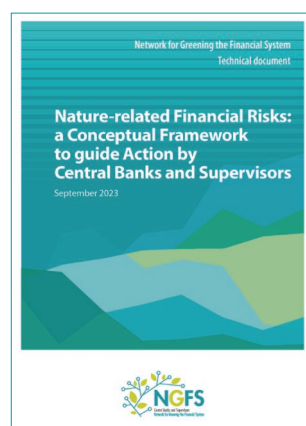
APRIL 2023



MAY 2023



JUNE 2023



SEPTEMBER 2023



## 2023 NGFS highlights (continued)

### OCTOBER

NGFS/Toronto Centre Seminar

### NOVEMBER

Steering Committee Meeting (via videoconference)

### DECEMBER

COP28 NGFS Finance Day Event

*Publication of the NGFS Dubai Socktake at COP28*

*Publication of the report on scaling Up Blended Finance for Climate Mitigation and Adaptation in EMDEs*

*Green Finance Research Advances*: NGFS Expert Network on Research Workshop and Launch event for the publication of the *NGFS technical document on nature-related scenarios* (see above)



DECEMBER 2023



DECEMBER 2023

# Section 4

Focus

## Focus on the First NGFS African Outreach

Each year, the NGFS organises several thematic and regional outreach sessions. These initiatives have been of growing importance as the NGFS Membership has been ever-expanding over the past years. Indeed, these meetings aim to better cater for the diversity of the Membership and allow the discussion of specific regional issues. Progress and best practices can also be shared for implementation across the entire NGFS Membership.

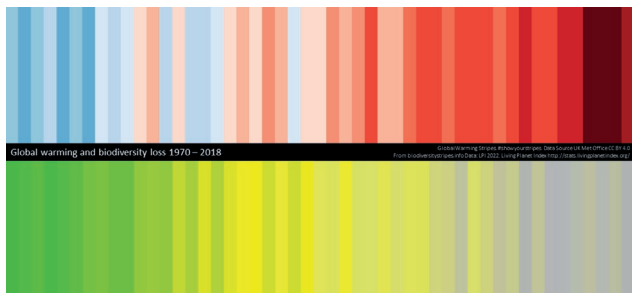
In June 2023, the NGFS organised the first African Outreach, hosted by the National Bank of Rwanda, in Kigali. This was a unique opportunity for various members to be introduced to the NGFS work programme, and circa 30 members from African countries met and discussed capacity building, the impact of physical risks and adaptation, as well as

relevant instruments to finance transition in emerging and developing economies. Representatives were invited to take the floor to highlight key issues and challenges, and to provide a short insight into their experiences of the NGFS and key activities.

This first edition of the African Outreach was a marked success and the Membership is now looking forward to holding a new regional event.

Other regional outreaches in 2023 took place in Singapore (for the Asia-Pacific region) and in Rome (for the European region) and concentrated on the transition to net zero and its implications for risk assessments, as well as on nature-related financial risks.

## Key takeaway 2023: A focus on the NGFS Conceptual Framework on Nature-related financial risks



Source: <https://biodiversitystrips.info/globalbiowarming>

The **NGFS Conceptual Framework** seeks to create a shared science-based understanding of, and common language for, nature-related financial risks to help central banks and financial supervisors navigate the complexities and challenges associated with assessing and addressing these risks. The aim is to provide greater clarity on the meaning of key concepts and the way these interrelate, and set out

a principle-based approach to help operationalise that conceptual understanding.

The principle-based approach provides flexibility for emerging analytical methodologies and risk management practices differences between jurisdictions. It consists of three phases, starting from identifying sources of physical and transition risk (phase 1), to assessing economic risks (phase 2), and to assessing risk to, from and within the financial system (phase 3). Under each phase, the framework also contains guiding questions to capture key elements that central banks and supervisors could consider.

Following the beta release in 2023, the NGFS will publish in 2024 a final Conceptual Framework, supplemented with illustrative cases assessing nature-related financial risks around the Amazon Rainforest and the Colorado River Basin, which will demonstrate further how the framework can be applied.

# Key takeaway 2023: Bridging the climate finance gap with blended finance

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The [Technical Document on Scaling Up Blended Finance for Climate Mitigation and Adaptation in Emerging Market and Developing Economies \(EMDEs\)](#) sets out recommendations to address key barriers to scaling blended finance in EMDEs.

Drawing insights from surveys, a literature review, discussions with a wide range of stakeholders across the blended finance ecosystem and shortlisted submissions of demonstrative blended finance projects, the NGFS identified seven key barriers to scaling up blended finance in EMDEs: (i) structural issues and challenges specific to EMDEs (prior to any climate considerations), (ii) limited investment opportunities and lack of bankable climate projects in EMDEs, (iii) data gaps, fragmented disclosure standards and classification regimes, (iv) the lack of technical expertise and need for capacity development, (v) the bespoke nature and complexity of blended finance instruments (lack of liquidity, standardization and scalability), (vi) the lack of climate policies and regulatory clarity and (vii) the lack of a broader enabling environment: information intermediaries (such as credit rating agencies, ESG data and products providers, sustainability practitioners, etc.), market practices and norms.

To effectively address these barriers, the NGFS recommends focusing on five key areas:

- Prerequisites to improve EMDEs climate investability: strengthen the climate information architecture (such as by improving the high quality, comparability, and reliability of climate data) and deepen domestic capital markets.
- Holistic approach to developing blended finance: adopt an ecosystem-of-solutions approach that brings together partnerships across key stakeholders (where central banks and supervisors can play a role), as well as a project-life-cycle approach to ensure and support viability of these projects.
- Development of project pipelines and scalable structures: develop a pipeline of viable projects with standardised and scalable structures to attract investment capital and reduce information asymmetries between investors and project developers.
- Risk mitigation and regulatory considerations: foster effective risk mitigation and diversification, and more effectively harness the role of Multilateral Development Banks and Development Financial Institutions to create an enabling environment for blended finance to succeed.
- Financial and information intermediation: align the practices and products offered by financial and information intermediaries such as credit rating agencies and ESG data and product providers.

Looking ahead to 2024, the NGFS aims to build on this publication and further work on adaptation issues where it can possibly add value or offer complementary views. To this end, the NGFS has established a new Task Force on Adaptation Finance to take this work forward.

## Key takeaway 2023: The NGFS held a Finance Day Event at COP28, on December 4th 2023

The NGFS was invited at COP28 to organise a Finance Day Event on December 4th, which was hosted at the Singapore Pavilion – and live-streamed on the Pavilion’s website.<sup>1</sup> The event gave the opportunity to present the Network’s perspectives on the main trends and developments in the climate finance space. It brought together members of the NGFS community, including central banks, supervisors, standard setters, MDBs and representatives from the private sector.

The event was opened by Ravi Menon, Chair of the NGFS in 2022-2023 and former Managing Director of the Monetary Authority of Singapore. Three panels followed: on the macroeconomics of the transition and climate change, on blended finance, and on data and transition plans. These panels built on 2023 NGFS publications as well as on perspectives from partner institutions.

The event ended with a fireside chat between past and current chairs of the NGFS – Frank Elderson, Ravi Menon and Sabine Mauderer – and provided an overview on the ground covered by the network, and the road ahead.



<sup>1</sup> <https://www.cop-pavilion.gov.sg/>

# Section 5

Membership

# Governance and membership of the NGFS

As of the end of 2023, the NGFS consists of **134** members and **21** observers.



Supervision of **100%** of the global systemically important banks



and **80%** of the Internationally Active Insurance Groups



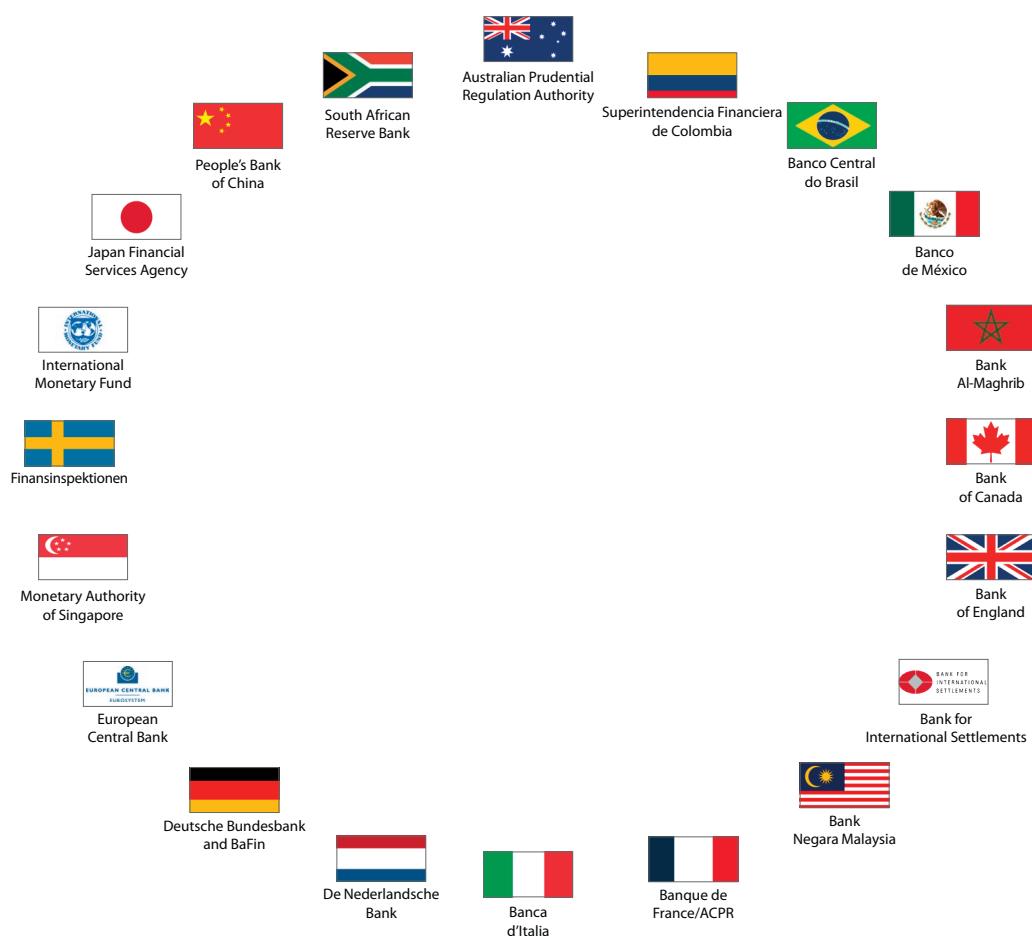
Over **88%** of global greenhouse gas emissions

Since December 2022, an additional 15 institutions and Observers – the State Bank of Pakistan, the Central Bank of Libya, the Central Bank of Barbados, the Bank of Uganda, the Bank of Tanzania, the Agency of the Republic of Kazakhstan for Regulation and Development of Financial Market, the European Single Resolution Board, the Central American Monetary Council, the Superintendency of Banking, Insurance and Private Pension Fund Administrators of Peru, the Superintendencia de Economía Popular y Solidaria of

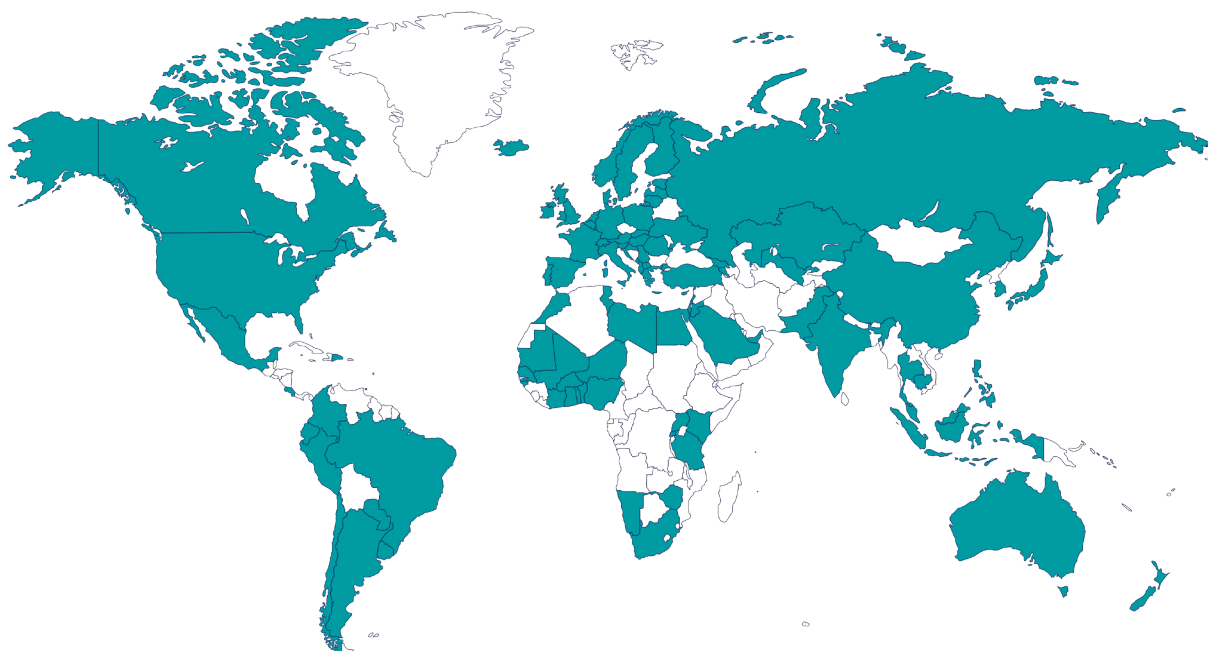
Ecuador, the Reserve Bank of Zimbabwe, the Financial Services Commission of Mauritius, the National Bank of Tajikistan, the Bank of Namibia and the Palestine Monetary Authority – joined the NGFS. As of the end of 2023, the NGFS consists of 134 members and 21 observers.

The Membership brings together institutions from all continents, from all levels of economic development, representing different climate and nature challenges.

## Steering Committee Members and Observers



# Plenary Members and Observers



## Map disclaimer

The boundaries shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the NGFS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.























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## Plenary Members

Abu Dhabi Financial Services Regulatory Authority	ARDFM Kazakhstan	Banco Central de Chile and Comisión para el Mercado Financiero de Chile	Banco Central de Costa Rica	Banco Central de la República Argentina
				
Banco Central de la República Dominicana	Banco Central de Reserva del Perú and Superintendencia de Banca y Seguros del Peru	Banco Central del Paraguay	Banco Central del Uruguay	Banco de España
				
Banco de la República	Banco de Portugal	Bangko Sentral ng Pilipinas	Bank of Albania	Bank of Estonia
				



## Plenary Members (continued)

Bank of Finland and Finanssivalvonta 	Bank of Ghana 	Bank of Greece 	Bank Indonesia and Otoritas Jasa Keuangan 	Bank of Israel 
Bank of Japan 	Bank of Korea and Financial Services Commission/ Financial Supervisory Service 	Bank of Latvia 	Bank of Lebanon 	Bank of Lithuania 
Bank of Mauritius and FSC Mauritius 	Bank of Namibia 	Bank of Russia 	Bank of Thailand 	Bank of Uganda 
Banka Slovenije 	Banque centrale du Luxembourg and Commission de surveillance du secteur financier 	Banque centrale de Tunisie 	Cayman Islands Monetary Authority 	Central Bank of Armenia 
Central Bank of Bahrain 	Central Bank of Barbados 	Central Bank of Cyprus 	Central Bank of Egypt and Financial Regulatory Authority of Egypt 	Central Bank of Iceland 
Central Bank of Ireland 	Central Bank of Jordan 	Central Bank of Kenya 	Central Bank of Libya 	Central Bank of Malta and Malta Financial Services Authority 
Central Bank of Mauritania 	Central Bank of Montenegro 	Central Bank of Nigeria 	Central Bank of Seychelles 	Central Bank of the Republic of Turkey and Banking Regulation and Supervision Agency 
Central Bank of Tanzania 	Central Bank of Trinidad and Tobago 	Central Bank of the U.A.E. 	Central Bank of Uzbekistan 	Central Bank of West African States 

## Plenary Members (continued)

Comisión Nacional Bancaria y de Valores 	Commission de contrôle des activités financières 	Croatian National Bank 	Danmarks Nationalbank and Danish Financial Supervisory Authority 	Dubai Financial Services Authority 
European Banking Authority 	European Insurance and Occupational Pensions Authority 	European Securities and Markets Authority 	Federal Reserve, Federal Housing Finance Agency, Federal Deposit Insurance Corporation, Federal Insurance Office, New York DFS and Office of the Comptroller of the Currency 	
Financial Market Authority Liechtenstein 	Guernsey Financial Services Commission 	Hong Kong Monetary Authority 	Isle of Man Financial Services Authority 	Istituto per la Vigilanza sulle Assicurazioni 
Jersey Financial Services Commission 	Komisja Nadzoru Finansowego 	Magyar Nemzeti Bank 	National Bank of Belgium 	National Bank of Cambodia 
National Bank of Georgia 	National Bank of the Republic of North Macedonia 	National Bank of Romania and Autoritatea de Supraveghere Financiară 	National Bank of Rwanda 	National Bank of Serbia 
National Bank of Tajikistan 	National Bank of Ukraine 	Norges Bank and Finanstilsynet 	Oesterreichische Nationalbank and Austrian Financial Market Authority 	Office of the Superintendent of Financial Institutions 
Palestine Monetary Authority 	Reserve Bank of Australia 	Reserve Bank of India 	Reserve Bank of New Zealand 	Reserve Bank of Zimbabwe 
Saudi Central Bank 	State Bank of Pakistan 	Superintendencia de Economía Popular y Solidaria de Ecuador 	Sveriges Riksbank 	Swiss National Bank and Financial Market Supervisory Authority 

## Observers

<p>ASEAN +3 Macroeconomic Research Office (AMRO)</p> 	<p>Asian Development Bank</p> 	<p>Basel Committee on Banking Supervision</p> 	<p>Central American Monetary Council</p> 	<p>Committee on Payments and Market Infrastructures</p> 
<p>European Bank for Reconstruction and Development</p> 	<p>European Investment Bank</p> 	<p>European Stability Mechanism</p> 	<p>Financial Stability Board</p> 	<p>Fondo Latinoamericano de Reservas</p> 
<p>Inter-American Development Bank</p> 	<p>International Association of Insurance Supervisors</p> 	<p>International Monetary Fund</p> 	<p>International Organisation of Pensions Supervisors</p> 	<p>International Organization of Securities Commissions</p> 
<p>Nordic Investment Bank</p> 	<p>Organisation for Economic Cooperation and Development</p> 	<p>Single Resolution Board</p> 	<p>Sustainable Banking and Finance Network</p> 	<p>Sustainable Insurance Forum</p> 
<p>The World Bank and International Finance Corporation</p> 				

## NGFS Key achievements since 2017

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Since its creation in 2017, the NGFS has effectively contributed to bringing climate change into the financial agenda and has provided a forum for discussions and exchanges of best practices for central banks and supervisors around the world. The large range of topics discussed and the quality of the work produced by its members has made the NGFS a key player in the collective response to climate change.

In 2021, the NGFS committed to strengthen the collective efforts of its members and observers to improve the resilience of the financial system to climate-related and environmental risks, and to encourage the scaling up of the financing flows needed to support the transition towards a sustainable economy.

Since then, the NGFS has focused its work on operationalising central bank and supervisory agencies' climate actions and has contributed to shaping a new way of addressing the climate challenge. It has improved the NGFS Scenarios every year and encouraged and supported climate scenario analysis and climate stress tests (the use of climate scenario analysis and climate stress-testing is becoming widespread among central banks). It has laid the foundation for robust climate change considerations into monetary policy strategies and frameworks as appropriate. It has explored

emerging issues in the context of prudential supervision (e.g. implications of the rise in climate litigation) and has helped to incubate the prudential approach to transition planning by financial institutions (NCBs and NCAs are now embracing forward-looking approaches to the transition). It has deepened and broadened its work on mainstreaming climate across all central banking business lines and promoted better accountability in line with existing international disclosure standards. It has focused on capacity building to help its members (especially, members from emerging and developing economies) upskill for climate action and has brought to the front new issues in the financial system (like nature-related risks in 2023).

The work of the NGFS has fostered action by its members. Most NGFS members have taken concrete steps over the past two years to turn identifying best practices into effective actions and policies in their own jurisdictions, especially in the development of supervisory expectations in many countries which has led to financial institutions improving their practices. The actual implementation has brought new insights and allowed others to learn from these experiences. This drive to turn knowledge, convictions and analytical work into action demonstrate the determination of the NGFS community to act as a leading force.



NGFS  
Secretariat