NGFS Dubai Stocktake

A renewed commitment to accelerate the transition to a climate and nature friendly global economy

December 2023

Executive summary

This Note, released on the Finance Day of the 28th Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) held in Dubai, takes stock of the work of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) over the past few years, as well as the progress and gaps in transition financing.

- *It builds on the NGFS 2016 Glasgow Declaration and highlights NGFS' key priorities that will contribute to bridging the implementation gap in the near term while reaffirming its medium-term commitment.*
- *The Note leverages the insights of the more than 150 institutions collaborating through the NGFS on the necessary actions central banks and supervisors can take to enable the transition towards a sustainable economy.*

Good progress has been achieved in incorporating sustainability in the financial system. A growing number of financial actors now integrate climate considerations in their strategy and strive for alignment with the objectives of the Paris Agreement.

- *The progress has been broad-based with central banks and supervisory agencies playing an increasing role in creating awareness among financial firms and fostering best practises to integrate climate considerations.*
- *Overall, the financial system is becoming an enabler of the transition.*

However, the implementation of climate policies and strategies needs to be faster and more coordinated.

- *A delayed transition risks financial instability and the macroeconomic effects of climate change are already manifesting.*
- *Climate policies need to raise ambition levels beyond that of current pledges and commitments and be coordinated between public and private actors in developing and advanced economies.*

The Note puts forward several key points:

1. *Economic and financial impacts of climate change and nature degradation underline the need for an effective transition to a climate and nature friendly global economy.*
2. *Fostering financial stability and enabling finance flows aligned with the objectives of the Paris Agreement and the Global Biodiversity Framework are key for a successful transition.*
3. *The NGFS has facilitated and strengthened the collective efforts of its Members.*
4. *The NGFS will continue to foster an environmentally sustainable financial landscape to help bridge the gap in scaling climate-related finance.*

1. Economic and financial impacts of climate change and nature degradation underline the need for an effective transition to a climate and nature friendly global economy

Limiting temperature increase to "well below 2°C" above pre-industrial levels in an orderly fashion is within reach but requires ambitious climate policies. The latest release of the NGFS Scenarios[1] highlights that staying close to or even below 1.5°C is possible. The new NGFS Low Demand scenario shows that remaining below 1.5°C could be achieved by complementing the energy transition (away from fossil fuels to renewable energy) with a reduction in energy demand and changes in consumption patterns with appropriate policies. The revised Net Zero 2050 scenario, which keeps global warming levels above but close to 1.5°C, requires more intensive efforts but still appears plausible. Both scenarios suggest that while feasible, limiting climate change to "well below 2°C" will require ambitious and effective climate policies.

A faster and coordinated transition to a climate resilient net-zero global economy is significantly beneficial. The NGFS scenarios emphasize that an accelerated and coordinated transition will be less costly than a disorderly or delayed transition in the long run. The macroeconomic costs and financial risks associated with unmitigated climate change will surpass the costs or risks associated with an effective transition. This conclusion holds even without fully accounting for the impacts of acute and chronic physical risks, which the NGFS Scenarios are only progressively taking into account[2]. The implications of reaching climate tipping points, which are also becoming more probable[3], have also not been captured by available macroeconomic models.

In addition, a growing body of evidence highlights the compatibility of the transition with a development agenda, even suggesting a complementarity.[4]

It has also become increasingly clear that the degradation of nature represents a risk we cannot overlook. Nature-related risks could have significant macroeconomic implications, and failure to account for, mitigate, and adapt to these implications is a source of risks for financial stability[5]. The NGFS recognizes that the different dimensions of nature, including climate, are closely interconnected. The physical dynamics driving climate change and the degradation of nature are mutually reinforcing. Additionally, climate mitigation and nature restoration present potential trade-offs and synergies.

2. Fostering financial stability and enabling finance flows aligned with the objectives of the Paris Agreement and the Global Biodiversity Framework are key for a successful transition

Enabling finance flows aligned with the objectives of the Paris Agreement and the Kunming-Montréal Global Biodiversity Framework will help central banks and supervisory agencies foster macroeconomic and financial stability. Conversely, successfully delivering on their monetary and financial stability mandates supports investments in the transition. A conductive investment environment depends on a favourable baseline assumption of macroeconomic and financial stability.

As financial supervisors assess climate-related risks as a source of financial risk, financial institutions will shift towards a risk-based forward-looking assessment of

[1] See NGFS, NGFS Climate Scenarios for central banks and supervisors - Phase IV, 7 Nov. 2023.
[2] NGFS scenarios now provide economic impact for different acute physical risks at country or regional level (floods, drought, cyclone, heatwave). See NGFS Climate Scenarios for central banks and supervisors - Phase IV, Nov. 2023
[3] Armstrong McKay *et al.*, Exceeding 1.5°C global warming could trigger multiple climate tipping points, Science, 9 Sept. 2022.
[4] See, for example, World Bank, Climate and Development: An Agenda for Action, 3 Nov. 2022 and the various Country climate and development reports.
[5] See NGFS, Statement on nature-related financial risks, March 2022

counterparties' vulnerability to climate-related risks.[6] Pursuing efforts to contain global warming "well below 2°C" remains the best risk management approach and such a transition can be considered a baseline for central banks and supervisory agencies to anchor their own actions.

While central banks and supervisory agencies can contribute as part of a global collective response to climate change, governments must implement climate policies that would enable a transition at scale and at speed toward a climate resilient net zero economy. While the NGFS can help to foster a climate and nature-friendly financial system, the speed and scale of transition pathways hinge on the ambition and credibility of governments' climate policies. The actions of central banks, supervisors and financial institutions complement climate policies and can facilitate implementation, but cannot compensate for gaps in governments' climate policies.

3. The NGFS has facilitated and strengthened the collective efforts of its Members

In Glasgow, at COP26, the NGFS and its Members reiterated their commitment to contribute to the global response required to meet the objectives of the Paris Agreement. The NGFS committed[7] to expand and strengthen the collective efforts of its Members and Observers to improve the resilience of the financial system to climate-related and environmental risks, and encourage the scaling up of the financing flows needed to support the transition towards a sustainable economy.

Since Glasgow, the NGFS has moved from commitment to action by focusing on implementing and operationalising central banks' and supervisory agencies' climate action. It has improved the NGFS Scenarios and encouraged and supported climate scenario analysis and climate stress tests. It has laid the foundation for a 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. [8] 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.

Central banks and supervisory agencies are effectively embracing, a forward-looking approach to the transition. Transition plans of financial institutions can now rely on information from real economy transition pathways, country transition strategies, and corporate transition plans to identify future challenges and strategic approaches to addressing them. Such information is valuable for micro-prudential supervision and macro-prudential surveillance.

The use of climate scenario analysis and climate stress testing is becoming widespread among central banks[9] while also developing in the private sector[10]. These scenarios are a key instrument for central banks, supervisors and private sector players to assess the macro-financial risks posed by climate change, as well as the opportunities of timely climate mitigation. Climate stress tests aim to both strengthen the ability of

[6] Namely, "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels [to] reduce the risks and impacts of climate change; increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development [...]; and making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development." (Paris Agreement, art. 2.1).

[7] See NGFS Glasgow Declaration: Committed to Action, 3 Nov. 2021.

[8] See [NGFS report on transition plans]

[9] See [joint NGFS-FSB report]

[10] See [result of the survey on NGFS Scenarios]

institutions to anticipate the consequences of climate change and to improve risk management. The scenarios have also helped financial institutions think through the implications from the transition in the short, medium and long term, and to adapt their strategies accordingly. This forward-looking perspective is contributing to a safer and more efficient financial system.

The NGFS has taken steps to mainstream the consideration of nature-related risks and their broader implications for the financial sector. Recognising the importance of ecosystem services to our economies, the NGFS has developed its analytical framework on nature related financial risks[11]. The NGFS will soon publish observations and recommendations on the development of scenarios that consider nature-related risks to complement its climate scenarios.[12]

The NGFS remains dedicated to a collaborative approach both among its community of 129 Members and 21 Observers and with other stakeholders (standard-setters, other policy makers coalitions and forum, the financial sector, academia and other relevant stakeholders). The cooperation within the NGFS community (as well as with other dedicated or interested stakeholders and groups) is key as leveraging on one another's commitment and capacities allows for distilling best practices, identifying challenges and solutions, and avoiding duplication of work. The collaboration with standard setting bodies (FSB, BCBS, IAIS), also coordinated by the G20[13] and the FSB[14], have helped advanced global regulatory approaches. [15]

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[16] 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.

4. The NGFS will continue to foster an environmentally sustainable financial landscape, to help bridge the gap in scaling up climate-related finance.

Over the next years, the NGFS will continue to support the development of transition planning and transition plans. Initial work has proven instrumental in reaching a common understanding of these issues and highlighted the need to address important challenges of transition planning, such as ensuring consistency across financial institutions' approach to transition finance. The starting points of the transition for different jurisdictions may however vary depending on the state of the energy system for instance. The NGFS is committed to ensure that transition planning and the development of transition plans account for such differences.

The NGFS will continue to improve the macro-financial scenarios to better reflect the physical impacts of climate change and account for possible adverse developments in the short term. The NGFS Scenarios have been developed using the 'state of the art' in

[11] See NGFS, Nature-related Financial Risks: a Conceptual Framework to guide Action by Central Banks and Supervisors, 6 Sept. 2023
[12] See NGFS publishes Conceptual Framework for Nature-related Financial Risks at launch event in Paris, 7 Sept. 2023
[13] See G20 SFWG, G20 Sustainable Finance Roadmap, Jan. 2022
[14] See FSB, FSB Roadmap for Addressing Financial Risks from Climate Change Progress Report, 13 Jul. 2023
[15] See Basel Committee on Banking Supervision, Principles for the effective management and supervision of climate-related financial risks, June 2023; IAIS, Application Paper on the Supervision of Climate-related Risks in the Insurance Sector, May 2021
[16] Supervisory expectations have been introduced in several jurisdictions, such as members of the European Single Supervisory Mechanism, the Office of the Comptroller of the Currency, the Monetary Authority of Singapore

the macroeconomic modelling of climate change. Yet, the NGFS is mindful that some physical risks are still crudely represented and seeks to foster progress in this respect. Additionally, while the medium to long term perspective is necessary to frame the scenarios, shorter term scenarios are required to undertake effective climate stress testing and ensure that the financial sector is able to cope with the possible impact of severe physical and transition risks which cannot be ruled out even in 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 net zero transition also 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.

Meaningful climate action is only possible if capacity is being built across the organisation and staff trained and upskilled. The NGFS has developed practical tools for the central banking and supervisory community to advance this effort is a collaborative way and is looking forward to joining forces with others to facilitate capacity building across its membership, including through wider global initiatives.

Central banks have a role to play in scaling up blended finance and deliver on the crowding in of private finance for climate action. Synergising public and private capital through effective blended finance mechanisms can help de-risk private capital investments and scale up private climate and nature financing more significantly. The investment gap remains large.[17] Adaptation remains underfinanced, especially for emerging and developing economies.[18] The members of the NGFS can help build an attractive investment environment for such instruments to function by harmonising regulatory approaches, and address potential risks associated with an increase in external financing. The NGFS is considering further work on adaptation financing in relation to its implications for the financial system and the possible avenues for addressing it.

Overall, the NGFS reaffirms its commitment to an open and collaborative approach to addressing climate and nature-related risks. The NGFS seeks to deepen the collaboration within the Network and with its community, including standard setting bodies and other public organisation and groups. Moreover, while stressing the importance of climate policy by governments and climate action by the private sector, it looks forward to engaging with willing stakeholders to foster the much-needed acceleration of the transition to avoid the worst of the impact of climate change.

[17] See, IPCC, Climate Change 2022: Mitigation of Climate Change. Working Group III Contribution to the IPCC Sixth Assessment Report, and, for an update, Climate policy Initiative, Global Landscape of Climate Finance 2023, 2 Nov. 2023.

[18] CPI estimates that adaptation related investments represented about USD 100bn in 2022 (bringing together adaptation projects and projects with dual benefits; see Global Landscape of Climate Finance 2023). The latest adaptation gap assessment published by UNEP points at an adaptation investment need of about USD 350bn-USD 400bn/year in developing countries alone (see Adaptation Gap Report 2023).