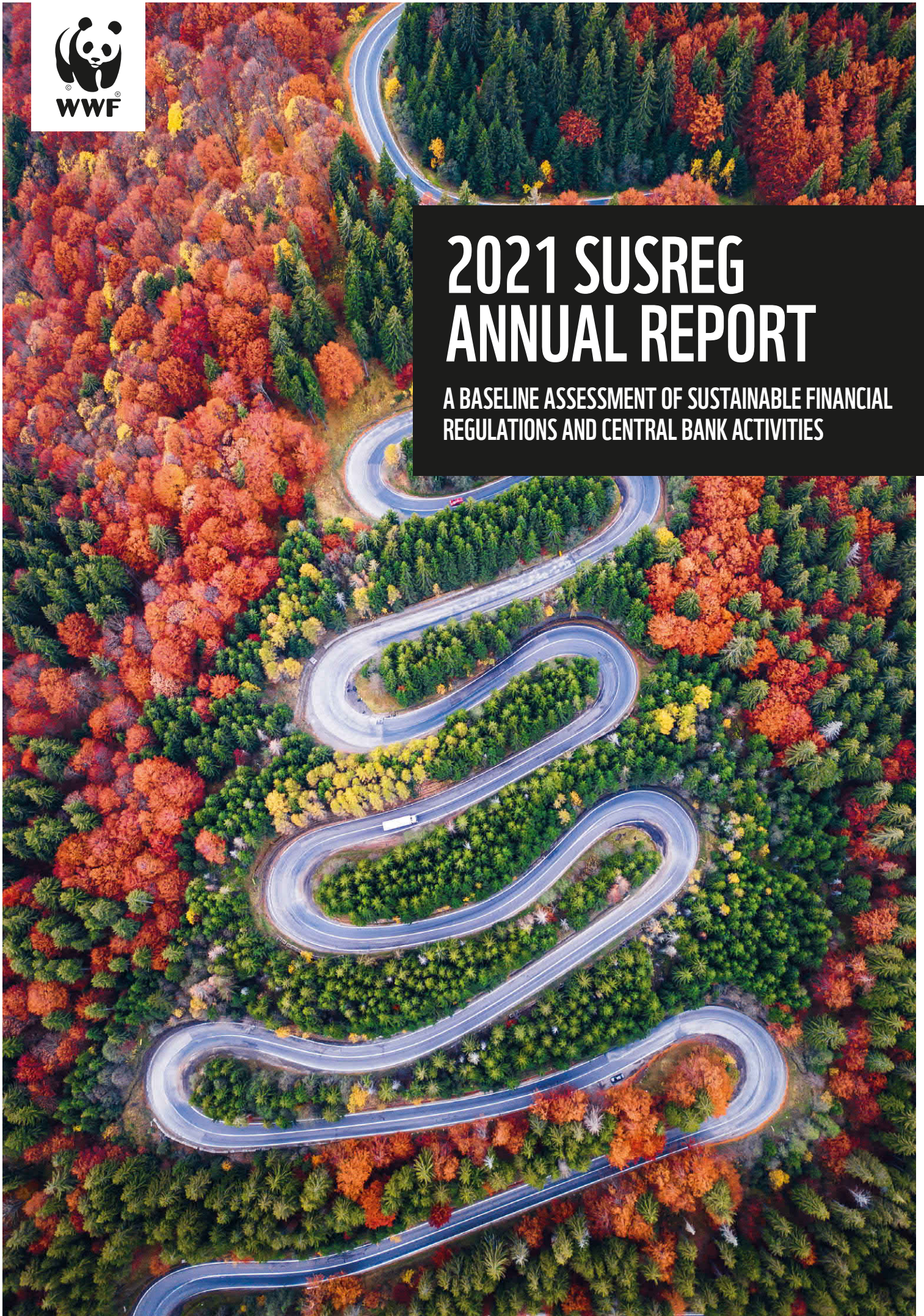




# 2021 SUSREG ANNUAL REPORT

A BASELINE ASSESSMENT OF SUSTAINABLE FINANCIAL  
REGULATIONS AND CENTRAL BANK ACTIVITIES



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## FOREWORD ODILE CONCHOU

FINANCIAL SECTOR FOCAL POINT AT THE SECRETARIAT  
OF THE CONVENTION ON BIOLOGICAL DIVERSITY

In recent years, extreme weather events linked to climate change and biodiversity loss have increased at an unprecedented rate, with major consequences for our local communities, societies and global economy. To avoid the catastrophic impacts of these two interconnected crises, it is urgent to act for a profound transformation of our economic system and development model.

*“Together with the upcoming climate negotiations at COP26, the COP15 is the last chance to lay the foundations for a permanent peace agreement with nature. An ambitious and effective post-2020 global biodiversity framework, with clear targets and benchmarks, should work in synergy with the Paris Agreement on climate change, and other multilateral agreements”,* said António Guterres at the opening of the first part of COP15, under the Convention on Biological Diversity. The Kunming Declaration adopted on this occasion confirmed the willingness of governments and stakeholders to increase their ambition in favour of Nature.

While climate awareness is now relatively well established in the economic sectors and society, the same is not yet completely true for biodiversity. But there are good reasons to be optimistic. Indeed, over the last years, we have seen the economic and financial sectors starting to mobilise. Several coalitions have emerged and made announcements in favour of nature beyond climate. This is very encouraging and needs to be followed by concrete actions on the ground.

Tackling biodiversity loss by aligning financial flows with global biodiversity targets will be an important part of the solution in terms of climate change, poverty reduction and equitable development, particularly in developing countries. By integrating nature-related financial risks, impacts and dependencies into investment decisions, by scaling up nature positive investments such as nature-based solutions, restoration of degraded ecosystems, sustainable agriculture, fisheries and infrastructure, and finally by disclosing nature-related financial risks and opportunities, the financial sector will make the difference.

To achieve this ambition, the engagement of central banks and regulators is critical. Climate change is increasingly recognized as generating systemic risk and impacting country debt portfolios and credit ratings, and the same is happening with biodiversity. The situation is evolving rapidly, notably through the research work of the Network for Greening the Financial System (NGFS) and some central banks in the Netherlands, France, the UK, Brazil and others.

The launch of the first annual report of the Sustainable Financial Regulations and Central Bank Activities (‘SUSREG’) framework by WWF is timely and comes at a particularly important time for Nature and Climate between COP15 and COP26. It describes the state of practices in 38 countries and provides comprehensive recommendations that will help regulators, supervisors and central banks to share good practices and to continue taking action to consider nature-related risks beyond climate risks, as major financial risks.



## FOREWORD ONNO VAN DEN HEUVEL

GLOBAL MANAGER  
THE BIODIVERSITY FINANCE INITIATIVE (BIOFIN), UNDP

When we think about biodiversity conservation, the main actors usually coming to our mind are rangers, NGO workers and local communities on the ground, or environment ministers. Central bank governors, financial regulators or finance ministers seem less obvious. Yet these are precisely the people who need to become our nature champions in the next decade if we are to achieve global biodiversity goals.

UNDP’s Biodiversity Finance Initiative (BIOFIN) worked over the past eight years with Ministries of Finance in 40 countries to develop national Biodiversity Finance Plans. An important part of this process is to raise their awareness on the financial benefits brought by biodiversity conservation, and the potential it has to create sustainable jobs. This work includes better reflecting the economic value of ecosystem services provided free-of-charge by nature (e.g. through carbon pricing or natural resources user fees).

It is remarkable governments spend around US\$500 billion per year supporting activities that harm nature – a big part of which consisting of support for unsustainable agriculture and fisheries (OECD, 2020), but only US\$120 billion on activities with a nature-positive impact - such as funding for protected areas, biodiversity-positive subsidies or investments into the restoration of wetlands and mangroves (UNDP-BIOFIN, 2020). The total expenditures for biodiversity protection (including from the private sector) of US\$143 billion per year fall well short of the US\$722-967 billion needed annually (Deutz et al, 2020).

Over the next decade, these figures need to be turned around. Financial sector stakeholders play a key role here, as this can only be achieved through a greener financial system, accounting for the true value of biodiversity and the real costs of biodiversity loss, along with mechanisms to prevent any further degradation and even restore the ecosystems we all depend on.

The question is then how to achieve this and how to monitor success. We need to engage with financial regulators and define metrics to measure progress in a clear and harmonized manner. Across the world, financial institutions are starting to develop stress tests to better understand the risk their portfolios face due to climate change. Further work is needed to factor nature loss into these risk assessments. The momentum is here, and now is the time to bring all financial sector stakeholders together to create a greener and more sustainable financial system.

We thus welcome the launch by WWF of its new ‘SUSREG’ framework, which can help central banks to measure progress across their main mandates and activities. This will help determine if central banks are indeed on track to become drivers of the change we need to see in the financial system, making it work in support of, and not against, a nature-positive economy.



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## FOREWORD ULRICH VOLZ

PROFESSOR OF ECONOMICS & DIRECTOR OF THE CENTRE FOR  
SUSTAINABLE FINANCE AT SOAS, UNIVERSITY OF LONDON

The climate and ecological crises are escalating rapidly. Decisive policy action is needed to limit global warming and protect our natural habitat, which is the very foundation of our existence. The financial system sits at the heart of our economies. Aligning financial flows with sustainability goals hence ought to be a policy priority. As guardians of the financial system, central banks and supervisors need to ensure that all lending and investment is compliant with climate and environmental goals and that financial institutions account for sustainability risks and impacts. While action by banks and investors is primarily driven by their fiduciary duties and aims to deliver returns, central banks and supervisors ought to take a systemic perspective, addressing both micro- and macroprudential risks, and, by implication, working to ensure that all financial flows become aligned with sustainability goals.

Over the last years, we have seen a new consensus emerging among central banks and supervisors that addressing climate and other environmental risks falls firmly into their mandates. This is epitomised by the fact that the Network of Central Banks and Financial Supervisors for Greening the Financial System, which was established in 2017 by eight members, now has a membership of almost 100 institutions, including central banks and supervisors from all the major economies.

As shown in the 2021 SUSREG Annual Report, a growing number of central banks and supervisors are now starting to roll out and implement regulations, supervisory expectations or guidelines to address sustainability-related risks. This is commendable. But the report also shows that current efforts are still falling short of what is needed to seriously align the financial system with sustainability. Within their mandates, central banks and supervisors need to take a strategic stance on supporting the transition to a low-carbon and environmentally sustainable economy and adjust their prudential, monetary and other policies to this end.

Enhancing market practices and transparency through standards, taxonomies and disclosure can be only a starting point. As recommended in this report, regulations and supervisory expectations should require financial institutions to develop a portfolio-level approach to the management of environmental and social risks and minimise the negative impacts associated with their lending or investment. Importantly, the report highlights that in addition to micro-prudential supervisory tools, central banks and financial supervisors should make full use of their macro-prudential toolkit to limit exposures to activities that are deemed incompatible with sustainable development objectives and subject to higher risks. Last but not least, central banks ought to adjust their monetary operations to account for sustainability impacts and integrate sustainability factors into their own-portfolio management.

”



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# EXECUTIVE SUMMARY

The latest findings from the international scientific community on climate and biodiversity are stark. In 2019, CO<sub>2</sub> concentrations in the atmosphere were higher than at any time in at least two million years.<sup>1</sup> The global average temperature has already increased by 1.2 °C over pre-industrial levels and is projected to rise to 2.4 °C by 2100, provided current climate pledges under the Paris Agreement are met.<sup>2</sup>

Human actions, notably through habitat destruction, climate change, pollution and the overexploitation of species has already severely altered 75% of the terrestrial environment and about 66% of the marine environment.<sup>3</sup> As world leaders prepare to negotiate a new Global Biodiversity Framework under the UN Convention on Biological Diversity, WWF's recent Living Planet Report showed that our planet's wildlife populations have plummeted by 68% since 1970.<sup>4</sup>

These changes are unprecedented in their scale and pace, and call for unprecedented action, both to address

the root causes of climate change and nature loss, and to improve resilience to their impacts. The Covid-19 pandemic is a clear reminder that we should heed the warnings of science, halt and reverse the degradation of nature and better protect the most vulnerable communities.

In this collective endeavour, the financial sector plays an important role and must be fully mobilized. As lenders, underwriters, investors and insurers, financial institutions channel financial flows and provide the capital needed to transition towards a more sustainable future.

Central banks, financial regulators and supervisors set the rules for financial institutions and ensure the stability of the financial system. They also have a leadership role in showing market participants that a sustainable transition provides significant new economic opportunities.

As a global science-based conservation organization, WWF is engaging with financial sector stakeholders across the world, working to ensure the financial system fully accounts for climate- and nature-related risks and drives sustainable practices throughout the rest of the economy.

Under its **Greening Financial Regulation initiative (GFRi)**, WWF is deepening its work with central banks, financial regulators and supervisors, advocating for the urgent need to fully integrate all environmental and social (E&S)<sup>i</sup> risks into their mandates and operations.<sup>ii</sup>

In July 2021, the **'Nature's next stewards' report** published under the GFRi highlighted the urgency for central banks and supervisors to act on the risks caused by unprecedented nature loss, and provided practical recommendations on the use of existing tools to take preventive action.<sup>5</sup>

In April 2021, WWF launched the **Sustainable Financial Regulations and Central Bank Activities ('SUSREG')** framework, to provide an independent assessment of how central banks, banking regulators and supervisors integrate E&S considerations into their activities.<sup>iii</sup>

This report is WWF's **baseline assessment of current practices**, covering 38 jurisdictions accounting for more than 90% of global GDP, 80% of total GHG emissions and 11 of the 17 most biodiversity-rich countries.<sup>6</sup> It delves deeper into the measures taken to date, identifying areas where more resolute and ambitious action is needed and

highlighting good practices to help speed up progress.

To access the detailed country-level assessment results, please visit the **SUSREG Tracker interactive platform:** [www.susreg.org/assessments](http://www.susreg.org/assessments)

The SUSREG Tracker platform will be updated on a regular basis to reflect ongoing developments, while the SUSREG report will **take stock of progress made on an annual basis**. In 2022, the SUSREG framework will be expanded to cover other key parts of the financial system, including the insurance sector.

**Of the 38 jurisdictions assessed, 35% have regulations or supervisory expectations in place** covering the integration of climate, broader environmental and/or social considerations in the governance, strategy, risk management and disclosure practices of commercial banks. While this is a good starting point, these expectations should be further strengthened, rolled out more systematically and followed by regulatory actions to ensure compliance with enacted rules.

**Central banks and supervisors are making significant efforts to better understand and quantify the exposure of banks to climate-related physical and transition risks**, including through the use of scenario-based stress-testing. The same should be done to understand, measure and mitigate risks associated with nature loss.

Conducting and gradually refining these complex exercises should be done in parallel with the **issuance and implementation of clear rules to ensure that financial institutions do not continue to support activities that are incompatible with global climate, environmental and broader sustainability objectives**.

In the face of accelerating and potentially irreversible changes, **a precautionary approach is necessary**.

Micro- and macro-prudential supervisory tools such as capital charges, concentration limits and liquidity requirements should already be deployed to better reflect actual risks and provide stronger incentives for banks to support their clients' transition towards more sustainable business models, as well as to reduce threats to financial stability.

**Limitations around data and methodologies should not be an obstacle** to rolling out some of the above measures. In many respects, there has never been more information available, and WWF believes that central banks and banking supervisors should take concrete action before risks materialize.

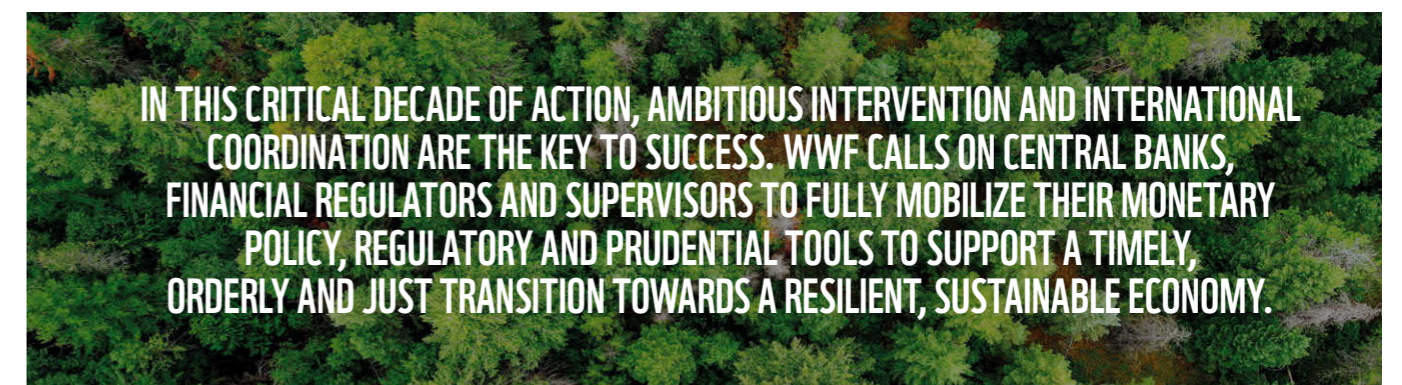
**The integration of environmental and social considerations in key monetary policy measures, such as asset purchases, collateral frameworks or refinancing programs, is currently very limited**. Only 22% of the relevant central banks have some of these measures in place, and none of them fully satisfy the related SUSREG indicators.

However, more progress can be seen in foreign exchange reserves and overall portfolio management. Making better use of these tools would ensure central banks contain E&S risks and do not slow down the sustainable transition.

**While central banks and banking supervisors are making good progress on developing their strategy and rolling out concrete measures to address climate-related risks, other environmental and social risks are significantly less well covered**.

Current efforts being made to build a better understanding of the financial implications of such risks, notably biodiversity loss<sup>iv</sup> and its interlinkages with climate change, should be rapidly followed by concrete actions.

The leadership role played by central banks and financial supervisors should also not be underestimated. Taking a stronger public stance on the need to respond to environmental and social challenges would **support more ambitious action from governments and send the right signals to financial institutions, notably over upcoming regulatory and supervisory changes**.



**IN THIS CRITICAL DECADE OF ACTION, AMBITIOUS INTERVENTION AND INTERNATIONAL COORDINATION ARE THE KEY TO SUCCESS. WWF CALLS ON CENTRAL BANKS, FINANCIAL REGULATORS AND SUPERVISORS TO FULLY MOBILIZE THEIR MONETARY POLICY, REGULATORY AND PRUDENTIAL TOOLS TO SUPPORT A TIMELY, ORDERLY AND JUST TRANSITION TOWARDS A RESILIENT, SUSTAINABLE ECONOMY.**

Under the Greening Financial Regulation initiative, in addition to producing key research and providing ad-hoc support, WWF will report annually on the progress made by central banks, financial regulators and supervisors in the integration of environmental and social considerations in their activities.

i. Environmental and social risks cover in particular climate-related risks, biodiversity loss, deforestation and pollution as well as human rights violations and labour issues.  
ii. For more information, please visit: [https://wwf.panda.org/discover/our\\_focus/finance/greening\\_financial\\_regulation/](https://wwf.panda.org/discover/our_focus/finance/greening_financial_regulation/)  
iii. Press release: [https://wwf.panda.org/discover/our\\_focus/finance/greening\\_financial\\_regulation/21834441/Sustainable-Financial-Regulations-SUSREG](https://wwf.panda.org/discover/our_focus/finance/greening_financial_regulation/21834441/Sustainable-Financial-Regulations-SUSREG)

iv. In particular, the *Biodiversity and financial stability: building the case for action* report of the Joint NGFS-INSPIRE Study Group on Biodiversity and Financial Stability (October 2021), acknowledges that the potential impacts of biodiversity loss pose threats to financial stability.



# KEY FINDINGS AND EXPECTED ACTIONS

This page gathers the key findings and expected actions distributed throughout the report.

## BANKING SUPERVISION

KEY FINDINGS	ACTIONS EXPECTED BY WWF
<ul style="list-style-type: none"> <li>In <b>35%</b> of the countries assessed (13 out of 38), banking regulators or supervisors have published regulations or supervisory expectations related to sustainable banking and applicable to all supervised commercial banks. In addition, voluntary guidance or recommendations have been issued by supervisors in five countries, and by national banking associations in six countries.</li> <li>In the 24 jurisdictions where regulations, supervisory expectations or guidelines have been issued, banks are expected to incorporate climate considerations in their strategy. Of these 24 jurisdictions, only five are limited to climate aspects, while 15 extend to the whole range of climate, environmental and social (E&amp;S) aspects. While this is encouraging, it also shows significant room for improvement, particularly as 14 countries have no expectations in place.</li> <li>On average and across all geographies, regulations and supervisory expectations fulfil more indicators than guidance documentation issued by supervisors or guidelines issued by banking associations. As such, they are associated with higher expectations, in addition to being an integral part of the supervisory dialogue with banks.</li> </ul>	<ul style="list-style-type: none"> <li>Regulations and supervisory expectations should be rolled out and expanded to cover the entire range of climate, environmental and social (E&amp;S) aspects. Banking regulators and supervisors should be trained and equipped to implement these new expectations as an integral part of ongoing supervisory dialogue, with accompanying sanctions for non-compliance.</li> <li>Regulators and supervisors globally should continue to develop and strengthen their expectations for banks. To facilitate compliance and ensure coherent implementation, expectations should be harmonized across geographies and applicable to all banking activities.</li> <li>Regulators and supervisors should ensure that banks set the appropriate incentives for the management of E&amp;S risks, in particular through appraisal and remuneration policies. Banks should be expected to provide regular training and build capacity of all relevant staff, including their Board and senior management.</li> <li>Regulators and supervisors should require banks to develop and publish their policies on sectors subject to high E&amp;S risks, with reference to international sustainability standards. Banks should be expected to put in place internal controls covering such risks, and to develop formal processes to address non-compliance issues.</li> <li>Regulators and supervisors should require banks to develop a portfolio-level approach to the management of E&amp;S risks. Banks should be expected to minimize the negative impacts associated with their business relationships, to progressively set science-based targets in line with existing and upcoming international climate and biodiversity frameworks, and to align with broader sustainable development goals.</li> </ul>
<ul style="list-style-type: none"> <li>In most jurisdictions, banks are expected to disclose information on their E&amp;S strategy and its implementation, albeit in varying levels of detail. Expectations for banks to disclose their exposure to E&amp;S risks or their E&amp;S impacts are generally limited or high level, although recently issued regulations and guidelines are more specific, with increasing reference to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).</li> </ul>	<ul style="list-style-type: none"> <li>Regulators and supervisors should require banks to disclose their portfolio-level exposure to, and management of, material E&amp;S risks. In line with double materiality considerations, banks should similarly be expected to disclose their adverse E&amp;S impacts and the associated mitigation measures.</li> </ul>
<ul style="list-style-type: none"> <li>Existing rule-based microprudential supervisory tools, such as those set out under the Basel regulatory framework, are not yet being fully utilized by banking regulators and supervisors to proactively mitigate, <i>ex-ante</i>, the financial risks derived from E&amp;S risks.</li> </ul>	<ul style="list-style-type: none"> <li>Regulators and supervisors should systematically require banks to factor E&amp;S risks in their capital adequacy assessment and liquidity risk management processes. While risk quantification methodologies are being refined, prudential supervisors should adopt a precautionary approach and use existing supervisory and regulatory tools to set minimum capital and liquidity requirements.</li> </ul>

## BANKING SUPERVISION

KEY FINDINGS	ACTIONS EXPECTED BY WWF
<ul style="list-style-type: none"> <li>While an increasing number of banking supervisors are conducting or have announced climate-related stress-tests and are monitoring risk exposures, there is a distinct lack of macro-prudential measures being taken to limit the exposure of banks to certain activities and prevent the build-up of systemic risks in the financial system, particularly with regards to climate and environmental risks.</li> </ul>	<ul style="list-style-type: none"> <li>In addition to micro-prudential supervisory tools, central banks and banking supervisors should make full use of macro-prudential measures to limit the exposure of banks to activities that are deemed incompatible with national or international sustainable development objectives and therefore subject to higher risks. While scenario-based stress-tests provide useful insights, they should not replace or delay the use of measures to address systemic risks <i>ex-ante</i>.</li> </ul>
<ul style="list-style-type: none"> <li>A majority of banking supervisors have conducted studies to assess the exposure of banks to certain E&amp;S risks, although almost exclusively focusing on climate-related risks. These studies are often complemented by surveys to understand how banks are managing these risks. Only a few supervisors are monitoring these risks on a regular basis.</li> </ul>	<ul style="list-style-type: none"> <li>Banking supervisors should deepen their understanding of banks' exposure to climate-related physical and transition risks. They should also use existing and new methodologies to start quantifying banks' exposure to broader E&amp;S risks. These results should be published and, combined with a better comprehension of how banks are managing these risks, should inform regulatory and supervisory action.</li> </ul>

## CENTRAL BANKING

KEY FINDINGS	ACTIONS EXPECTED BY WWF
<ul style="list-style-type: none"> <li>While <b>22%</b> of the relevant central banks (7 out of 32) are starting to integrate E&amp;S considerations into key monetary policy areas, none of them fully satisfy the related indicators. Regardless of individual mandates, central banks usually have a range of relevant tools at their disposal. Although this is an area of increasing interest and research, these tools are currently largely underutilized.</li> </ul>	<ul style="list-style-type: none"> <li>Central banks should make full use of their monetary policy toolkit, both to reflect the risks derived from E&amp;S issues and to ensure that their actions do not impair the transition to a low-carbon and more sustainable economy.</li> </ul>
<ul style="list-style-type: none"> <li>An increasing number of central banks are incorporating E&amp;S considerations in the management of their financial portfolios and are starting to quantify their exposure to climate risks. However, in a majority of cases, little detail is available on central banks' responsible investment practices.</li> </ul>	<ul style="list-style-type: none"> <li>Central banks should lead by example by fully integrating E&amp;S considerations in the management of their foreign reserves as well as across all their portfolios, and disclosing their approach. Central banks should progressively set targets to align their portfolios with science-based targets, starting with climate.</li> </ul>
<ul style="list-style-type: none"> <li><b>92%</b> of the central banks and <b>84%</b> of the banking supervisors assessed are members of the Network for Greening the Financial System (NGFS). Banking supervisors and central banks are starting to roll out and implement their plans and activities to address climate-related risks, although broader E&amp;S risks are currently less well covered. Dedicated teams and governance structures are progressively being set up to implement these actions.</li> </ul>	<ul style="list-style-type: none"> <li>Banking regulators, supervisors and central banks should further strengthen their strategies and roadmaps, and notably go beyond climate-related risks to incorporate broader E&amp;S considerations. These institutions, especially the larger ones, should also build their own capacity and develop robust governance structures to fully embed E&amp;S aspects in their activities.</li> </ul>

## ENABLING ENVIRONMENT

KEY FINDINGS	ACTIONS EXPECTED BY WWF
<ul style="list-style-type: none"> <li>The development of multi-stakeholder initiatives, capacity building efforts, as well as regulations and standards on financial products all point to the gradual strengthening of the enabling environment for sustainable finance. The noticeable involvement of civil society and academia in these efforts is testament to the importance of partnerships to find joint solutions and overcome existing challenges.</li> </ul>	<ul style="list-style-type: none"> <li>Harmonized sustainable finance regulations and guidelines should be issued to ensure a meaningful shift of financial flows away from harmful and towards sustainable activities that are aligned with national and international sustainable development goals.</li> </ul>
<ul style="list-style-type: none"> <li>Taxonomies are being developed across all regions, usually with a focus on defining 'green' or 'sustainable' activities and increasingly with E&amp;S safeguards in place. However, taxonomies for unsustainable activities have not yet been developed.</li> </ul>	<ul style="list-style-type: none"> <li>Tools such as science-based taxonomies covering both sustainable and unsustainable activities as well as efficient carbon pricing, when designed and implemented in a consistent manner, can prove to be powerful levers to complement and reinforce other regulatory actions.</li> </ul>



# INTRODUCTION

Humanity is at a crossroads. To avert the most catastrophic impacts of the climate and ecological crises we are facing, a profound transformation of our socio-economic development model is required. The finance sector must be fully mobilized to support this collective endeavour.

On August 9th, 2021, the Intergovernmental Panel on Climate Change (IPCC) published the first instalment of its *Sixth Assessment Report*,<sup>7</sup> a comprehensive review of the physical science of climate change. And the message is clear. It is now “unequivocal that human influence has warmed the atmosphere, ocean and land”, warming the climate at a rate that is “unprecedented in at least the last 2000 years”, and the changes affect every part of our planet.

The IPCC report finds stronger evidence of human-induced warming being the main driver behind observed changes in extreme weather events such as heatwaves, heavy precipitation, droughts and tropical cyclones, while compound events are increasingly likely to occur.

The current climate crisis is compounded by an ecological crisis. Natural ecosystems hold the key to our fight against climate change, but are under increasing and unprecedented pressure. Closely interrelated, climate change and nature loss should be addressed concurrently.<sup>8</sup>

The Global Assessment Report published in May 2019 by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) showed that one million species are threatened with extinction. Pollinator loss is putting up to US\$577 billion in annual global crops at risk, while 100-300 million people are at increased risk of floods and hurricanes as coastal habitat loss removes their natural protection.<sup>9</sup> Deforestation and unsustainable

land management practices exacerbate climate change and put livelihoods at risk.

## DESPITE AN INDISPUTABLY BLEAK PICTURE, ACTION CAN STILL AND MUST BE TAKEN TO AVOID THE WORST CONSEQUENCES

Global GHG emissions should quickly and substantially decline, starting with a reduction of CO2 emissions by about 45% by 2030 compared to 2010 levels, leading to net-zero emissions by 2050.<sup>10</sup> A new, ambitious international agreement on biodiversity should pave the way for a reversal of nature loss and achieve a nature-positive world by 2030.<sup>11</sup>

To meet these goals, systemic changes are necessary and all actors of society have a role to play. Governments and policymakers should raise their ambitions and create an environment that enables a just transition to a more sustainable development model.

Particular attention needs to be paid to vulnerable populations that are the most exposed to the physical impacts of climate change and environmental degradation, and to those that might be disadvantaged by the sustainable transition.

For its part, the financial sector has a central role in deciding where and under what conditions it allocates capital. Much progress has been made, from an increased integration of environmental and social considerations into financial decision-

making to the provision of green and sustainable financial products. However, despite genuine efforts and some leading practices, most of the world’s largest banks<sup>12</sup> and asset managers<sup>13</sup> are still financing activities that are incompatible with ambitious climate targets or that are contributing to the destruction of critical ecosystems.

## AS GUARDIANS OF THE FINANCIAL SYSTEM, CENTRAL BANKS, FINANCIAL REGULATORS AND SUPERVISORS PLAY A KEY ROLE

Central banks, financial regulators and supervisors define and enforce regulations for the financial sector, and ensure the stability of the financial system. They have the responsibility to ensure that financial institutions adequately take into account and manage all potential risks when making financing decisions, including risks that result from environmental and social issues.

As the financial implications of climate change and environmental degradation, including on financial stability, are increasingly recognized, financial regulators are progressively stepping in to ensure environmental and social risks are better accounted for and reported, and that sustainability claims actually deliver tangible results. Central banks and supervisors are studying the transmission channels between both climate- and nature-related risks and financial risks, and are starting to quantify how much financial portfolios are exposed to these risks.

**Increasing risks:** According to the World Economic Forum (WEF), more than half of the global GDP – \$44 trillion each year – is ‘moderately or highly dependent’ on nature and the services it provides.<sup>14</sup> According to Munich Re, 2017 was the costliest year ever in terms of global weather disasters, with total costs reaching US\$320 billion, of which only US\$130 billion were insured,<sup>15</sup> while 2020 witnessed a record hurricane season and major wildfires.<sup>16</sup>

As a case in point, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) has rapidly grown into a global network

of 95 members and 16 observers since its launch in December 2017,<sup>17</sup> and has produced a number of landmark reports covering areas such as prudential supervision, portfolio management, monetary policy, and climate scenario analysis.

The policies and actions of central banks and supervisors are critical for the creation of an enabling environment to facilitate the financing of economic activities that are compatible with a more sustainable future. In particular, central banks can use their statutory independence to alert governments on the need for stronger policy actions to address identified risks and seize opportunities.

Through their role as asset owners, central banks can lead by example and invest responsibly.

**Significant opportunities:** The WEF estimated that a sustainable transition in three key sectors (namely food, land and ocean use, infrastructure and the built environment, and energy and extractives) would necessitate a capital investment of about US\$2.7 trillion annually, but could deliver US\$10.1 trillion in annual business opportunities and 395 million jobs by 2030, thus improving livelihoods and increasing the resilience of communities around the world.<sup>18</sup>

*Through its Greening Financial Regulation initiative, and the SUSREG framework in particular, WWF aims to contribute to improving the understanding of how environmental and social risks can be integrated into the activities of central banks, financial regulators and supervisors. These institutions can build on the identified areas of improvement and existing good practices to accelerate their progress towards more comprehensive and harmonized practices.*

*Through regular updates of the online SUSREG Tracker platform ([www.susreg.org](http://www.susreg.org)), annual reporting and upcoming expansion of the assessment framework to other key parts of the financial system, WWF will monitor the progress made while focusing its advocacy and capacity building efforts on addressing the identified gaps.*

## THE SUSREG FRAMEWORK AND THE ASSESSMENT RESULTS CAN BE USED BY:

### Central banks, financial regulators and supervisors(\*):

- To strengthen regulatory and supervisory practices by integrating E&S considerations into financial regulations, guidelines and monetary policy operations;
- To benchmark themselves against peers in key markets worldwide and align with best practices.

### International financial standard-setters and initiatives:

- To benefit from independent, regularly updated assessments and annual reporting on progress;
- To build on the framework to establish roadmaps for integrating E&S considerations into global financial regulations and central bank activities;
- To benefit from WWF’s science-based perspective on best practices regarding the integration of climate- and nature-related risks.

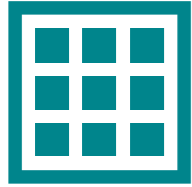
### Commercial banks (and institutional investors):

- To understand the differences in the regulatory and monetary policy frameworks in the countries in which they operate (and those affecting the financial institutions in their portfolios);
- To support and inform their engagement with government entities and policymakers (and with banks in their portfolios).

### Academics, think-tanks and other non-governmental organizations:

- To better understand the differences in the regulatory and monetary policy frameworks in key countries worldwide;
- To assess the degree of integration of various E&S issues into financial regulation, supervision and central bank activities, and track progress.

(\*) The SUSREG framework currently focuses on banking regulation and supervision. In 2022, it will be expanded to cover other key parts of the financial system, starting with the insurance sector.



# THE SUSREG FRAMEWORK

The Sustainable Financial Regulations and Central Bank Activities ('SUSREG') framework is used to assess the integration of environmental & social (E&S) considerations in financial regulations, supervisory expectations and monetary policy. It also aims to provide practical guidance to central banks, financial regulators and supervisors.

The framework contains 68 indicators, organized around three key pillars (Banking supervision, Central banking, Enabling environment), in turn broken down in subsections according to the overall structure laid out in the figure below. The individual sections are identified with a dotted border line. In the future, the framework will be expanded to cover other key parts of the financial system.

Please refer to 'Introducing SUSREG' launch report for the full list of indicators.<sup>19</sup>



## ASSESSMENT METHODOLOGY

In performing the assessments, WWF has taken the following information into consideration (non-exhaustive list):

- Regulations, supervisory expectations<sup>v</sup> or guidelines issued by financial regulators or supervisors, as they pertain to sustainable banking practices - in their absence, WWF considered relevant guidelines issued by the national banking association or other industry-led bodies, where available;
- Measures and activities implemented by central banks (in particular those related to monetary policy), in line with their mandate;
- Measures taken by central banks, banking regulators or supervisors, or other policymakers, to create an environment conducive to the development of sustainable finance.

The current focus of SUSREG being on banking supervision, listing rules or sustainability reporting guidelines issued by securities commissions or stock exchanges were not taken into account for the assessments. In addition, although the results distinguish between the level of stringency of applicable regulations or guidelines, the extent to which such measures are adequately and effectively implemented is beyond the scope of the current exercise.

Only publicly available information has been taken into account, and the **cut-off date was set at July 31st, 2021**.

WWF has used its best efforts to share preliminary assessment results with the relevant institutions in each country. The resulting dialogue has often led to a better understanding of the institutions' practices and feedback has been incorporated where relevant. It should however be noted that feedback from an institution should not be construed as an endorsement of the SUSREG methodology or results.

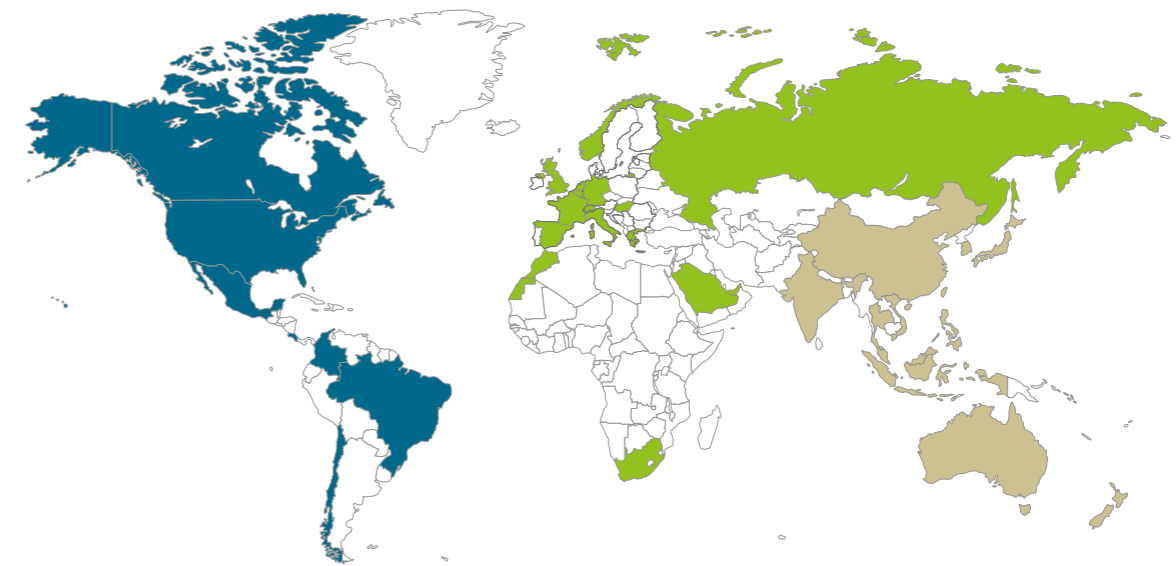
When official documents were not available in English, translations have been procured so that all information accessible through the SUSREG Tracker platform is in English, facilitating comparison and accessibility. For more details on the assessment methodology, please refer to 'Introducing SUSREG' launch report.

The full assessment results are available on the SUSREG Tracker platform: [www.susreg.org/assessments](http://www.susreg.org/assessments)

## GEOGRAPHICAL SCOPE

The assessment currently covers the central banks, banking regulators and supervisors in 37 countries and the European Union. These 38 jurisdictions cover more than 90% of global GDP and 80% of global GHG emissions, and contain 11 of the 17 most biodiversity-rich countries in the world.<sup>20</sup> Most members and observers of the Basel Committee on Banking Supervision (BCBS) are covered.

Please refer to Annex 1 for the detailed list of the central banks, banking regulators and supervisors covered by this assessment.



AMERICAS (7)				EMEA (18)				ASIA PACIFIC (13)			
BRAZIL	CHILE	COSTA RICA*	UNITED STATES	BELGIUM	HUNGARY*	NORWAY*	SWITZERLAND	AUSTRALIA	INDONESIA	PHILIPPINES*	VIETNAM*
CANADA	COLOMBIA	MEXICO		EUROPEAN UNION	ITALY	RUSSIA	UAE	CHINA	JAPAN	SINGAPORE	
				FRANCE	LUXEMBOURG	SAUDI ARABIA	UK	HONG KONG	MALAYSIA	SOUTH KOREA	
				GERMANY	MOROCCO*	SOUTH AFRICA		INDIA	NEW ZEALAND*	THAILAND*	
				GREECE*	NETHERLANDS	SPAIN					

\* Not part of the BCBS (as member or observer)

v. To be formally taken into account, these expectations should be laid out in an official public document that would inform the regular supervisory dialogue between a supervisor and the supervised banks.





# A GUIDE TO THIS REPORT

This report provides WWF's analysis for a selection of key indicators, regrouped in sections that mostly follow the SUSREG framework structure. References to the relevant SUSREG indicators are provided throughout the text. The report also provides our key findings and recommendations, as well as interviews with central banks and banking supervisors.

As the SUSREG assessment is based on publicly available information only, the efforts of certain central banks, banking regulators or supervisors may not yet be fully recognized in the assessment results. WWF has asked some of these institutions to share more about their current and upcoming activities. These interviews are distributed throughout the report.

In each section, graphs present aggregated results. Results are generally broken down by regions, namely the Americas, EMEA (Europe, Middle East & Africa) and APAC (Asia-Pacific). The assessment covers seven countries in the Americas, 18 EMEA countries and 13 APAC countries.

Results are also often broken down according to the environmental and social themes, or aspects, covered. In such cases, three distinct themes are considered, each with a corresponding pictogram:

<p><b>CLIMATE</b> Such as greenhouse gas emissions and related risks</p>	
<p><b>ENVIRONMENT</b> Such as biodiversity loss, habitat destruction, deforestation, water, air and soil pollution, and depletion of natural resources</p>	
<p><b>SOCIAL</b> Such as human rights violations, labour issues (incl. occupational health &amp; safety), and adverse impacts on local communities (incl. indigenous people)</p>	

Key findings are represented by the following pictogram:



The report also highlights existing good practices from specific central banks, banking regulators and supervisors, represented by the following pictogram:



Key recommendations and actions expected by WWF are represented by the following pictogram:



In this report, graphs such as the one in the figures below provide a condensed view of the assessment results for a selection of key SUSREG indicators.

The results are first broken down by region (Americas, EMEA and APAC) and then by theme (climate, environment, social).

- The **dark green** portion of the graph indicates the number of countries where there are expectations(\*) in place and they fully satisfy the indicator ("Fully met").
- The **light green** portion indicates the number of countries where there are expectations in place, but they only partially satisfy the indicator ("Partially met"). This can be due to parts of the indicator not being addressed, or an overall lower level of expectation. More details on the assessment methodology are provided in the SUSREG Assessment Guide.<sup>vi</sup>
- The **dark grey** portion indicates the number of countries where there are expectations in place, but they do not satisfy the indicator ("Not met"). For instance, this is the case when the measure targeted by the indicator is not covered by the regulations, supervisory expectations or guidelines being assessed.
- The **light grey** portion of the graph indicates the number of countries where either (i) there are expectations in place, but they do not cover the relevant climate, environment or social theme or (ii) there are no expectations in place ("No expectations").

(\*) Here, "expectations" refer to either regulations, supervisory expectations, guidance or guidelines issued by the banking regulator, supervisor or national banking association.

## HOW TO READ THIS GRAPH (FIGURE 10 BELOW):

In the Asia-Pacific region, banks in five countries are expected to develop and implement sector-specific policies outlining the climate-related requirements for their clients. In an additional three countries, this is either only recommended or the expectations only cover the issuance of sector policies with no explicit mention of the need to specify client requirements. In two countries with relevant banking regulations or guidelines, the documents do not cover this specific point. The remaining three countries have no relevant regulations or guidelines in place (or these do not cover climate aspects).

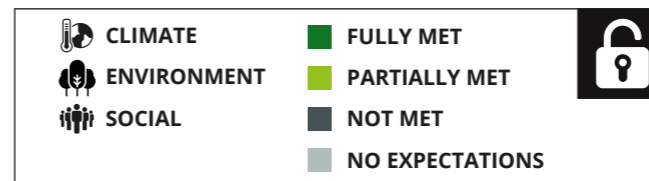
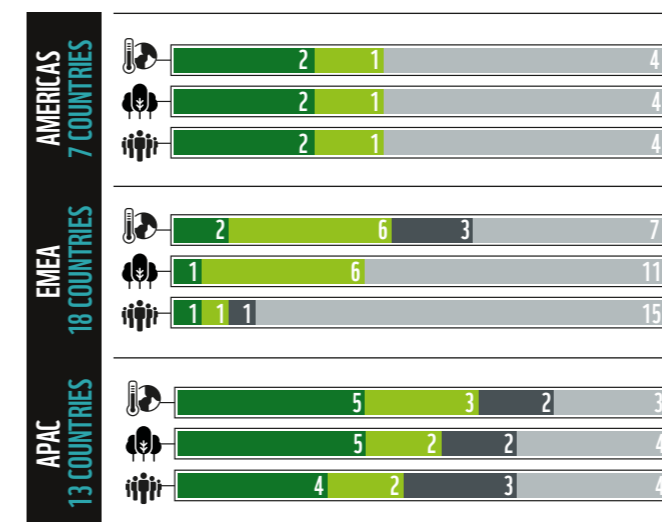


FIGURE 10: INDICATOR 1.3.1

Banks are expected to develop and implement sector policies outlining minimum E&S requirements for their clients, particularly in sectors with high E&S risks and impacts



Other graphs, such as **figure 16** below, are related to measures applicable to central banks, banking regulators or supervisors themselves.

In some countries, a specific measure might be outside the mandate of a particular institution. In this example, corporate asset purchase programs are outside the mandate of nine central banks among the 18 EMEA countries (mainly resulting from the Eurosystem particularities) as well as of four central banks in the Asia-Pacific region and one in the Americas. These are marked as "Not applicable".

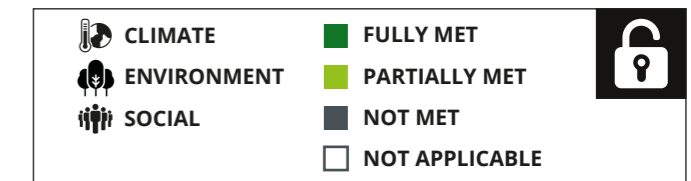


FIGURE 16: INDICATOR 2.1.1

The central bank takes E&S considerations into account when implementing corporate asset purchase programs



# ASSESSMENT RESULTS AT A GLANCE

The infographics below are based on the percentage of fulfilled indicators for the assessed jurisdictions. The results are grouped according to the SUSREG framework sections (refer to page 10). The results are first displayed for the combination of all three climate, environmental and social themes, and then for each theme separately. In each case, the minimum, average and maximum values are provided first as an average of results across all 38 countries, and then across each region (Americas, EMEA, APAC).

## HOW TO READ THIS GRAPH:

For the 'Micro-prudential supervision (supervisory expectations)' section, across all three regions and all three climate, environmental and social themes, countries fulfilled slightly more than 20% of the indicators on average, with the country showing the best result fulfilling just above 70% of the indicators.

On the climate theme and across all three regions, slightly less than 30% of the indicators are fulfilled on average, while the average for the social theme is only around 15%. Across all three climate, environmental and social themes, APAC countries fulfil just above 30% of the indicators, EMEA countries 17% and in the Americas 15%.

NB: this is not a scoring or ranking exercise, as not all SUSREG indicators necessarily have the same weight. However, this infographic makes it possible to identify broad areas where the most progress has been made and areas where significant progress still needs to be made, while tracking changes over time.



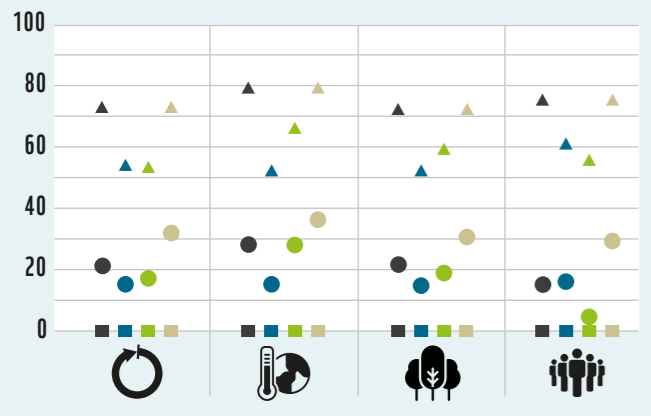
ALL COUNTRIES (N=38)  
 AMERICAS (N=7)  
 EMEA (N=18)  
 APAC (N=13)

MAX ▲ ▲ ▲ ▲  
 AVERAGE ● ● ● ●  
 MIN ■ ■ ■ ■

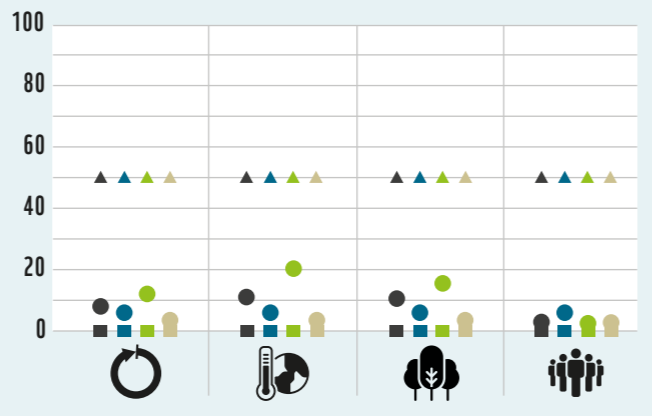
○ TOTAL  
 🌡️ CLIMATE  
 🌳 ENVIRONMENT  
 👤 SOCIAL

## BANKING SUPERVISION

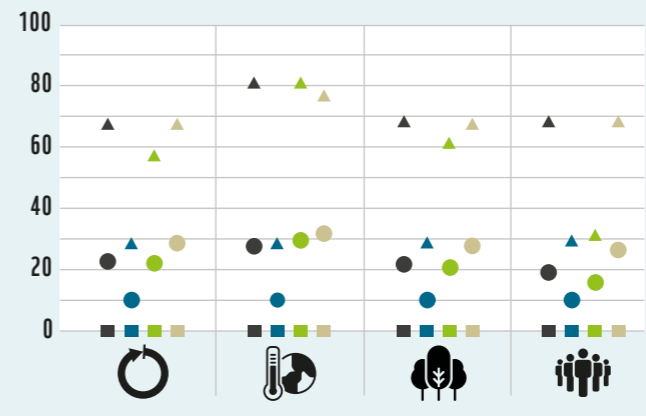
### MICRO-PRUDENTIAL SUPERVISION (SUPERVISORY EXPECTATIONS)



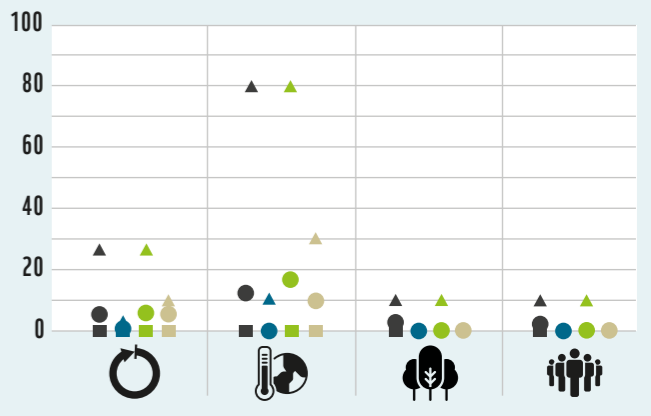
### MICRO-PRUDENTIAL SUPERVISION (RULE-BASED)



### DISCLOSURE & TRANSPARENCY

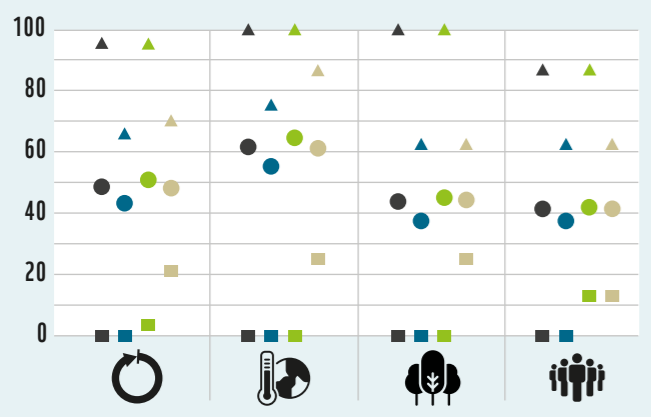


### MACRO-PRUDENTIAL SUPERVISION



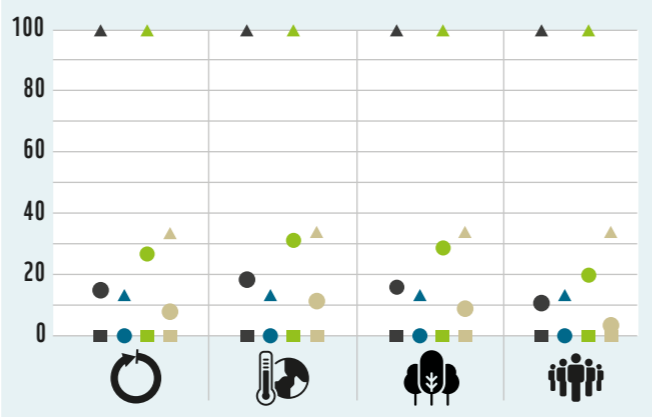
## BANKING SUPERVISION

### LEADERSHIP & INTERNAL ORGANIZATION

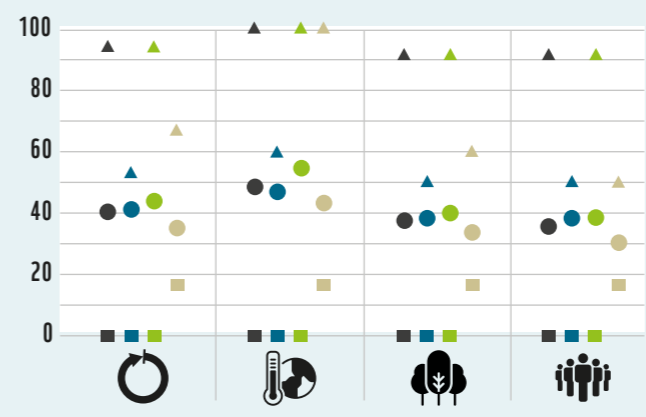


## CENTRAL BANKING

### MONETARY POLICY

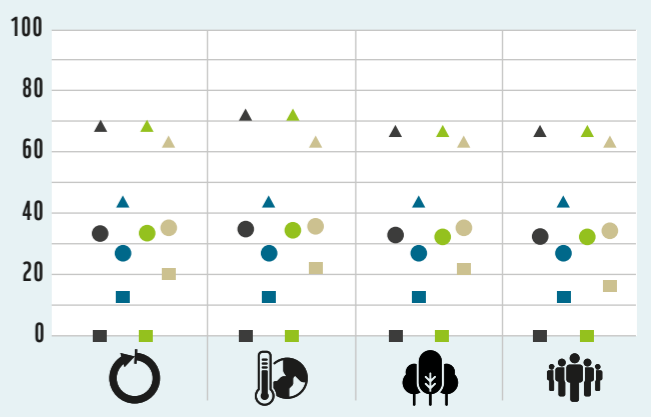


### LEADERSHIP & INTERNAL ORGANIZATION



## ENABLING ENVIRONMENT

### ENABLING ENVIRONMENT





KEY RESULTS

# BANKING SUPERVISION

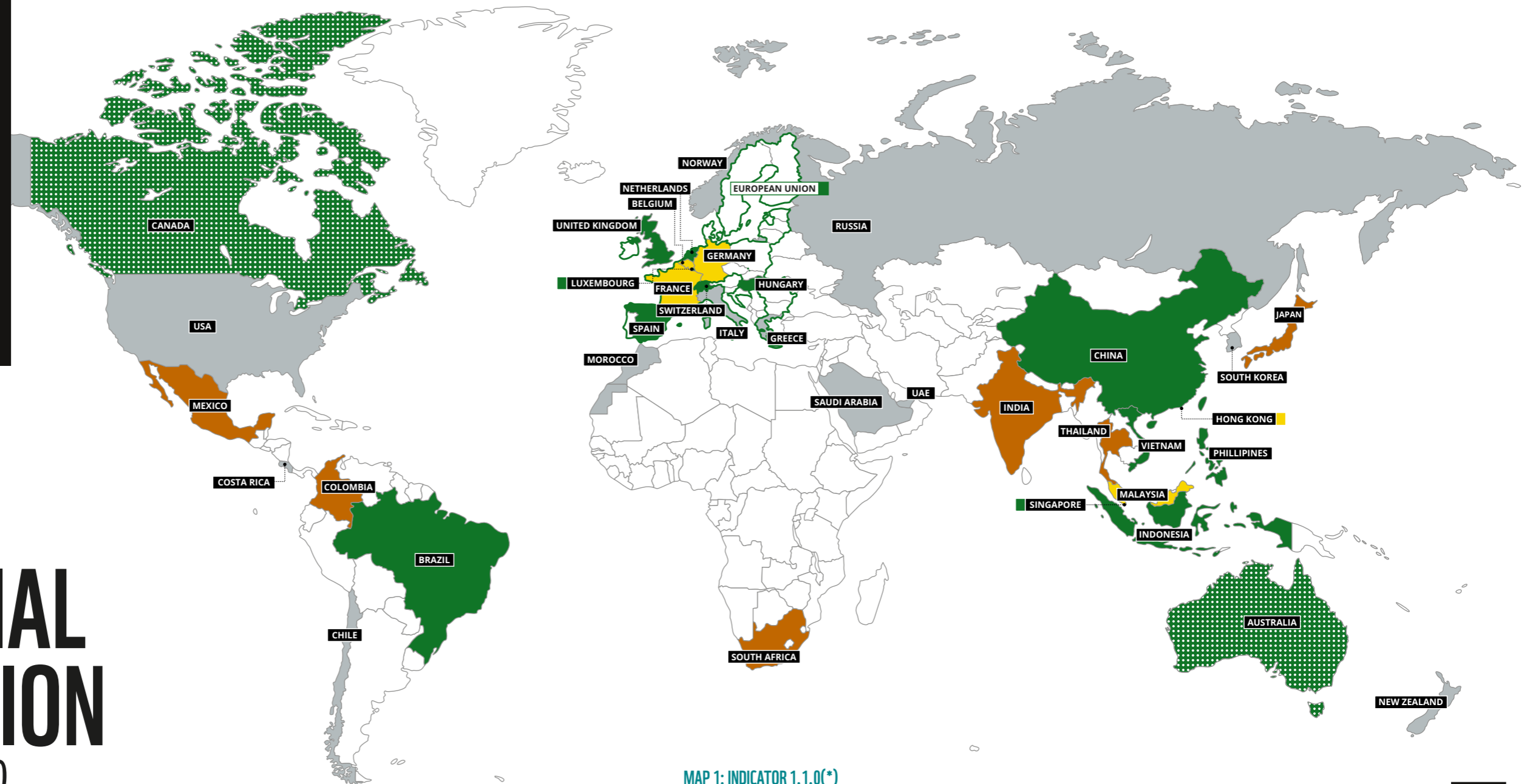
THIS SECTION EXAMINES EXISTING EXPECTATIONS TOWARDS BANKS REGARDING THE INTEGRATION OF ENVIRONMENTAL & SOCIAL CONSIDERATIONS IN THEIR BUSINESS STRATEGY, GOVERNANCE, DECISION-MAKING, AND RISK MANAGEMENT POLICIES AND PROCESSES, INCLUDING AT THE PORTFOLIO LEVEL.

# MICRO-PRUDENTIAL SUPERVISION

(SUPERVISORY EXPECTATIONS)

This section of the SUSREG framework applies to regulations, supervisory expectations or guidelines (issued either by the regulator, supervisor or by the national banking association) that pertain to sustainable banking practices. Environmental and/or social considerations should be explicitly mentioned in these documents.

**IN 35% OF THE COUNTRIES ASSESSED (13 OUT OF 38), BANKING REGULATORS OR SUPERVISORS HAVE PUBLISHED REGULATIONS OR SUPERVISORY EXPECTATIONS RELATED TO SUSTAINABLE BANKING AND APPLICABLE TO ALL SUPERVISED COMMERCIAL BANKS. GUIDANCE OR RECOMMENDATIONS HAVE BEEN ISSUED BY SUPERVISORS IN FIVE COUNTRIES, AND BY NATIONAL BANKING ASSOCIATIONS IN SIX COUNTRIES.**



MAP 1: INDICATOR 1.1.0(\*)  
Issuance of regulations, supervisory expectations or guidelines pertaining to sustainable banking practices (differentiated by enforcement level)

	Regulations or supervisory expectations have been issued by the banking regulator or supervisor. Implementation is either mandatory or strongly encouraged, and verification of compliance is performed by the supervisor as part of the supervisory dialogue. When specified, consequences for non-compliance can vary (financial penalties, potential for increased capital charges, etc.).
	Draft regulations or supervisory expectations have been issued by the banking regulator or supervisor for public consultation.
	Guidance on good practices or recommendations have been issued by the banking regulator or supervisor. Implementation is not mandatory but is however encouraged, although no verification of compliance is performed by the supervisor.
	Guidelines have been issued by the national banking association or another industry-led body. Implementation is voluntary and no verification of compliance is performed by the supervisor.
	No national-level regulations, supervisory expectations, guidance on good practices or other industry-led guidelines related to sustainable banking have been issued.
	Country not covered by this assessment.

(\*) Principle-based regulations or supervisory expectations related to sustainable banking have been issued and are applicable to all supervised commercial banks

# THEMATIC COVERAGE

Building on the previous world map, the charts below look at thematic coverage globally and explore regional specificities in more depth, by looking at the environmental and social themes covered by the applicable regulations, supervisory expectations or guidelines.

FIGURE 1: INDICATOR 1.1.1(\*)

Thematic coverage of regulations, expectations and guidelines (all 38 countries)



- CLIMATE
- ENVIRONMENT
- SOCIAL
- NO EXPECTATION

**IN THE 24 JURISDICTIONS WHERE REGULATIONS, SUPERVISORY EXPECTATIONS OR GUIDELINES HAVE BEEN ISSUED, BANKS ARE EXPECTED TO INCORPORATE CLIMATE CONSIDERATIONS IN THEIR STRATEGY. OF THESE 24 JURISDICTIONS, ONLY FIVE ARE LIMITED TO CLIMATE ASPECTS, WHILE 15 EXTEND TO THE WHOLE RANGE OF CLIMATE, ENVIRONMENTAL AND SOCIAL ASPECTS. WHILE THIS IS ENCOURAGING, IT ALSO SHOWS SIGNIFICANT ROOM FOR IMPROVEMENT, PARTICULARLY AS 14 COUNTRIES HAVE NO EXPECTATIONS IN PLACE.**

While over two thirds of countries assessed in the Europe, Middle East and Africa (EMEA) and Asia-Pacific (APAC) regions have regulations or supervisory expectations in place, this is the case for only one country in the Americas (Brazil).

In a quarter of the countries assessed in the Americas and Asia-Pacific region, banking associations have been particularly active with the issuance of sustainable banking guidelines and an emphasis on training. However, we also observe in many of these countries that the issuance of sustainable banking regulations or supervisory expectations is planned.

In the EMEA region, we observe a larger coverage of climate-related issues (11 of 18 jurisdictions) while broader environmental and social aspects are less frequently covered (in only seven and three jurisdictions respectively). Interestingly, there is a better coverage of the entire spectrum of climate, environmental and social issues in the Asia-Pacific region, such as in the case of the *Sustainable Finance Framework (Circular No. 1085)* issued by Bangko Sentral ng Pilipinas (BSP) in April 2020.<sup>21</sup>

Going forward, we expect to see an increase in the number of jurisdictions with regulations or supervisory expectations in place. This would indeed be critical to ensure more systematic and consistent integration of E&S considerations among commercial banks.

## HOW TO READ THIS GRAPH (EMEA):

In the EMEA region, regulations or supervisory expectations have been issued in seven out of the 18 countries assessed. While all of these cover climate-related risks, broader environmental risks are covered in only five countries and social risks in just one country. Seven countries have no expectations in place, while broader environmental and social risks are not covered in 11 and 15 countries respectively.

- REGULATIONS OR SUPERVISORY EXPECTATIONS
- GUIDANCE OR RECOMMENDATIONS
- BANKING INDUSTRY GUIDELINES
- NO EXPECTATIONS OR GUIDELINES

FIGURE 2:

Enforcement level and thematic coverage of regulations, expectations and guidelines, broken down by region



NB: in the APAC region, one country (Singapore) not only has supervisory expectations (covering climate and environmental aspects) in place, but also banking association guidelines covering all E&S aspects, which is reflected by the fourth additional point for "social" aspects.

**REGULATIONS AND SUPERVISORY EXPECTATIONS SHOULD BE ROLLED OUT AND EXPANDED TO COVER THE ENTIRE RANGE OF CLIMATE, ENVIRONMENTAL AND SOCIAL ASPECTS.**

**BANKING REGULATORS AND SUPERVISORS SHOULD BE TRAINED AND EQUIPPED TO IMPLEMENT THESE NEW EXPECTATIONS AS AN INTEGRAL PART OF ONGOING SUPERVISORY DIALOGUE, WITH ACCOMPANYING SANCTIONS FOR NON-COMPLIANCE.**

In February 2017, the Banco Central do Brasil (BCB) issued the *Resolution CMN 4557* covering the implementation of risk and capital management frameworks, in which banks are explicitly required to identify and address socio-environmental risks alongside the traditional risk categories (credit, market, operational, liquidity, etc.).<sup>22</sup>

*The Guide on climate-related and environmental risks*<sup>23</sup> and *Guidelines on Environmental Risk Management for Banks*<sup>24</sup> have been issued late 2020 by the European Central Bank (ECB) and the Monetary Authority of Singapore (MAS) respectively. These supervisory expectations are associated with short implementation timelines, with supervisory dialogue starting in 2021. In August 2021, the ECB published a first analysis based on a self-assessment performed by banks.<sup>25</sup>

# INFLUENCE OF THE ENFORCEMENT LEVEL



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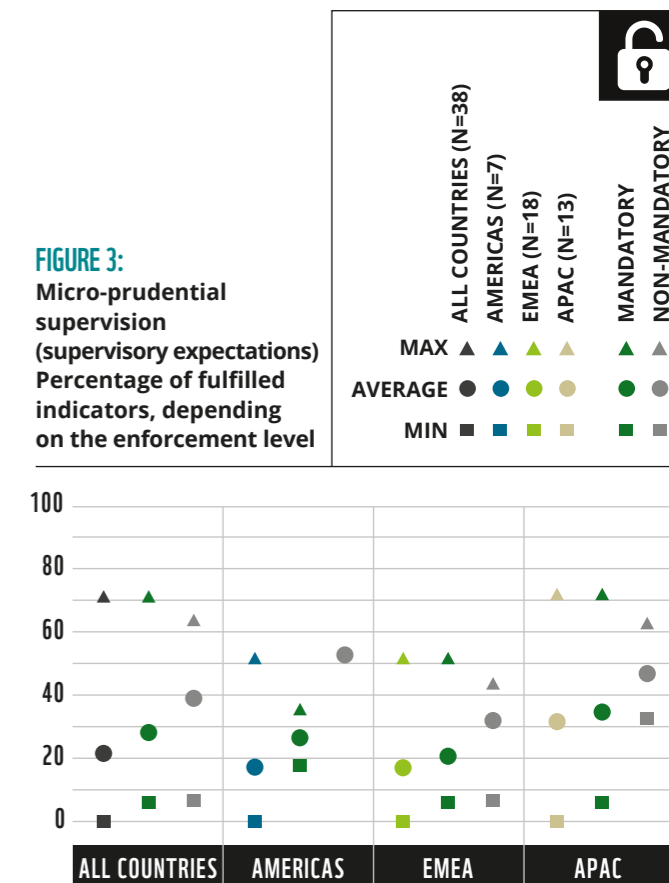
This section considers the differences observed in the overall assessment results between sustainable banking regulations and supervisory expectations (“Mandatory”▲●■, issued by banking regulators or supervisors) and voluntary guidance or guidelines (“Non-mandatory”▲●■, issued by supervisors or banking associations).

While in the Americas, the set of regulations issued by the Banco Central do Brasil (BCB) fulfils the highest number of indicators, voluntary guidance or recommendations issued by the Federal Financial Supervisory Authority (BaFin, *Guidance Notice on Dealing with Sustainability Risks*<sup>26</sup>) in Germany and by Bank Negara Malaysia (BNM, *Value-based Intermediation framework*<sup>27</sup>) are the most comprehensive documents in the EMEA and Asia-Pacific regions respectively. This highlights the important role played by supervisors in driving sustainable banking practices, even in the absence of formal regulations.

However, the results also show that there is still significant room for improvement across all geographies, as even the most comprehensive sets of regulations or guidelines fail to fulfil more than three-quarters of the relevant SUSREG indicators.

**ON AVERAGE AND ACROSS ALL GEOGRAPHIES, REGULATIONS AND SUPERVISORY EXPECTATIONS FULFIL MORE INDICATORS THAN GUIDANCE DOCUMENTATION ISSUED BY SUPERVISORS OR GUIDELINES ISSUED BY BANKING ASSOCIATIONS. AS SUCH, THEY ARE ASSOCIATED WITH HIGHER EXPECTATIONS, IN ADDITION TO BEING AN INTEGRAL PART OF THE SUPERVISORY DIALOGUE WITH BANKS.**

**REGULATORS AND SUPERVISORS GLOBALLY SHOULD CONTINUE TO DEVELOP AND STRENGTHEN THEIR EXPECTATIONS FOR BANKS. TO FACILITATE COMPLIANCE AND ENSURE COHERENT IMPLEMENTATION, EXPECTATIONS SHOULD BE HARMONIZED ACROSS GEOGRAPHIES AND APPLICABLE TO ALL BANKING ACTIVITIES.**



*The Value-based Intermediation Financing and Investment Impact Assessment Framework* issued by Bank Negara Malaysia (BNM) in November 2019 provides detailed guidance to Islamic financial institutions, but is also intended to serve as a reference for conventional banks to incorporate E&S considerations in their own risk management system, contributing to strengthening the Malaysian banking system as a whole.<sup>28</sup>

Several European countries have issued detailed supervisory expectations, complementing the ECB Guide on climate-related and environmental risks applicable to the largest EU banks.<sup>29</sup> In the Netherlands, De Nederlandsche Bank (DNB) has transposed the ECB Guide to “less significant institutions” in the Netherlands, while Banco de España and the Magyar Nemzeti Bank (MNB) have issued separate sets of detailed expectations for the banks under their supervision.<sup>vii</sup>

vii. Under the Single Supervisory Mechanism (SSM), the ECB is responsible for the direct supervision of significant institutions (SIs) while national supervisory authorities supervise less significant institutions (LSIs). More information at <https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html>

# STRATEGY & GOVERNANCE

To ensure that banks successfully implement their E&S strategy, they should be expected to create a conducive environment, starting with board oversight, clear responsibilities and incentives, resources allocation and training.

Across all three regions, board oversight of E&S strategy implementation is commonly expected of banks, when regulations or guidelines are in place (Figure 4, indicator 1.2.3). In each region, only one or two countries do not have this expectation in their existing set of regulations or guidelines.

In contrast, the expectation for banks to include criteria related to E&S strategy implementation in their appraisal and remuneration policy is not as widespread (Figure 5, indicator 1.2.5). While this is particularly true in the Asia-Pacific region, this expectation is relatively better covered in the EMEA

region, albeit covering mostly climate and other environmental aspects. ‘Partially met’ results typically reflect a lower level of expectations or wording that is less specific than expected.

In almost all jurisdictions where regulations or guidelines are in place, banks are expected to dedicate staff and resources to the definition and implementation of their E&S strategy (indicator 1.2.6). In all three regions, banks are generally expected to define the roles and responsibilities of the various teams involved in implementing their E&S strategy (Figure 6, indicator 1.2.7).

NB: In this section ‘E&S strategy’ refers to a bank’s business strategy incorporating E&S considerations, i.e. the management of the E&S risks, opportunities and impacts associated with the provision of financial products & services to its clients. It does not cover corporate social responsibility or philanthropic activities, or the management of a bank’s direct environmental impacts such as energy use and business travel.

Here, ‘Partially met’ results generally correspond to expectations that do not explicitly mention the role of senior management. It is noteworthy that three countries in the EMEA region do not cover this aspect at all.

In nearly all jurisdictions, banks are also expected to conduct regular training for their staff on relevant E&S issues (Figure 7, indicator 1.2.8). While this is a welcome development, in more than half of these jurisdictions there is no mention of training to be provided to the board or senior management, or this is merely recommended (‘Partially met’ results).

**REGULATORS AND SUPERVISORS SHOULD ENSURE THAT BANKS SET THE APPROPRIATE INCENTIVES FOR THE MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS, IN PARTICULAR THROUGH APPRAISAL AND REMUNERATION POLICIES. BANKS SHOULD BE EXPECTED TO PROVIDE REGULAR TRAINING AND BUILD CAPACITY OF ALL RELEVANT STAFF, INCLUDING THEIR BOARD AND SENIOR MANAGEMENT.**

In its *Supervisory Statement SS3/19* published in April 2019, the UK Prudential Regulation Authority (PRA) granted clear responsibilities to the board of regulated firms, notably expecting them to attribute responsibility for managing the financial risks from climate change to existing Senior Management Functions (SMF), and to include these responsibilities in their Statement of Responsibilities.<sup>30</sup> In its July 2020 letter to the banks’ CEOs, the PRA clarified its expectation that performance against climate-related objectives should be reflected in the variable remuneration of the SMF executives.<sup>31</sup>

In its *Guide on climate-related and environmental risks*<sup>32</sup> (November 2020), the ECB expects banks to implement a variable remuneration component linked to climate-related and environmental objectives, using either quantitative or qualitative criteria, referring to the European Banking Authority’s Guidelines on remuneration policies and practices.<sup>33</sup>

In the *Green Credit Guidelines*<sup>34</sup> and associated *Key Performance Indicators*<sup>35</sup> (published in February 2012 and June 2014 respectively), the China Banking and Insurance Regulatory Commission (CBIRC) details specific expectations for banks to integrate performance appraisal and evaluation indicators related to E&S risk management for senior management and other relevant staff.

FIGURE 4: INDICATOR 1.2.3

Banks are expected to include oversight of their E&S strategy implementation in their board’s responsibilities

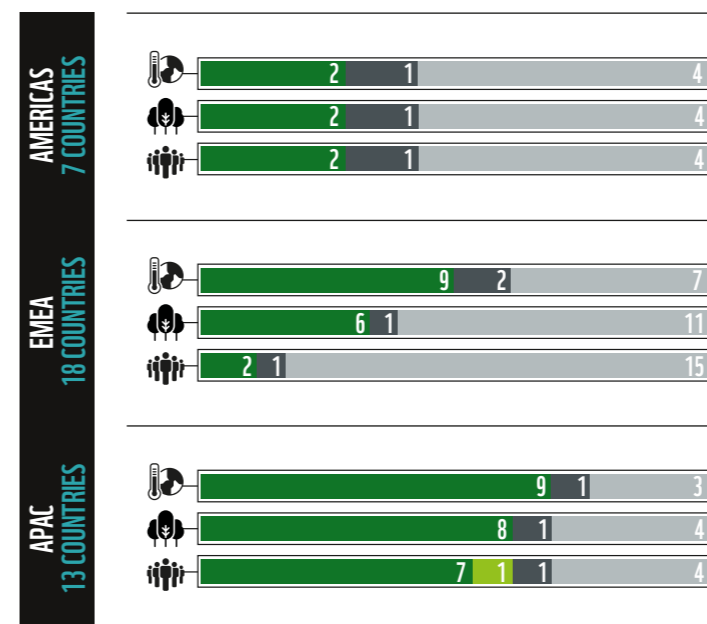


FIGURE 6: INDICATOR 1.2.7

Banks are expected to define the roles and responsibilities of the various teams (incl. senior management) involved in the implementation of their E&S strategy

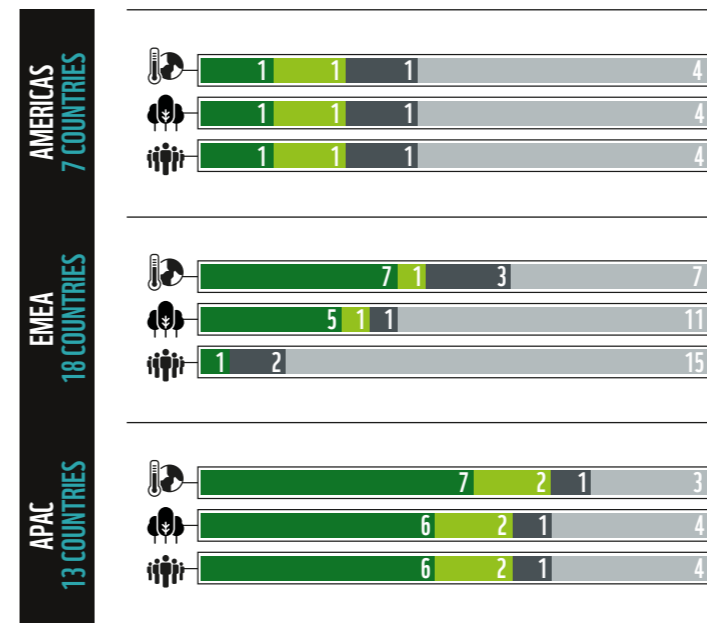


FIGURE 5: INDICATOR 1.2.5

Banks are expected to include criteria related to their E&S strategy implementation in their appraisal and remuneration policy

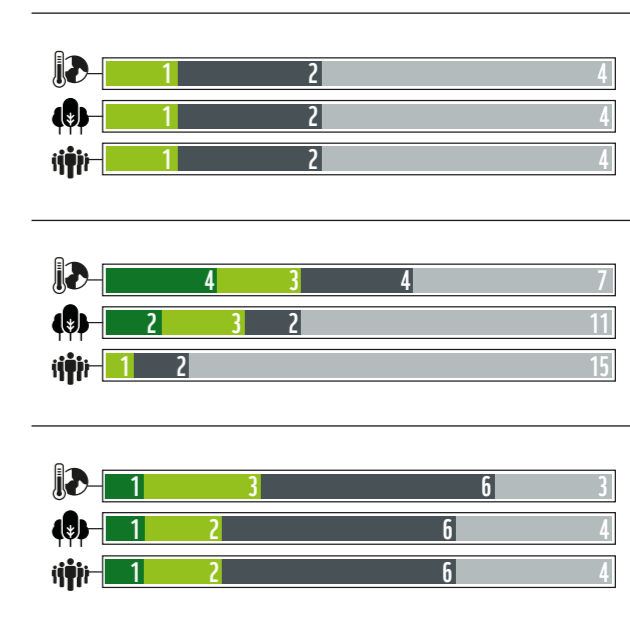
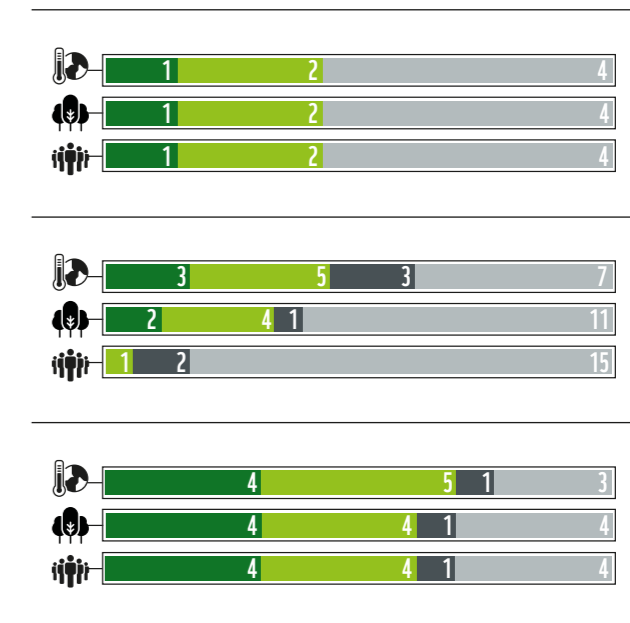


FIGURE 7: INDICATOR 1.2.8

Banks are expected to conduct regular training on relevant E&S issues for their board, senior management, business lines and functions





# POLICIES & PROCESSES

In order to adequately identify, assess and mitigate the E&S risks and impacts that they are exposed to through their business relationships, banks should be expected to develop sector-specific policies outlining expectations towards their clients. These considerations should then be incorporated in the banks' overall decision-making, as well as risk management and control processes.

In all jurisdictions where regulations or guidelines are in place, banks are expected to integrate E&S considerations into their decision-making and risk management processes, except in a couple of cases where the expectation is not specific enough (Figure 8, indicator 1.3.5). However, and this is particularly true in the Americas and Asia-Pacific region, there is a comparative lack of expectations for banks to integrate the management of E&S risks into their internal controls, particularly following the 'three lines of defence' approach (Figure 9, indicator 1.3.6).

In the EMEA region, although banks are expected to incorporate E&S aspects in their policy and risk appetite frameworks, there is a noticeable lack of clear expectations to develop sector-specific policies outlining their positions and approach to client engagement (Figure 10, indicator 1.3.1). This is comparatively much better covered in the Americas and Asia-Pacific region. In Asia-Pacific, banks are also generally expected to monitor and address situations where clients are not compliant with sector policies or applicable laws, while there is a

distinctly lower level of expectation in the EMEA region and in the Americas (Figure 11, indicator 1.3.8).

In all regions, we observe a lack of reference to international sustainability standards with which banks should align their policies - with supervisory expectations in Malaysia and Singapore being the only ones to provide specific examples (indicator 1.3.2).

**REGULATORS AND SUPERVISORS SHOULD REQUIRE BANKS TO DEVELOP AND PUBLISH THEIR POLICIES ON SECTORS SUBJECT TO HIGH ENVIRONMENTAL AND SOCIAL RISKS, WITH REFERENCE TO INTERNATIONAL SUSTAINABILITY STANDARDS. BANKS SHOULD BE EXPECTED TO PUT IN PLACE INTERNAL CONTROLS COVERING SUCH PROCESSES TO ADDRESS NON-COMPLIANCE ISSUES.**

The *CBIRC Green Credit Guidelines*<sup>36</sup> (February 2012) and associated *Key Performance Indicators*<sup>37</sup> (June 2014) detail specific expectations for banks to develop criteria, policies and processes to assess and manage the E&S risk associated with their clients, particularly those in industries associated with major E&S risks. Approval processes should be tailored to the level of associated E&S risks, while compliance checklists and watchlists should be developed.

The *MAS Guidelines on Environmental Risk Management for Banks*<sup>38</sup> (December 2020) have similar expectations for banks to fully integrate environmental risks into their decision-making processes as well as overall risk management and control. Banks are advised to develop specific policies outlining their expectations towards existing or prospective clients - making reference to international standards and certifications schemes such as the IFC Performance Standards and the Roundtable on Sustainable Palm Oil (RSPO).



FIGURE 8: INDICATOR 1.3.5

Banks are expected to integrate E&S considerations in their decision-making and risk management processes

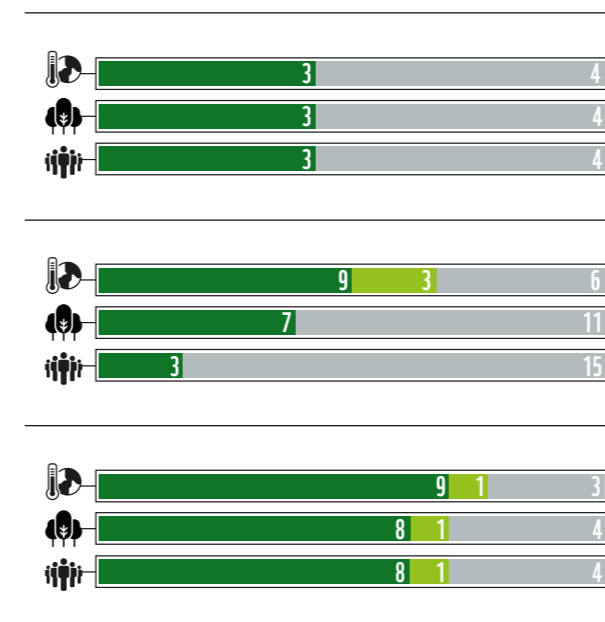


FIGURE 10: INDICATOR 1.3.1

Banks are expected to develop and implement sector policies outlining minimum E&S requirements for their clients, particularly in sectors with high E&S risks and impacts

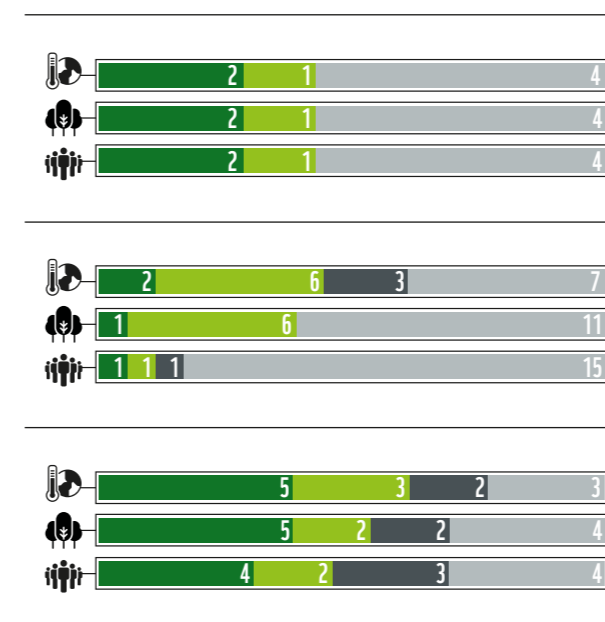


FIGURE 9: INDICATOR 1.3.6

Banks are expected to put in place internal controls to manage E&S risks, in accordance with the three lines of defence approach

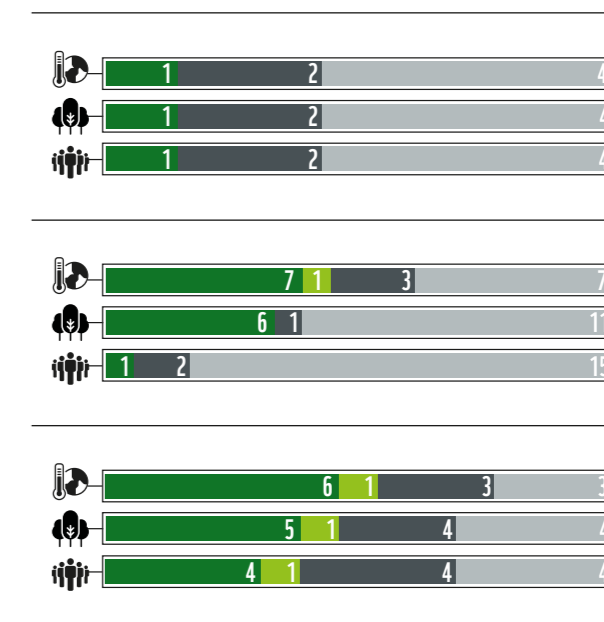
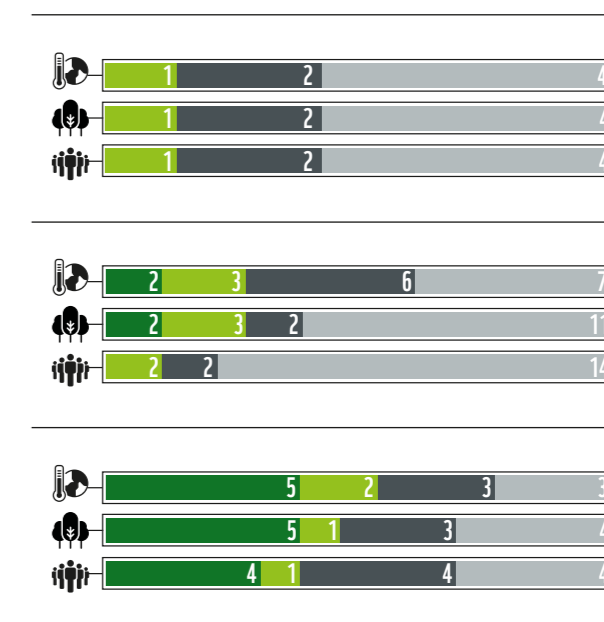


FIGURE 11: INDICATOR 1.3.8

Banks are expected to put in place an internal process to monitor and address situations where clients are not compliant with the banks' E&S sector policies or with applicable laws and regulations



CLIMATE  
ENVIRONMENT  
SOCIAL

FULLY MET  
PARTIALLY MET  
NOT MET  
NO EXPECTATIONS



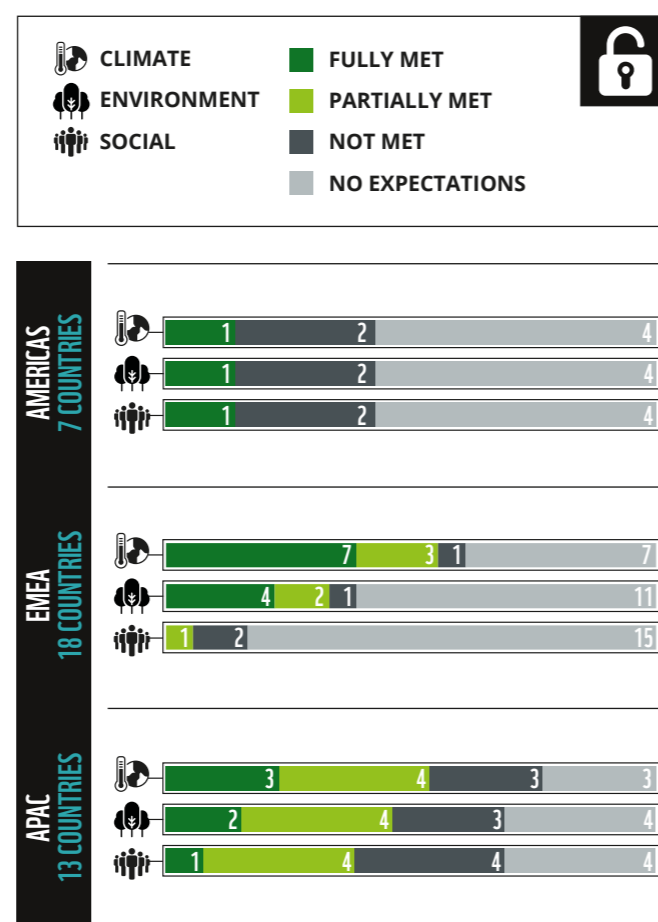
# PORTFOLIO RISKS & IMPACTS

The assessment of environmental & social risks at client- and transaction-level is key, but it is equally important that banks be expected to assess and mitigate their exposure to such risks at the portfolio-level, and to set science-based targets on climate and environmental aspects.

In all regions, banks are usually expected to assess E&S risks at the portfolio level, although in the Asia-Pacific region and the Americas the expectations could often be made more specific (Figure 12, indicator 1.4.1). Only two supervisors – Banco Central do Brasil (BCB) and Bank Negara Malaysia (BNM) – cover all climate, environmental and social risks in their expectations. Where they exist, and particularly in the EU, these expectations tend to be paired with an expectation for banks to use forward-looking scenario analysis and stress-testing (indicator 1.4.2), although our assessment shows that more guidance should be provided, particularly on the number and type of scenarios.

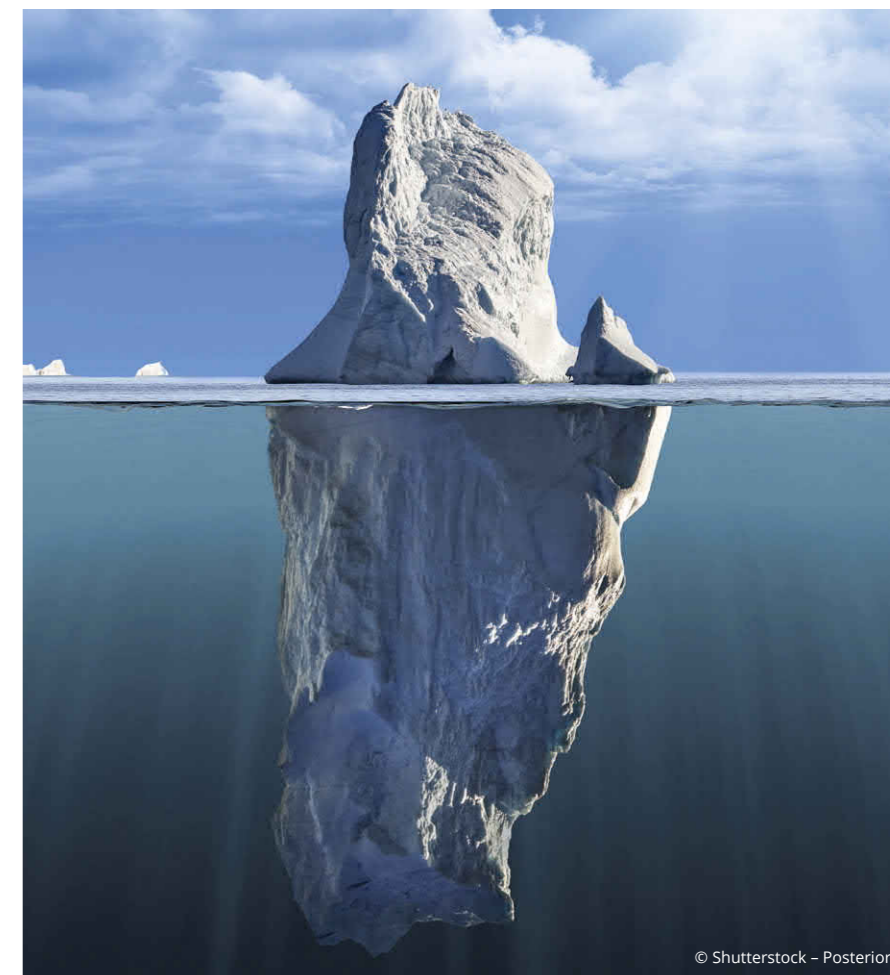
With the exception of India and Malaysia, there are no expectations for banks to assess and mitigate the material negative E&S impacts associated with their business relationships at the portfolio level, although the relevant underlying frameworks for these two countries are recommendations rather than strict regulations (indicator 1.4.3). With increasing focus on double-materiality and the need to reduce adverse impacts on the environment and society, this is a clear area for improvement.

**FIGURE 12: INDICATOR 1.4.1**  
Banks are expected to assess and mitigate their portfolio-level exposure to material E&S risks



Beyond the assessment of risks and impacts, banks should be expected to set science-based decarbonization targets, taking advantage of the development and ongoing improvement of related methodologies (indicator 1.4.4). In this respect, while a few jurisdictions have issued recommendations for banks to align their portfolios with climate objectives, there is currently only one country (Spain) where banks are required by law to set specific targets aligned with the Paris Agreement.

Similarly, banks should be expected to set portfolio-level science-based targets for other environmental risks (indicator 1.4.5). Although such expectations are virtually non-existent to date, we should expect this to change following the adoption of a new Global Biodiversity Framework under the UN Convention on Biological Diversity.<sup>39</sup>



In their recently issued guidelines, supervisors in the European Union, Hungary, the United Kingdom and Singapore all expect banks to use forward-looking scenario analysis and stress testing as a means to better understand their exposure to climate-related risks over different time horizons. They provide guidance on the types of scenarios to be used, often referring to those developed by the Intergovernmental Panel on Climate Change (IPCC), International Energy Agency (IEA) or the NGFS.

Banks are typically advised to use scenarios with increases in global temperatures associated physical risks, as well as scenarios reflecting orderly or disorderly transition pathways. Banks are then expected to incorporate findings in their business strategy and risk appetite frameworks, in some cases feeding into capital adequacy assessment and liquidity management.

Spain's landmark *Law 7/2021 on Climate Change and Energy Transition* is currently the only text formally directing banks to set and publish specific decarbonization targets aligned with the Paris Agreement for their lending and investment portfolios, with a deadline set at 2023.<sup>40</sup>

BNM's *Value-Based Intermediation Financing and Investment Impact Assessment Framework (VBIAF)* recommends that banks set time-bound targets at the portfolio level on aspects such as on zero-deforestation and water, going beyond climate-only considerations.<sup>41</sup>

**REGULATORS AND SUPERVISORS SHOULD REQUIRE BANKS TO DEVELOP A PORTFOLIO-LEVEL APPROACH TO THE MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS. BANKS SHOULD BE EXPECTED TO MINIMIZE THE NEGATIVE IMPACTS ASSOCIATED WITH THEIR BUSINESS RELATIONSHIPS, TO PROGRESSIVELY SET SCIENCE-BASED TARGETS IN LINE WITH EXISTING AND UPCOMING INTERNATIONAL CLIMATE AND BIODIVERSITY FRAMEWORKS, AND TO ALIGN WITH BROADER SUSTAINABLE DEVELOPMENT GOALS.**

# DISCLOSURE & TRANSPARENCY



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Public disclosure of decision-useful information on environmental & social risks and impacts by financial and non-financial corporations is key to help correct market failures and enhance market discipline. It also contributes to better risk management and facilitates the identification of sustainable finance opportunities.

FIGURE 13: INDICATOR 1.6.1

Banks are expected to publicly disclose how E&S considerations are integrated in their business strategy, governance, policies and risk management processes

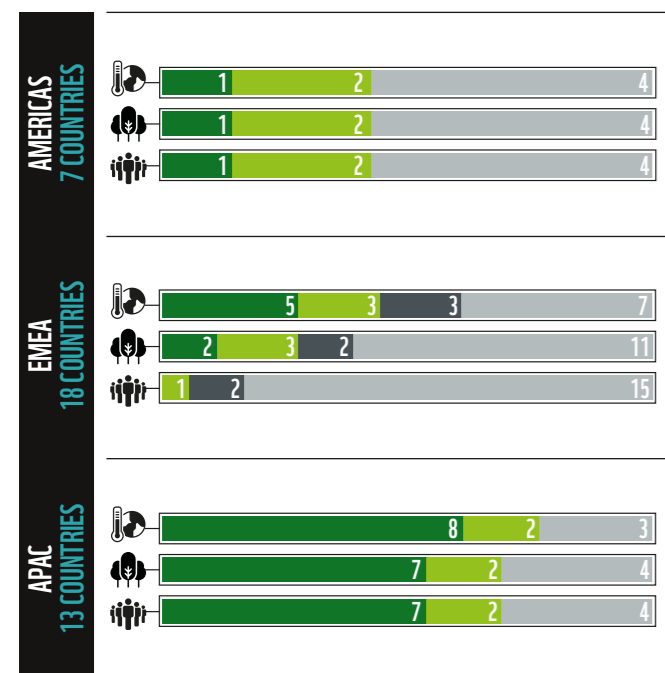
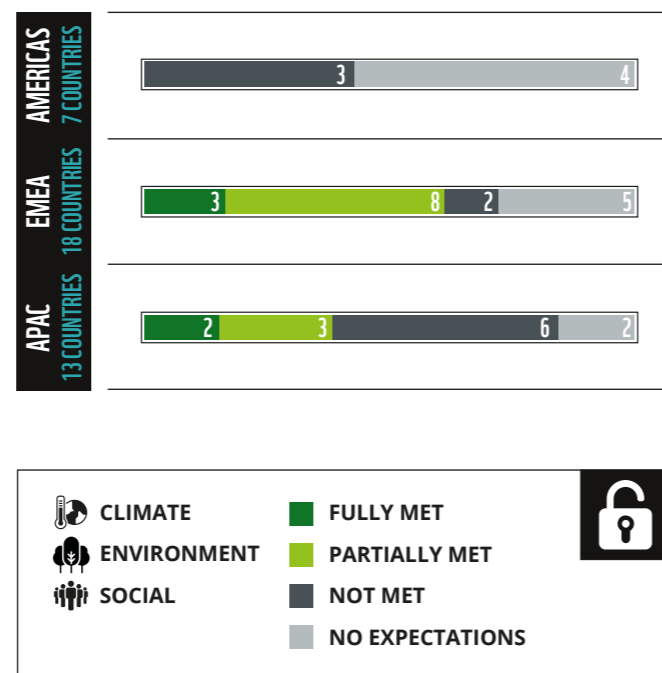


FIGURE 14: INDICATOR 1.6.7

Banks are expected to report publicly on their exposure to and management of climate-related risks and opportunities, in line with the TCFD recommendations



CLIMATE    FULLY MET  
 ENVIRONMENT    PARTIALLY MET  
 SOCIAL    NOT MET  
 NO EXPECTATIONS

**IN MOST JURISDICTIONS, BANKS ARE EXPECTED TO DISCLOSE INFORMATION ON THEIR E&S STRATEGY AND ITS IMPLEMENTATION, ALBEIT IN VARYING LEVELS OF DETAIL. EXPECTATIONS FOR BANKS TO DISCLOSE THEIR EXPOSURE TO E&S RISKS OR THEIR E&S IMPACTS ARE GENERALLY LIMITED OR HIGH LEVEL, ALTHOUGH RECENTLY ISSUED REGULATIONS AND GUIDELINES ARE MORE SPECIFIC, WITH INCREASING REFERENCE TO THE RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD).**

**REGULATORS AND SUPERVISORS SHOULD REQUIRE BANKS TO DISCLOSE THEIR PORTFOLIO-LEVEL EXPOSURE TO, AND MANAGEMENT OF, MATERIAL E&S RISKS. IN LINE WITH DOUBLE MATERIALITY CONSIDERATIONS, BANKS SHOULD SIMILARLY BE EXPECTED TO DISCLOSE THEIR ADVERSE E&S IMPACTS AND THE ASSOCIATED MITIGATION MEASURES.**

Expectations for banks to publicly disclose how E&S considerations are integrated into their business strategy, governance, policies and risk management processes are the most specific in the Asia-Pacific region, compared with the Americas where existing expectations are often relatively high level, and in the EMEA region where the expectations are often either absent or relatively high level (Figure 13, indicator 1.6.1). With the exception of a handful of countries, there is no explicit reference to internationally recognized sustainability reporting frameworks (indicator 1.6.2).

Nearly half of the assessed jurisdictions have no expectations for banks to publicly disclose their credit exposure by industry sub-sectors (indicator 1.6.4). Where expectations do exist, disclosure is expected at sector-level only, preventing a more granular understanding of banks' exposure to sectors potentially at risk from a climate, environmental or social perspective.

In nearly all countries where classification systems for sustainable or unsustainable activities (taxonomies) exist, banks are expected to publicly disclose the share of their total lending portfolio which is allocated to such activities (indicator 1.6.5). In only a few countries, there is either no expectation or only an expectation to report to the supervisor. There is currently no formal taxonomy in place in any of the countries assessed in the Americas region.

Only a limited number of jurisdictions currently expect banks to report against the TCFD recommendations (Figure 14, indicator 1.6.7). This is however expected to change rapidly as governments move beyond simple recommendations to gradually increase their expectations. A few regulators have already published time-bound plans for mandatory TCFD reporting, generally applicable to all listed companies including banks.

The European Commission Delegated Acts published in July 2021 to supplement the Taxonomy Regulation published in June 2020 require credit institutions (banks) to publish "how and to what extent [their] activities are associated with economic activities that qualify as environmentally sustainable [...]".<sup>42</sup>

A key indicator is the Green Asset Ratio (GAR) that will show the proportion of the banks' assets financing and invested in taxonomy-aligned economic activities as a proportion of total covered assets. Importantly, non-financial corporations will also be expected to report how much of their turnover, capital and operational expenditures is associated with economic activities that qualify as environmentally sustainable.

Following the publication by Bank Negara Malaysia (BNM) of its *Climate Change and Principle-based Taxonomy* in April 2021, commercial banks in Malaysia will be expected to report the exposure of their loan books to green and polluting economic activities, using a specific template.<sup>43</sup>

# MICRO-PRUDENTIAL SUPERVISION (RULE-BASED)

Prudential rules are essential to strengthen regulation and supervision, and eventually the practices of banks. As environmental and social issues translate into financial risks for banks, banking regulators and supervisors can not only discuss these risks as part of the supervisory dialogue but also set specific requirements to ensure that those risks are adequately reflected into banks' capital and liquidity risk management processes.

In 10 out of 38 jurisdictions, banks are required or advised to integrate climate and/or broader E&S considerations into their Internal Capital Adequacy Assessment Process or ICAAP (indicator 1.5.1). In nine out of these 10 jurisdictions, banks are also expected to integrate these considerations into their liquidity risk management process (indicator 1.5.3). There are no such expectations in the remaining countries assessed.

Regarding the use of micro-prudential rules, currently no regulator or supervisor is explicitly factoring climate or broader E&S considerations in minimum capital requirements or capital add-ons for banks (indicator 1.5.2).

Similarly, no regulator or supervisor is currently explicitly factoring climate, environmental or social considerations in the adjustment of liquidity ratios such as liquidity coverage ratio, through the definition of high-quality liquid assets, or the net stable funding ratio, through the definition of required stable funding (indicator 1.5.4).

**EXISTING RULE-BASED MICRO-PRUDENTIAL SUPERVISORY TOOLS, SUCH AS THOSE SET OUT UNDER THE BASEL REGULATORY FRAMEWORK, ARE NOT YET BEING FULLY UTILIZED BY BANKING REGULATORS AND SUPERVISORS TO PROACTIVELY MITIGATE, EX-ANTE, THE FINANCIAL RISKS DERIVED FROM ENVIRONMENTAL AND SOCIAL RISKS.**

Banco Central do Brasil (BCB), Bangko Sentral ng Pilipinas (BSP) and Germany's Federal Financial Supervisory Authority (BaFin) all expect banks to incorporate the whole range of climate, environmental and social risks in both their capital adequacy assessment and liquidity risk management processes.

The European Central Bank (ECB) and Magyar Nemzeti Bank (MNB) both require banks to include climate and environmental risks in their ICAAP and liquidity risk management processes, and then have explicit expectations for banks to consider the outcomes of such exercises in their risk appetite and business strategy, as well as expectations to take measures to maintain adequate liquidity buffers.

**REGULATORS AND SUPERVISORS SHOULD SYSTEMATICALLY REQUIRE BANKS TO FACTOR ENVIRONMENTAL AND SOCIAL RISKS IN THEIR CAPITAL ADEQUACY ASSESSMENT AND LIQUIDITY RISK MANAGEMENT PROCESSES. WHILE RISK QUANTIFICATION METHODOLOGIES ARE BEING REFINED, PRUDENTIAL SUPERVISORS SHOULD ADOPT A PRECAUTIONARY APPROACH AND USE EXISTING SUPERVISORY AND REGULATORY TOOLS TO SET MINIMUM CAPITAL AND LIQUIDITY REQUIREMENTS.**

# MACRO-PRUDENTIAL SUPERVISION

Through the identification and mitigation of system-wide imbalances and risks, macro-prudential supervision is critical to ensure the stability of the financial system as a whole, beyond that of individual financial institutions.

Among the 38 jurisdictions assessed, the Autorité de contrôle prudentiel et de résolution (ACPR)<sup>44</sup> in France and most recently the European Central Bank (ECB) are the only banking supervisors to have published the results of comprehensive climate stress-testing exercises which covered both physical and transition risks across a range of scenarios (indicator 1.7.3). In the Netherlands, DNB published a number of reports exploring various aspects of climate-related risks, such as energy transition<sup>45</sup> and flooding risks.<sup>46</sup>

Banking supervisors in 11 other jurisdictions are conducting or have announced similar climate stress-tests, with most results expected by the end of 2022 (indicator 1.7.1). Both the APCR and the UK PRA have disclosed their detailed climate stress-testing methodology for public consultation, while the Monetary Authority of Singapore (MAS) has published a broad outline including potential climate scenarios and next steps (indicator 1.7.2).

It should be noted that so far only climate risks are covered in such stress-tests. Other environmental issues such as biodiversity loss, or social aspects, are not yet covered. However, initial studies have been conducted in a few jurisdictions to assess financial institutions' exposure to such risks (indicator 1.8.4, refer to the next section).

**IN ADDITION TO MICRO-PRUDENTIAL SUPERVISORY TOOLS, CENTRAL BANKS AND BANKING SUPERVISORS SHOULD MAKE FULL USE OF MACRO-PRUDENTIAL MEASURES TO LIMIT THE EXPOSURE OF BANKS TO ACTIVITIES THAT ARE DEEMED INCOMPATIBLE WITH NATIONAL OR INTERNATIONAL SUSTAINABLE DEVELOPMENT OBJECTIVES AND THEREFORE SUBJECT TO HIGHER RISKS. WHILE SCENARIO-BASED STRESS-TESTS PROVIDE USEFUL INSIGHTS, THEY SHOULD NOT REPLACE OR DELAY THE USE OF MEASURES TO ADDRESS SYSTEMIC RISKS EX-ANTE.**

**WHILE AN INCREASING NUMBER OF BANKING SUPERVISORS ARE CONDUCTING OR HAVE ANNOUNCED CLIMATE-RELATED STRESS-TESTS AND ARE MONITORING RISK EXPOSURES, THERE IS A DISTINCT LACK OF MACRO-PRUDENTIAL MEASURES BEING TAKEN TO LIMIT THE EXPOSURE OF BANKS TO CERTAIN ACTIVITIES AND PREVENT THE BUILD-UP OF SYSTEMIC RISKS IN THE FINANCIAL SYSTEM, PARTICULARLY WITH REGARDS TO CLIMATE AND ENVIRONMENTAL RISKS (INDICATOR 1.7.5).**

The ECB has embarked on an economy-wide climate stress-test. The results of this exercise were published in September 2021, covering 1,600 euro area banks and more than four million of their corporate counterparties worldwide. Three different climate policy scenarios were used, covering a 30-year period.<sup>47</sup>

Unsurprisingly, results showed that firms and banks will be severely affected if climate change is not addressed, with risk being noticeably concentrated in certain regions and sectors. An orderly and swift transition to a zero-carbon economy is necessary to minimize costs and maximise benefits, which over the medium- to long-term outweighs short-term transition costs.

In addition to the work done at the ECB level and its own climate stress testing exercise, the ACPR jointly with the financial market authority (Autorité des marchés financiers, AMF) are monitoring and evaluating the commitments made by the largest banks, insurers and asset managers operating in Paris with regards to thermal coal. The ACPR and AMF also publish their recommendations for market participants.<sup>48</sup>

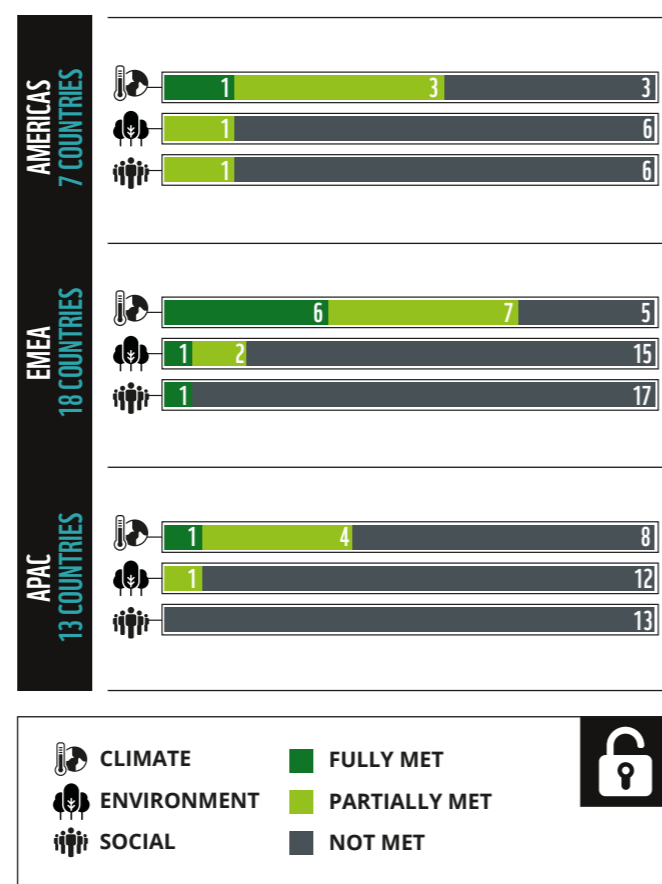
# ASSESSMENT AND MONITORING OF RISK EXPOSURES

Before considering in-depth scenario analysis and stress-testing, central banks and banking supervisors can perform initial studies to start quantifying the exposure of banks to E&S risks and understand how these risks are being managed, before developing indicators to monitor how risk exposure and management evolve over time.

Banking supervisors have started to conduct studies to assess the exposure of banks to climate-related risks and to survey their risk management practices (Figure 15, indicator 1.8.4). However, in most cases, these studies only look at either physical or transition risks ('Partially met' results). Across the jurisdictions assessed, broader environmental and social aspects are only rarely looked at, which is a concern given the importance of the underlying risks.

In 16 jurisdictions, supervisors conducting the studies mentioned above have developed indicators to quantify the exposure of banks to specific risks, for instance by measuring exposure to carbon-intensive sectors as a proxy to transition risks in lending portfolios (indicator 1.7.4). Other indicators include carbon footprint and exposure to certain physical risks such as extreme weather events. However, only four of these supervisors have started to monitor banks' exposure to climate-related risks on a regular basis (or have committed to do so), and only a handful of supervisors have started to look at E&S indicators beyond climate.

**FIGURE 15: INDICATOR 1.8.4**  
The supervisor has conducted studies to assess the banking sector's exposure to, and management of, E&S risks, and published its conclusions and recommendations



Since 2018, Banco de México has published assessments of banks' exposure to climate-related physical and transition risks in its Financial Stability Reports, gradually increasing the scope of sectors and natural hazards covered with each iteration.<sup>49</sup> Surveys are also conducted to understand how banks are managing these risks. Similar studies have been conducted by Banca d'Italia, looking at lending to both households and corporations.<sup>50</sup>



An increasing number of central banks or banking supervisors are now going beyond climate-related risks and starting to look at the banking sector's exposure to nature-related risks or even to social risks. In its Indebted to nature report<sup>51</sup> published in June 2020, DNB assessed Dutch financial institutions' exposure to biodiversity loss, while Banque de France conducted a similar exercise in August 2021 as described in its working paper A 'Silent Spring' for the Financial System?<sup>52</sup> Banco Central do Brasil (BCB) participated in a World Bank study published in August 2021 exploring the exposure of Brazilian banks to biodiversity loss.<sup>53</sup>

In its Values at risk? report published in January 2019, DNB also looked at how banks were exposed to raw material scarcity and human rights controversies.<sup>54</sup>

A MAJORITY OF BANKING SUPERVISORS HAVE CONDUCTED STUDIES TO ASSESS THE EXPOSURE OF BANKS TO CERTAIN E&S RISKS, ALTHOUGH ALMOST EXCLUSIVELY FOCUSING ON CLIMATE-RELATED RISKS. THESE STUDIES ARE OFTEN COMPLEMENTED BY SURVEYS TO UNDERSTAND HOW BANKS ARE MANAGING THESE RISKS. ONLY A FEW SUPERVISORS ARE MONITORING THESE RISKS ON A REGULAR BASIS.



BANKING SUPERVISORS SHOULD DEEPEN THEIR UNDERSTANDING OF BANKS' EXPOSURE TO CLIMATE-RELATED PHYSICAL AND TRANSITION RISKS. THEY SHOULD ALSO USE EXISTING AND NEW METHODOLOGIES TO START QUANTIFYING BANKS' EXPOSURE TO BROADER ENVIRONMENTAL AND SOCIAL RISKS. THESE RESULTS SHOULD BE PUBLISHED AND, COMBINED WITH A BETTER COMPREHENSION OF HOW BANKS ARE MANAGING THESE RISKS, SHOULD INFORM REGULATORY AND SUPERVISORY ACTION.





## BANCO DE MÉXICO



BANCO DE MÉXICO

**Q1** Could you tell us about Banco de México's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

Banco de México aims to assess and measure the impact of climate and environmental risks on the financial system, to avoid blind spots that could compromise its resilience. It aims to enhance market transparency via the adoption of disclosure frameworks such as the TCFD and quantitative sustainability standards, and to create awareness and support capacity building efforts at financial institutions.

Stronger cooperation with other financial regulators and the private sector is key to guarantee a transition to a more sustainable economy. The creation of the Sustainable Finance Committee (SFC) in 2020, within the Financial Sector Stability Council, is a key milestone, as it involves all Mexican Financial regulators as members and the main financial sector associations as observers.

The SFC is instrumental to advance the sustainable finance agenda in México. It has set out four priorities: developing a sustainable finance taxonomy, integrating climate and ESG risk factors in supervisory and financial market activities, improving

the amount and quality of disclosures and reporting by non-financial and financial institutions and creating enabling conditions to increase sustainable capital mobilization.

**Q2** More specifically, how is Banco de México planning to integrate climate, environmental and/or social considerations into its activities, and what is your overall timeline?

Our financial stability division has undertaken analysis of physical and transition risks exposures of the banking system that has been published in the Financial Stability Report. It is developing a framework to assess climate-related macro financial risks with a forward-looking perspective, which is expected in 2022. Our risk management and central banking operations divisions are assessing different approaches and methodologies, to integrate more broadly ESG considerations into the investment and risk management of international reserves. A division of environmental and social risk analysis, created in the fall of 2021, coordinates policies, research, methodologies and tools, across internal departments and with other authorities and financial institutions.

**Q3** What are the main challenges faced by Banco de México in the definition and implementation of its roadmap? What would be needed to overcome these?

While México faces considerable physical risks due to climate change, recent studies show that transition risks are also considerable. Most firms are not yet fully aware of these risks and may underprice them. Some of these risks tend to materialize in the long term and incentives to integrate them into ordinary financial decision making may be lacking. Also, climate risks require new tools and are complex to assess. Thus, there is a need for guidance and capacity building for authorities and financial institutions.

**Q4** Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

In addition to having a leading participation in international fora such as G20 SFWG, FSB, BCBS and NGFS, Banco de México has teamed up with the United Nations, multilateral development banks and international cooperation agencies, to advance the sustainable finance agenda in the country.



## BANK INDONESIA



BANK INDONESIA

**Q1** Q1: Could you tell us about Bank Indonesia's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

Bank Indonesia' ultimate objective is to foster a more sustainable and resilient financial system, for which financial access for MSMEs and low-income individuals and green finance are critical. The pandemic situation has led many SMEs – which account for more than 97% of the businesses and workforce in Indonesia - to struggle, triggering a major rebalancing of banks portfolios towards larger corporations. This has serious implications for access to finance by SMEs, and increases concentration risk and vulnerability of the banking sector.

Bank Indonesia views climate change as a significant risk to financial stability. While physical risks may lead to substantial costs, an orderly transition could significantly reduce these costs. To support the transition, Bank Indonesia has launched a number of green initiatives that will be strengthened.

**Q2** More specifically, how is Bank Indonesia planning to integrate climate, environmental and/or social considerations into

its activities and mandates, and what is your overall timeline?

Inclusive finance is a key area of focus. Measures to enhance globally competitiveness, digitalization and develop sustainable business models for SMEs are being taken. In addition, under a new policy, banks will have to meet a target of minimum 30% of loans granted to MSMEs and low-income individuals by 2024.

Bank Indonesia is also taking green finance measures, notably through national collaboration to develop a green market infrastructure and macro-prudential policy formulation to reduce the impact of climate-related risk on the financial system. Most recently, Bank Indonesia is developing a guide for banks to measure their carbon footprints, including for their portfolios. It will serve to align the financial industry's carbon footprint with Indonesia's Nationally Determined Contribution<sup>viii</sup> by 2030.

**Q3** What are the main challenges faced by Bank Indonesia in the definition and implementation of its roadmap? What would be needed to overcome these?

There has been a growing awareness of the importance of climate change

and sustainable finance across government agencies. However, various initiatives are still scattered and there is significant room for integration and synergy. In fact, there is an urgency to enhance the coordination and collaboration among government agencies to create effective nation-wide climate change and sustainable finance policies.

**Q4** Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

Bank Indonesia is actively participating in international initiatives such as the NGFS, and is also very supportive of the Sustainable Finance Roadmap developed under the G20 Sustainable Finance Working Group. In addition, Bank Indonesia has bilateral cooperations with other central banks such as the Monetary Authority of Singapore on climate risk stress-test and cross-border carbon markets, and is currently looking into a collaborative joint research on transition risks with the Agence Française de Développement.



viii. Indonesian, Ministry of Environment and Forestry, Indonesia's Updated Nationally Determined Contribution (NDC), 2020, <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/Updated%20NDC%20Indonesia%202021%20-%20corrected%20version.pdf>



## RESERVE BANK OF NEW ZEALAND (RBNZ)



### Q1 Could you tell us about RBNZ's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

At Te Pūtea Matua, the Reserve Bank of New Zealand (RBNZ), we are kaitiaki (guardians) of New Zealand's financial ecosystem, tasked to maintain and enhance financial stability.

Our vision is that climate change considerations are incorporated into decisions across the RBNZ and financial system, and we also monitor international developments in the NGFS and SIF on broader environmental issues such as biodiversity. We are also active on financial inclusion, and are working to raise awareness on indigenous economic and financial issues.

### Q2 More specifically, how is RBNZ planning to integrate climate, environmental and/or social considerations into its activities and mandates, and what is your overall timeline?

Climate is a multi-year strategic priority for the RBNZ. Our Climate Change Strategy launched in 2018 has three components: (1) monitoring and managing our own climate impacts, (2) mainstreaming climate by

understanding and incorporating its impacts into our core functions, and (3) leading through collaboration.<sup>xvi</sup>

We measure and verify our operational emissions and will implement a reduction plan. In addition, as we further embed climate risk into our supervisory frameworks and data collection, we continue engaging with our regulated entities' management/boards to assess their governance, strategy and risk management frameworks. We also intend to further contribute to the New Zealand climate-related mandatory disclosures regime and National Adaptation and Emissions Reduction Plans. We have begun incorporating climate risks into our stress-testing programme, and are further working to identify gaps for in-depth analysis in areas such as flooding risks to mortgage lending and droughts on the agricultural sector.

While we consider how our overall approach to monetary policy should account for climate change, we are working to measure carbon-related emissions associated with our sovereign bond portfolio and considering how we can incorporate broader sustainability objectives into our balance sheet, while maintaining our ability to effectively execute our policy objectives.

### Q3 What are the main challenges faced by RBNZ in the definition and implementation of its roadmap? What would be needed to overcome these?

Two key challenges are capacity and data. We are building in-house capacity, for instance by exploring the NGFS climate scenarios and working with New Zealand scientists and banks. We are also exploring the challenges Māori face in accessing capital.

### Q4 Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

Partnerships are integral to our approach, both internationally through initiatives such as the NGFS and domestically. For example, we lead the Council of Financial Regulators' Climate Community of Practice to improve capacity and coordination,<sup>xvii</sup> and engage with scientists, researchers as well as with relevant financial industry groups on climate-related issues.



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KEY RESULTS

# CENTRAL BANKING

# MONETARY POLICY

The public debate on the role of monetary policy in addressing the climate and environmental crises is relatively recent, and more research is required to better understand the transmission mechanisms of environmental and social risks to inflation control and price stability, as well as to quantify the magnitude of potential impacts. However, there is a growing recognition that central banks have an important role to play, and they are starting to take action.

## MAP 2:

### Level of integration of environmental and social considerations into key monetary policy areas



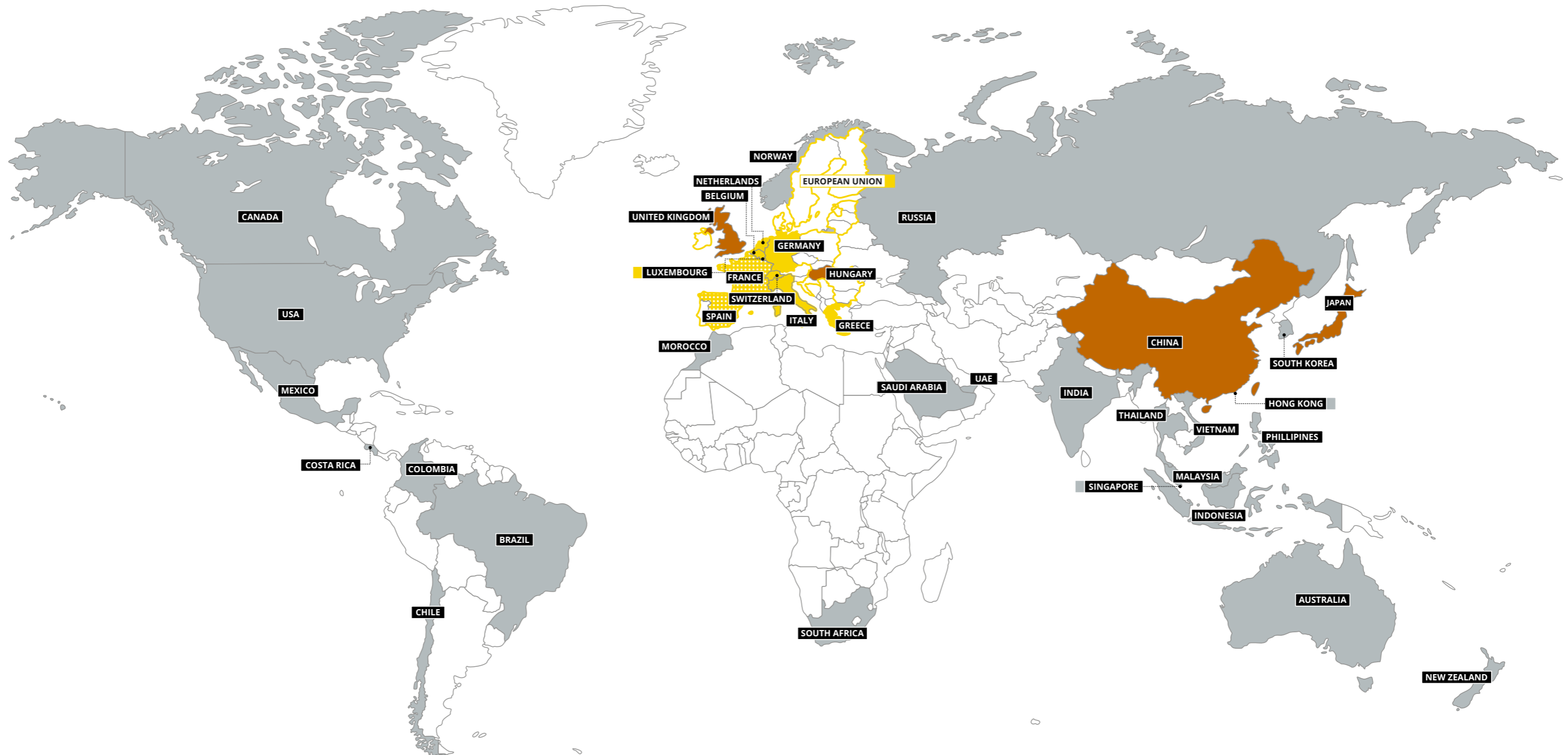
The key monetary policy areas correspond to the following SUSREG indicators: corporate asset purchase programs (indicator 2.1.1), collateral frameworks (indicator 2.1.2), as well as subsidized loans or preferential targeted refinancing lines (indicator 2.1.4). They have been selected for their importance and influence on financial markets.

#### HOW TO READ THIS MAP:

In China, the central bank incorporates environmental and/or social considerations in at least one of the key monetary policy areas, but the assessment result is only partial on the related indicator(s). The findings are identical for the European Central Bank and the broader Eurosystem.



	Partial integration
	Partial integration (Eurosystem)
	Measures in addition to Eurosystem
	No integration
	Countries not assessed





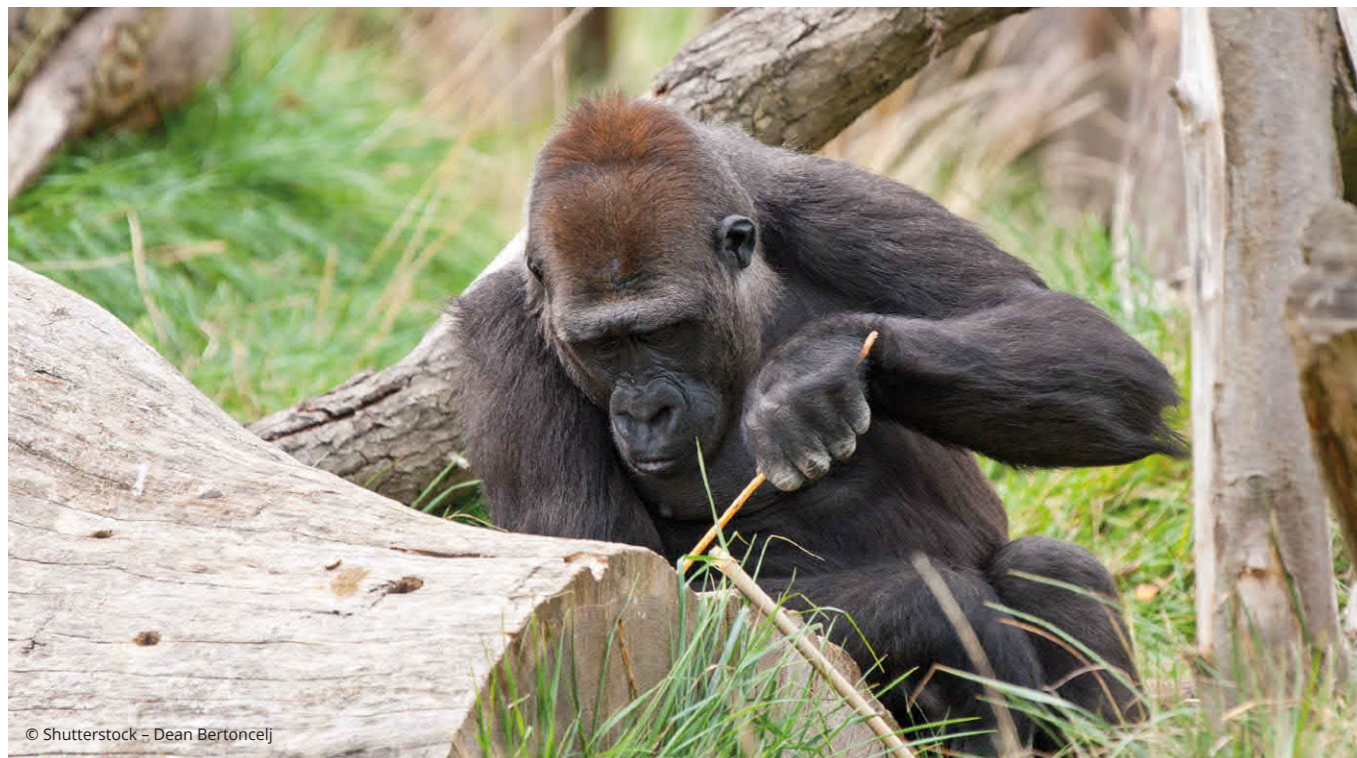
WHILE **22%** OF THE RELEVANT CENTRAL BANKS<sup>ix</sup> (7 OUT OF 32) ARE STARTING TO INTEGRATE E&S CONSIDERATIONS INTO KEY MONETARY POLICY AREAS, NONE OF THEM FULLY SATISFY THE RELATED INDICATORS. REGARDLESS OF INDIVIDUAL MANDATES, CENTRAL BANKS USUALLY HAVE A RANGE OF RELEVANT TOOLS AT THEIR DISPOSAL.<sup>x</sup> ALTHOUGH THIS IS AN AREA OF INCREASING INTEREST AND RESEARCH, THESE TOOLS ARE CURRENTLY LARGELY UNDERUTILIZED.

CENTRAL BANKS SHOULD MAKE FULL USE OF THEIR MONETARY POLICY TOOLKIT, BOTH TO REFLECT THE RISKS DERIVED FROM ENVIRONMENTAL AND SOCIAL ISSUES AND TO ENSURE THAT THEIR ACTIONS DO NOT IMPAIR THE TRANSITION TO A LOW-CARBON AND MORE SUSTAINABLE ECONOMY.

Regarding corporate purchase programs (Figure 16, indicator 2.1.1), only three out of 24 central banks using this tool have started to integrate E&S considerations. The Bank of England (BoE) has published its *Options for greening the Bank of England's Corporate Bond Purchase Scheme*<sup>55</sup> discussion paper, in line with their new mandate to support the net-zero transition in the UK, while the Magyar Nemzeti Bank (MNB) recently announced measures to boost green mortgage lending in Hungary as part of its Green Monetary Policy Toolkit Strategy.<sup>56</sup> The European Central Bank (ECB) has already made sustainability-linked bonds eligible for its asset purchases and has published a roadmap to further integrate climate risks into its monetary policy strategy.<sup>57</sup>

Only four out of 32 central banks have started to integrate some E&S considerations into their collateral framework (Figure 17, indicator 2.1.2). The People's Bank of China (PBoC) expanded the eligible collateral list to include green bonds, green loans and loans to SMEs, while the ECB is accepting sustainability-linked bonds as collateral. The French and Spanish central banks are incorporating qualitative E&S considerations in their in-house credit ratings (on which collateral acceptance relies).

Subsidized loans or preferential targeted refinancing lines factoring E&S considerations are only starting to be used by two central banks out of 29 (Figure 18, indicator 2.1.4). The Bank of Japan (BOJ) introduced a new fund-provisioning measure to support financial institutions in investing or lending to activities that address climate change issues. The Magyar Nemzeti Bank (MNB) will provide refinancing operations to credit institutions at 0% interest for loans to construct or purchase new, highly energy-efficient residential real estates.



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ix. All central banks except national central banks that are part of the Eurosystem and that have no measures in place beyond those mandated by the ECB, which represents a total of 32 institutions.

x. See in particular: *Adapting central bank operations to a hotter world: Reviewing some options*, NGFS, March 2021

FIGURE 16: INDICATOR 2.1.1

The central bank takes E&S considerations into account when implementing corporate asset purchase programs

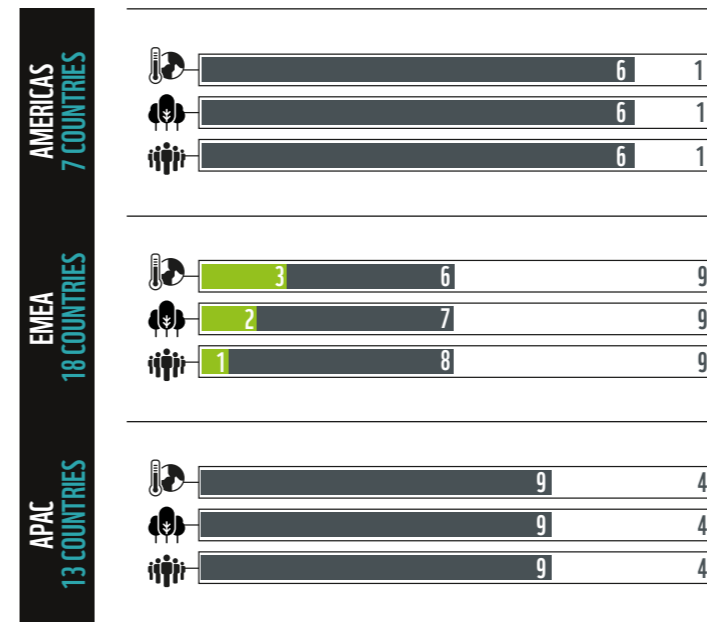


FIGURE 18: INDICATOR 2.1.4

The central bank offers subsidised loans or preferential targeted refinancing lines based on E&S considerations

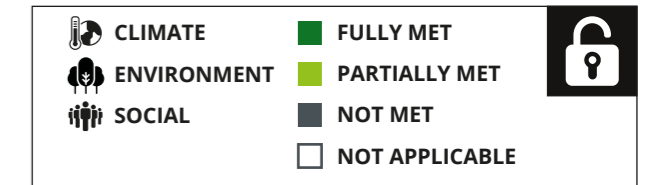
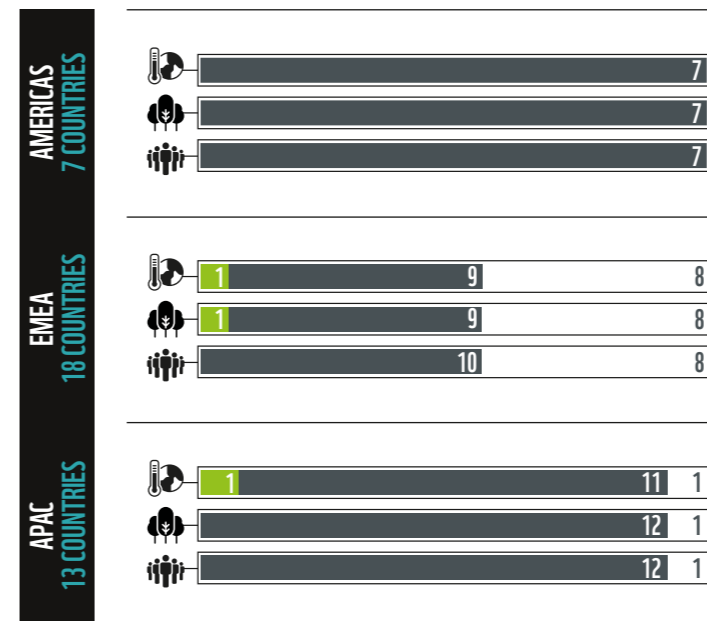


FIGURE 17: INDICATOR 2.1.2

The central bank takes E&S considerations into account in its collateral framework

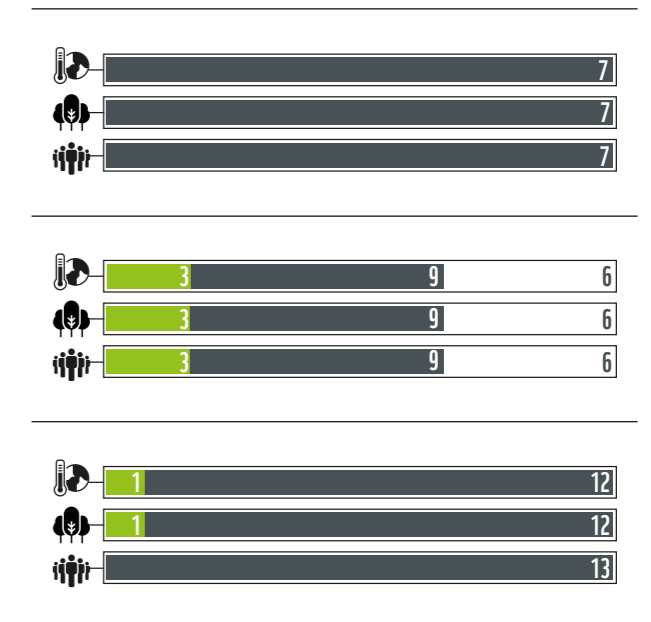
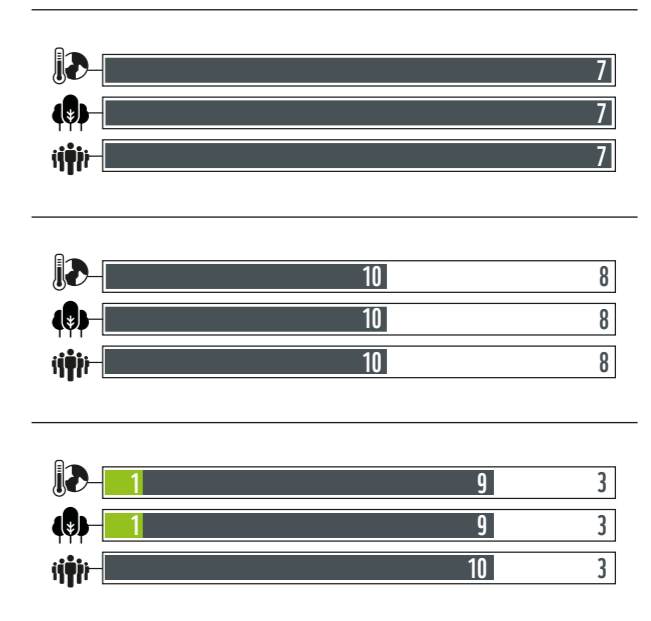


FIGURE 19: INDICATOR 2.1.5

The central bank takes E&S considerations into account in determining reserve requirements for banks





# RESERVES AND PORTFOLIOS MANAGEMENT

Central banks have the unique opportunity to lead by example, by developing, implementing and publishing a responsible investment strategy for the portfolios they manage. Managing foreign exchange reserves responsibly also contributes to achieving monetary policy objectives.

**AN INCREASING NUMBER OF CENTRAL BANKS ARE INCORPORATING E&S CONSIDERATIONS IN THE MANAGEMENT OF THEIR FINANCIAL PORTFOLIOS AND ARE STARTING TO QUANTIFY THEIR EXPOSURE TO CLIMATE RISKS. HOWEVER, IN A MAJORITY OF CASES, LITTLE DETAIL IS AVAILABLE ON CENTRAL BANKS' RESPONSIBLE INVESTMENT PRACTICES.**

**CENTRAL BANKS SHOULD LEAD BY EXAMPLE BY FULLY INTEGRATING ENVIRONMENTAL AND SOCIAL CONSIDERATIONS IN THE MANAGEMENT OF THEIR FOREIGN RESERVES AS WELL AS ACROSS ALL THEIR PORTFOLIOS, AND DISCLOSING THEIR APPROACH. CENTRAL BANKS SHOULD PROGRESSIVELY SET TARGETS TO ALIGN THEIR PORTFOLIOS WITH SCIENCE-BASED TARGETS, STARTING WITH CLIMATE.**

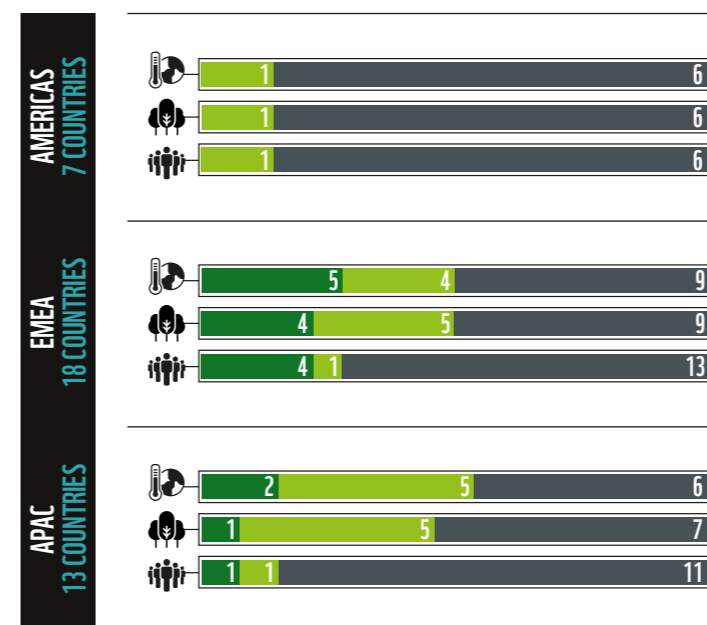
Seven out of 38 central banks, five of which in Europe, provide details on the integration of E&S considerations in their foreign exchange reserves management (Figure 20, indicator 2.1.3). These include sectoral or thematic policies, screening or exclusions, or other responsible investment practices such as active ownership or factoring E&S considerations when appointing external managers. Another 10 central banks declare following responsible investment principles but provide no specific details.

The integration of E&S considerations in the management of central banks own, pension or third-party portfolios shows similar characteristics, although it is noticeable that only two central banks in the Asia-Pacific region have such practices in place (Figure 21, indicator 2.2.5). The common stance<sup>58</sup> adopted in February 2021 by the Eurosystem central banks<sup>xi</sup> and covering climate change-related sustainable investments in non-monetary policy portfolios explains the relatively high numbers shown in Figure 21 for the EMEA region.

Where they exist, such integration efforts by central banks tend to be combined with an assessment of portfolio-level exposure to E&S risks (or a commitment to do so), even though except in a few cases this is limited to climate-related risks (indicator 2.2.4).

**FIGURE 20 INDICATOR 2.1.3**

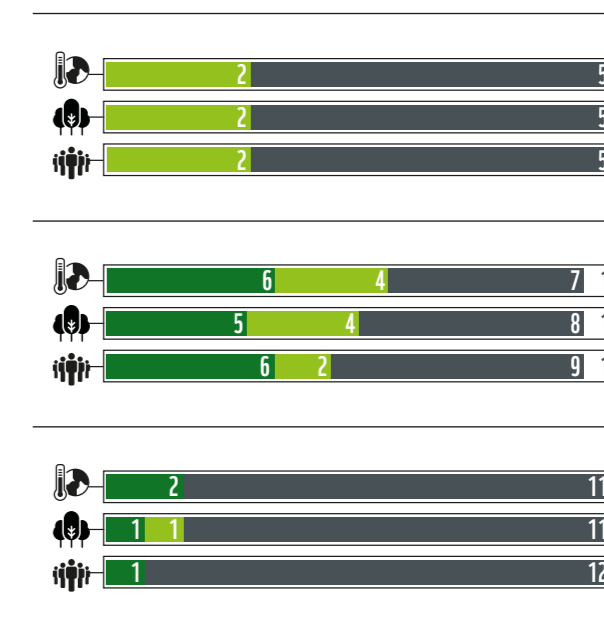
The central bank integrates E&S considerations in the management of its foreign exchange reserves portfolio



CLIMATE ■ FULLY MET  
 ENVIRONMENT ■ PARTIALLY MET  
 SOCIAL ■ NOT MET  
 NOT APPLICABLE

**FIGURE 21: INDICATOR 2.2.5**

The central bank integrates E&S considerations in its asset management practices (for its own, pension and third-party portfolios as applicable)



A signatory to the Principles for Responsible Investment (PRI) and supporter of the Task Force on Climate-related Financial Disclosures (TCFD), the Hong Kong Monetary Authority (HKMA) is factoring ESG considerations in the management of its Exchange Fund, covering both public and private market investments.<sup>59</sup> The HKMA focuses notably on ESG integration in the investment analysis process and active ownership by exercising its shareholder rights in public equity holdings, and ensures that its external asset managers share the same approach.

As detailed in its *Responsible Investment Charter* first published in March 2018, Banque de France (BDF) is committed to aligning the equity components of its portfolio with a 2°C trajectory, to exercise voting rights and engage with issuers, and has laid out fossil fuel exclusions.<sup>60</sup> BDF also measures the ESG performance of its portfolios, using a range of indicators such as carbon footprint, exposure to fossil fuels and climate-related physical risks, as well as indicators related to the biodiversity and societal impacts of investee companies.

In June 2021, the Bank of England (BoE) published its second climate-related financial disclosures report, in line with the TCFD recommendations.<sup>61</sup> The report details the exposure of BoE's financial assets, including its monetary policy portfolio, to physical and transition risks, notably using forward-looking scenario analysis. The report also explores the use of an Implied Temperature Rise (ITR) metric to provide an estimate of the temperature increase with which financial asset holdings are aligned.

# LEADERSHIP & INTERNAL ORGANIZATION

The transition to a low-carbon, resilient and more equitable economy requires ambitious action and leadership from banking regulators, supervisors and central banks. In order to properly integrate environmental and social considerations into their activities, these institutions also need to develop internal capacity and expertise on these topics.

The Bank of England (BoE) has been at the forefront of the debate on central banks' role with regards to climate change. A significant milestone has been reached in March 2021 with a change to its official remit, through which the Bank should now formally consider how it can support the transition of the UK economy to net-zero emissions by 2050.



In Asia, the Monetary Authority of Singapore (MAS) recently announced the appointment of a Chief Sustainability Officer to lead a newly-created Sustainability Group, tasked to coordinate the sustainability efforts undertaken by various departments and build internal capacity.<sup>62</sup> Bank Negara Malaysia (BNM) has set up dedicated workstreams covering all aspects of its activities to define and implement its climate strategy, while working together with Securities Commission Malaysia under the Joint Committee on Climate Change (JC3), a collaborative platform to build climate resilience in the financial sector.<sup>63</sup>

In 2009, the Bank of Greece set up an Interdisciplinary Climate Change Impacts Study Committee (CCISC), bringing together academic experts to study the economic, social and environmental impacts of climate change and inform the Bank's policies.<sup>64</sup>

Half of the 38 banking supervisors assessed have either an existing strategy or a time-bound action plan to incorporate climate-related risks in both their supervisory expectations and in the assessment of the banks' E&S risk exposures (e.g. through stress-testing). For another 14 banking supervisors, only one of the above measures is in place, or they have a roadmap but no associated implementation timeline (Figure 22, indicator 1.8.2). Other E&S risks are markedly less well covered.

Results are broadly similar for central banks, except in the Asia-Pacific region where climate-related risks are not as well addressed as they are by banking supervisors (Figure 24, indicator 2.2.2). For central banks, our minimum expected practices are (i) the integration of E&S considerations in macroeconomic studies or monetary policy measures, (ii) reserves or portfolio management and (iii) assessment of banks' or financial system's exposure to E&S risks (depending on their mandate) – either as existing practices or as time-bound plans.

Out of the 38 banking supervisors assessed, 19 have set up a robust governance structure, with board-level responsibility over the E&S strategy implementation, a dedicated team formally part of the organization or a working group with key representatives from the relevant departments (Figure 23, indicator 1.8.3). Another seven supervisors have a working group or a person in charge, but the information disclosed is much less specific.

Similar results are found for central banks, although a greater number of central banks in the Asia-Pacific region seem not to have a specific governance structure in place, compared to banking supervisors (Figure 25, indicator 2.2.3).

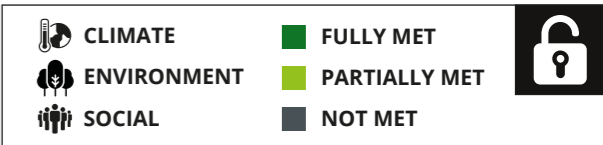


FIGURE 22: INDICATOR 1.8.2

The supervisor has published an official strategy or roadmap outlining measures to address E&S risks and opportunities in the financial sector, in line with its mandate

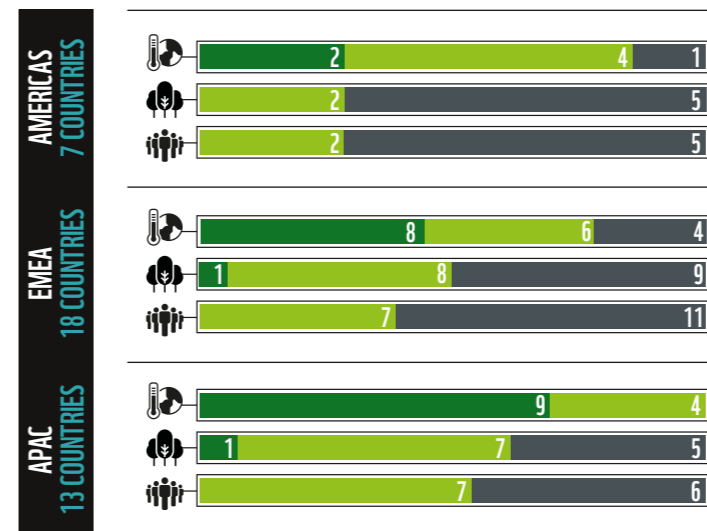
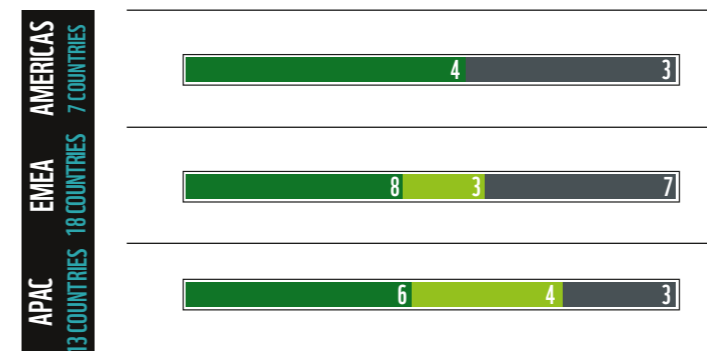


FIGURE 23: INDICATOR 1.8.3

The supervisor has established an internal organization and allocated resources to the implementation of its E&S strategy or roadmap



**92%** OF THE CENTRAL BANKS AND **84%** OF THE BANKING SUPERVISORS ASSESSED ARE MEMBERS OF THE NETWORK FOR GREENING THE FINANCIAL SYSTEM (NGFS). BANKING SUPERVISORS AND CENTRAL BANKS ARE STARTING TO ROLL OUT AND IMPLEMENT THEIR PLANS AND ACTIVITIES TO ADDRESS CLIMATE-RELATED RISKS, ALTHOUGH BROADER E&S RISKS ARE CURRENTLY LESS WELL COVERED. DEDICATED TEAMS AND GOVERNANCE STRUCTURES ARE PROGRESSIVELY BEING SET UP TO IMPLEMENT THESE ACTIONS.

FIGURE 24: INDICATOR 2.2.2

The central bank has published an official strategy or roadmap outlining measures to address E&S risks and opportunities in the financial sector, in line with its mandate

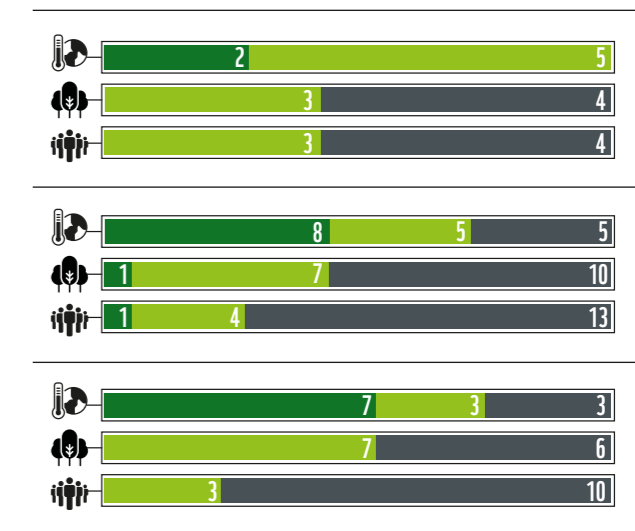
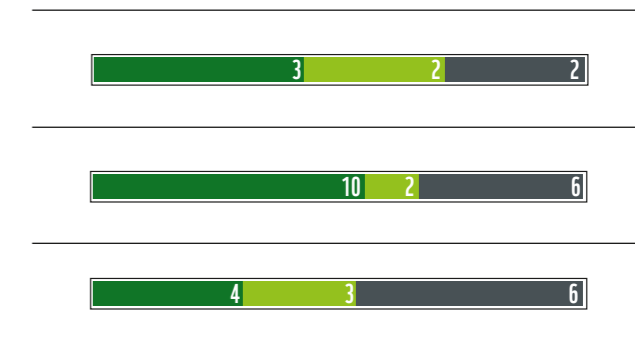


FIGURE 25: INDICATOR 2.2.3

The central bank has established an internal organization and allocated resources to the implementation of its E&S strategy or roadmap



**BANKING REGULATORS, SUPERVISORS AND CENTRAL BANKS SHOULD FURTHER STRENGTHEN THEIR STRATEGIES AND ROADMAPS, AND NOTABLY GO BEYOND CLIMATE-RELATED RISKS TO INCORPORATE BROADER ENVIRONMENTAL AND SOCIAL (E&S) CONSIDERATIONS. THESE INSTITUTIONS, ESPECIALLY THE LARGER ONES, SHOULD ALSO BUILD THEIR OWN CAPACITY AND DEVELOP ROBUST GOVERNANCE STRUCTURES TO FULLY EMBED E&S ASPECTS IN THEIR ACTIVITIES.**



## BANK OF THAILAND



BANK OF THAILAND

**Q1** Could you tell us about the Bank of Thailand's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

While the Bank of Thailand's sustainability strategy covers broad environmental, social and governance aspects, the current focus is on climate change given its urgency and the significant gaps in terms of understanding and progress within the financial sector. Our priorities are to set clear risk management expectations and to create an enabling ecosystem for sustainable finance that leads to positive impacts on the real economy. To avoid fragmentation and incoherent policies, we have established a working group<sup>xv</sup> with other financial regulators and developed a roadmap on sustainable finance.

**Q2** More specifically, how is the Bank of Thailand planning to integrate climate, environmental and/or social considerations into its activities and mandates, and what is your overall timeline?

The Bank of Thailand plans to issue good practices for banks to internalize environmental and climate-related risks, in preparation for potential prudential supervision

in this area. In addition, we are currently working on a taxonomy for the Thai financial sector to promote sustainable products and services while eliminating the issue of greenwashing, keeping in mind the need to align with regional and international taxonomies. We are exploring disclosure standards such as the TCFD recommendations to encourage banks to internalize climate considerations and start identifying data gaps. Climate scenario analysis and stress testing will also be powerful tools in this regard.

We are actively engaging with international and domestic parties to align our work with international best practices while incorporating the Thai context. The taxonomy is expected to be launched in 2022, while disclosure standards and scenario analysis will be piloted soon afterwards.

Internally, the Bank of Thailand has been building up capacity on sustainability. The Sustainable Banking team and a dedicated ESG committee have been established to oversee the implementation of our sustainability policy.

**Q3** What are the main challenges faced by the Bank of Thailand in the definition and implementation of its roadmap? What would be needed to overcome these?

There is limited experience and capacity of both regulators and regulated entities in the field of climate change. There are also data gaps to quantify the impact of climate-related risks on the financial sector, and difficulty in aligning domestically-relevant measures with international standards. Cooperation among stakeholders and experts is key to address these challenges.

**Q4** Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

The Bank of Thailand is collaborating with many experts on climate-related risks (e.g. NGFS / WWF / UK Government) to exchange best practices and organize workshops for the financial regulators and industry. We are also engaging with government agencies responsible for the environmental and climate change agenda, to develop key standards such as the taxonomy that align with national priorities.



## SUPERINTENDENCIA FINANCIERA DE COLOMBIA (SFC)



**Q1** Could you tell us about SFC's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

Given the country's vulnerability to natural disasters, the SFC has been working for the past three years to help the financial sector mobilize capital flows towards sustainable investments and support better identification and management of environmental related risks, while promoting greater transparency. Specifically, we have worked on the development of a taxonomy (published for consultation), promoted ESG integration and paved the way for improved disclosures around climate-related risks, and started to assess the financial sector's exposure to these risks.

**Q2** More specifically, how is SFC planning to integrate climate, environmental and/or social considerations into its activities and mandates, and what is your overall timeline?

In addition to banks, the SFC supervises insurance companies, securities intermediaries and issuers as well as pension fund managers. Macroprudential supervision is performed jointly with the Ministry of Finance and Banco de la República (the central bank).

In October 2021, we will publish our first ESG and Climate Disclosure Regulation, applicable to the largest issuers in Colombia. We expect this regulation to be aligned with the TCFD and SASB recommendations. In November, we will publish our first vulnerability analysis on physical and transition risks for the banking sector (pilot). In December, we will issue Climate Risk Management Good Practice Guidance for Banks. Looking beyond, we will be developing a Green Bond Issuance Incentive Scheme, Green Risk Differential measurement (using the green taxonomy), and will be further exploring and studying biodiversity risk for the financial system.

**Q3** What are the main challenges faced by SFC in the definition and implementation of its roadmap? What would be needed to overcome these?

The main challenges and bottlenecks the SFC is currently facing are (1) an overall lack of awareness, skills and knowledge among market participants and supervisory teams, (2) the lack of consistency across various industries, and (3) data. Given the challenges we are facing, a coordinated effort between supervisory and regulatory authorities, environment and finance

ministries as well as cooperation agencies and international organizations is required.

**Q4** Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

The SFC has been leveraging on its NGFS membership, on the IFC Sustainable Banking Network and on the help of the World Bank Group to implement its strategy. We also signed a MOU with Universidad de los Andes in order to build capacity in the market and within the SFC.

Further to our work with 2 Degrees Investing Initiative on portfolio alignment and stress testing for pension funds, SFC and Banco de la República have asked the World Bank Group for support on designing and implementing a stress testing framework covering climate change risks for the Colombian banking sector, at the macro level.





KEY RESULTS

# ENABLING ENVIRONMENT

# ENABLING ENVIRONMENT

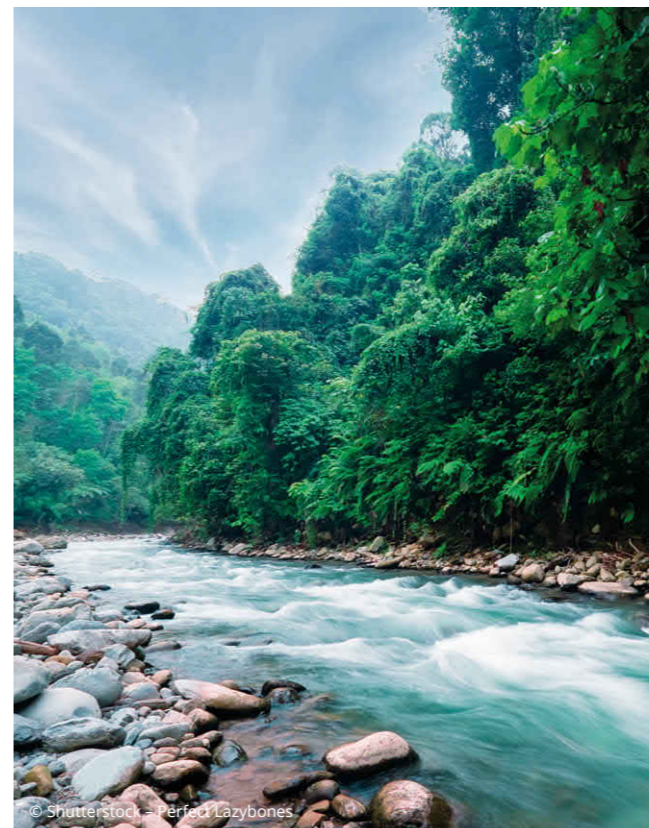
This section covers measures that are not necessarily within the mandates of central banks and banking supervisors, such as multi-stakeholder initiatives, taxonomies or carbon pricing mechanisms. These measures are key to facilitate the adoption of sustainable finance principles by banks and more generally to contribute to the alignment of financial flows with global sustainability goals.

National multi-stakeholder initiatives are most common in the Asia-Pacific region (Figure 26, indicator 3.1.1). In seven countries, they gather representatives from the banking industry, regulatory and supervisory authorities, as well as from civil society or academia. In the EMEA region and in the Americas, a majority of such initiatives do not involve representatives from all stakeholder groups. While in some cases regulatory authorities are not involved, civil society and/or academia are those that most often lack representation.

Among the 38 jurisdictions assessed, six countries and the European Union have developed classification systems for sustainable activities, or have published drafts for consultation (indicator 3.1.3). A number of countries have announced

their intention to develop such taxonomies. Although these can take very different forms, there is a noticeable trend towards ensuring that eligible activities contribute meaningfully to a country's sustainability objectives, while respecting certain minimum E&S standards or safeguards.

Carbon pricing is widely recognized as a crucial mechanism to drive deeper reductions of GHG emissions. Among the 38 jurisdictions assessed, 25 have either an emissions trading system or a carbon tax (Figure 27, indicator 3.1.9), although in three countries the system in place is either voluntary or limited to certain geographies or sectors. However, existing carbon prices are still too low to bring about the necessary change.



THE DEVELOPMENT OF MULTI-STAKEHOLDER INITIATIVES, CAPACITY BUILDING EFFORTS, AS WELL AS REGULATIONS AND STANDARDS ON FINANCIAL PRODUCTS ALL POINT TO THE GRADUAL STRENGTHENING OF THE ENABLING ENVIRONMENT FOR SUSTAINABLE FINANCE. THE NOTICEABLE INVOLVEMENT OF CIVIL SOCIETY AND ACADEMIA IN THESE EFFORTS IS TESTAMENT TO THE IMPORTANCE OF PARTNERSHIPS TO FIND JOINT SOLUTIONS AND OVERCOME EXISTING CHALLENGES.

TAXONOMIES ARE BEING DEVELOPED ACROSS ALL REGIONS, USUALLY WITH A FOCUS ON DEFINING 'GREEN' OR 'SUSTAINABLE' ACTIVITIES AND INCREASINGLY WITH E&S SAFEGUARDS IN PLACE. HOWEVER, TAXONOMIES FOR UNSUSTAINABLE ACTIVITIES HAVE NOT YET BEEN DEVELOPED.

The Japanese Expert Panel on Sustainable Finance, Hong Kong's Centre for Green and Sustainable Finance and South Korea's Green Finance Task Force were all launched in 2020. Alongside regulators and financial institutions, these multi-stakeholder initiatives involve academic experts, highlighting an emphasis on capacity building, as also evidenced by the composition of the TCFD Consortium launched in Japan in 2019.<sup>65</sup>

In the European Union, the Platform on Sustainable Finance acts as a formal advisor to the Commission on the development of its sustainable finance policies including the EU taxonomy, and is composed of representatives from EU supervisory authorities, the financial industry and civil society organizations, the large majority of which were selected and appointed after an open application process.<sup>66</sup>

In Mexico, the Green Finance Advisory Council (CCFV) brings together over 300 members from the banking, asset management and insurance sectors but also multilateral development banks, rating agencies, consultants and non-profit organizations, working together towards a sustainable and resilient financial market.<sup>67</sup>

Under the Priority Sector Lending guidelines issued by Reserve Bank of India (RBI), commercial banks are required to dedicate a minimum share of their total lending portfolio to the financing of eligible projects in line with national priorities, such as in the agriculture, education, housing, social infrastructure and renewable energy sectors.<sup>68</sup>

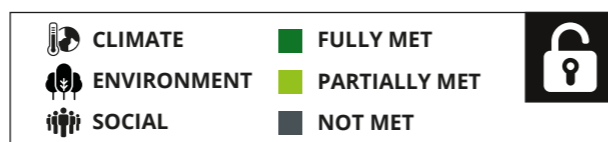
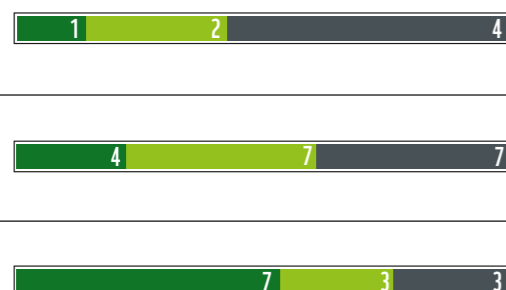


FIGURE 27: INDICATOR 3.1.9  
A carbon pricing mechanism is being implemented in the country



FIGURE 26: INDICATOR 3.1.1  
A multi-stakeholder sustainable finance initiative is in place, involving representatives from the banking industry, regulatory and supervisory authorities, as well as from civil society



APAC 13 COUNTRIES  
EMEA 18 COUNTRIES  
AMERICAS 7 COUNTRIES



## RESERVE BANK OF INDIA (RBI)



### Q1 Could you tell us about RBI's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

The Reserve Bank is committed to fostering a more sustainable and resilient financial system in its jurisdiction. Accordingly, it has taken initiative on green finance as early as 2007 and has also taken policy measures to promote and support green finance initiatives. Thus, it has been our constant endeavour to assess and mitigate climate risks. In addition to mitigating the risks arising out of extreme climate events, there is a need to maintain a delicate balance for our financial system to move towards green financing, even while being mindful of the country's developmental requirements.

### Q2 More specifically, how is RBI planning to integrate climate, environmental and/or social considerations into its activities and mandates?

The RBI is conscious of the need to integrate climate, environmental and / or social considerations into its activities and mandates. Accordingly, it is studying the actions being taken by leading central banks in areas of disclosures, regulation and

supervision of banks, etc. The RBI is associated with initiatives aimed at creating an enabling environment through putting in place a taxonomy. Further, it is also actively participating in the work of various standard-setting bodies which are working on improving climate risks disclosures.

### Q3 What is the overall timeline for implementation of this roadmap, and which actions will be prioritized?

The initial focus would be on integrating climate-related risks by building awareness of such risks. The RBI is actively participating in various committees and following the developments from standard setting bodies like the BCBS and FSB on climate risk and would be guided on its policies accordingly.

### Q4 What are the main challenges faced by RBI in the definition and implementation of its roadmap? What would be needed to overcome these?

One challenge is to ensure that India has a taxonomy on sustainable finance in place. Building awareness of climate-related risks among all stakeholders would be another priority.

### Q5 Have you entered or are you planning to enter into any external partnership to support the implementation of this roadmap?

In order to learn from and contribute to the global efforts towards green finance, the RBI has joined the Central Banks and Supervisors Network for Greening of Financial System (NGFS) on April 23, 2021. The RBI intends to learn from and actively contribute to the NGFS workstreams. The RBI is also a member of a bilateral India-UK Sustainable Finance Forum set up last year to drive forward deeper cooperation between India and the UK on sustainable finance. It is also represented on the G20 Sustainable Finance Working Group, FSB's Working Group on Climate Risk and Work Stream on Climate-related disclosures and a Task Force on Climate-related Financial Risks set up by the BCBS.



وزارة التغير المناخي  
والبيئة  
MINISTRY OF CLIMATE CHANGE  
& ENVIRONMENT



## ABU DHABI GLOBAL MARKET (ADGM) & MINISTRY OF CLIMATE CHANGE AND ENVIRONMENT (MOCCAE)

### Q1 Could you tell us about ADGM's and MOCCAE's current plans to foster a more sustainable and resilient financial system in your jurisdiction?

ADGM's ambition is to be 'the leading centre for ESG investment in the region' through four pillars (Regulations, Cooperation, Ecosystem, Knowledge and Awareness). Following the publication of the *UAE Guiding Principles on Sustainable Finance*<sup>xii</sup> together with 10 UAE financial regulators and exchanges, we are working to bring clarity and reduce greenwashing risks in relation to sustainable financial products.

In 2019, we launched the *Abu Dhabi Sustainable Finance Declaration*<sup>xiii</sup> under the auspices of the MOCCAE, the Central Bank and the Securities and Commodities Authority, and created a Sustainable Finance Working Group to promote collaboration among national and international stakeholders, both public and private. Since 2018, ADGM's Abu Dhabi Sustainable Finance Forum contributes to knowledge sharing in the region.

ADGM's efforts to create a diverse ecosystem of institutions, products and services is key to deploying the necessary funding to scale up

sustainable finance, and are aligned with the UAE's own objectives.

In January 2021, the MOCCAE published the UAE Sustainable Finance Framework (SFF), a 10-year roadmap to mainstream sustainability in financial decision-making and risk management, enhance supply and demand for sustainable financial products and projects, and strengthen the enabling environment through collaboration.<sup>xiv</sup>

### Q2 More specifically, how are ADGM and MOCCAE planning to integrate climate, environmental and/or social considerations into its activities and mandates?

ADGM is currently looking at how it can build-out its regulatory framework for sustainable finance, notably with measures to encourage the establishment of 'green' funds, enhance ESG disclosures and facilitate the issuance of green bonds in Abu Dhabi.

On its part, MOCCAE is exploring potential public interventions to further develop the domestic green bond and sukuk market. A situation analysis report will be published in 2021 to lay out the fundamentals of green bonds, current conditions in the UAE

marketplace and recommendations to address identified gaps and challenges, including via appropriate government-led interventions.

### Q3 What are the main challenges faced by ADGM and MOCCAE in the definition and implementation of its roadmap? What would be needed to overcome these?

The scale of the investment required for the UAE to successfully transition to a more environmentally-sustainable, resource-efficient and socially-inclusive economy is well beyond the capacity of the public sector alone. Sustainable finance is therefore one of the crucial pillars of this transition, strengthening at the same time the competitiveness of the UAE's financial services sector. In addition to sustained capacity building efforts, the successful implementation of MOCCAE's SFF will require close cooperation between ministries, financial regulators, academia and private sector participants.

Our vision for Abu Dhabi and the UAE is that of a thriving community of financial institutions and other stakeholders working together to support socially beneficial, environmentally responsible and economically viable activities.



# ANNEXES



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# ANNEX 1: COUNTRIES AND INSTITUTIONS COVERED

REGION / COUNTRY	BANKING SUPERVISOR	CENTRAL BANK
<b>AMERICAS</b>		
BRAZIL	Banco Central do Brasil (BCB)	
CANADA	Office of the Superintendent of Financial Institutions (OSFI)	Bank of Canada (BoC)
CHILE	Comisión para el Mercado Financiero (CMF)	Banco Central de Chile
COLOMBIA	Superintendencia Financiera de Colombia (SFC)	Banco de la República
COSTA RICA	Superintendencia General de Entidades Financieras (SUGEF)	Banco Central de Costa Rica (BCCR)
MEXICO	Comisión Nacional Bancaria y de Valores (CNBV)	Banco de México (Banxico)
UNITES STATES OF AMERICA	Federal Reserve Board ( <i>as supervisor of the largest US financial institutions</i> ) <sup>xvi</sup>	
<b>EMEA</b>		
BELGIUM	National Bank of Belgium (NBB)	
EUROPEAN UNION	European Central Bank (ECB)	
FRANCE	Autorité de contrôle prudentiel et de résolution (ACPR)	Banque de France (BDF)
GERMANY	Federal Financial Supervisory Authority (BaFin)	Deutsche Bundesbank
GREECE	Bank of Greece	
HUNGARY	Magyar Nemzeti Bank (MNB)	
ITALY	Banca d'Italia	
LUXEMBOURG	Commission de Surveillance du Secteur Financier (CSSF)	Banque centrale du Luxembourg (BCL)
MOROCCO	Bank Al-Maghrib	
NETHERLANDS	De Nederlandsche Bank (DNB)	
NORWAY	Finanstilsynet	Norges Bank
RUSSIA	Central Bank of the Russian Federation (Bank of Russia)	
SAUDI ARABIA	Saudi Central Bank (SAMA)	
SOUTH AFRICA	South African Reserve Bank (SARB)	
SPAIN	Banco de España	
SWITZERLAND	Swiss Financial Market Supervisory Authority (FINMA)	Swiss National Bank (SNB)
UNITED ARAB EMIRATES	Central Bank of the UAE, Dubai Financial Services Authority (DFSA), Abu Dhabi Global Market (ADGM) Financial Services Regulatory Authority	
UNITED KINGDOM	Prudential Regulation Authority (PRA)	Bank of England (BoE)
<b>ASIA PACIFIC</b>		
AUSTRALIA	Australian Prudential Regulation Authority (APRA)	Reserve Bank of Australia (RBA)
CHINA	China Banking and Insurance Regulatory Commission (CBIRC)	People's Bank of China (PBoC)
HONG KONG	Hong Kong Monetary Authority (HKMA)	
INDIA	Reserve Bank of India (RBI)	
INDONESIA	Otoritas Jasa Keuangan (OJK)	Bank Indonesia (BI)
JAPAN	Financial Services Agency (FSA)	Bank of Japan (BOJ)
MALAYSIA	Bank Negara Malaysia (BNM)	
NEW ZEALAND	Reserve Bank of New Zealand (RBNZ)	
PHILIPPINES	Bangko Sentral ng Pilipinas (BSP)	
SINGAPORE	Monetary Authority of Singapore (MAS)	
SOUTH KOREA	Financial Supervisory Service (FSS)	Bank of Korea (BOK)
THAILAND	Bank of Thailand (BOT)	
VIETNAM	State Bank of Vietnam (SBV)	

# ANNEX 2: LIST OF ACRONYMS

APAC	Asia-Pacific
BCBS	Basel Committee on Banking Supervision
CEO	Chief Executive Officer
COP15	15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD)
COP26	26th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)
E&S	Environmental and Social
ESG	Environmental, Social and Governance
EMEA	Europe, Middle-East and Africa
FSB	Financial Stability Board
G20 SFWG	G20 Sustainable Finance Working Group
GDP	Gross Domestic Product
GFRI	WWF's Greening Financial Regulation Initiative
GHG	Greenhouse Gas
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IPCC	Intergovernmental Panel on Climate Change
MSME	Micro, Small & Medium Enterprises
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
SIF	Sustainable Insurance Forum
SME	Small and medium-sized enterprises
SUSREG	Sustainable Financial Regulations and Central Bank Activities
TCFD	Task Force on Climate-related Financial Disclosures

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**OUR MISSION IS TO STOP  
DEGRADATION OF THE  
PLANET'S NATURAL  
ENVIRONMENT AND TO BUILD  
A FUTURE IN WHICH HUMANS  
LIVE IN HARMONY  
WITH NATURE.**



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