

Reform/sc2021/033 environmental scenario analysis and climate risk assessment

Deliverable 10 – Closing Conference

Technical Support Instrument

Supporting reforms in 27 Member States



Funded by
the European Union



This document was produced with the financial assistance of the European Union. Its content is the sole responsibility of the author(s). The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

The project is funded by the European Union via the Technical Support Instrument, managed by the European Commission Directorate-General for Structural Reform Support.

This report has been delivered in June 2023, under the EC Contract No. SRSS/2018/01/FWC/002. It has been delivered as part of the project “Environmental scenario analysis and climate risk assessment for Austria and Romania”.

© European Union, 2024



The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39 – <https://eur-lex.europa.eu/eli/dec/2011/833/o>).

Unless otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed, provided that appropriate credit is given and any changes are indicated.

Contents

List of abbreviations	3
1 Context of the Closing Conference.....	4
1.1 Agenda and setup of the conference	4
1.2 Speakers and panellists	6
2 Summary of public and private session.....	7
2.1 Summary of the public session.....	7
2.2 Summary of the private session	11
3 Q&A Sessions.....	13
3.1 Q&A of the Public session – Panel discussion	13
3.2 Q&A of the Private session	15
4 Feedback and lessons learned.....	17
5 Annexes	18
5.1 List of event participants	18
5.2 Presentations used within the public and private sessions.....	20

List of abbreviations

ACPR – Autorité de Contrôle Prudentiel et de Résolution

BdF – Banque de France

DG Reform – Directorate-General for Structural Reform Support, European Commission

EBA – European Banking Authority

EC – European Commission

FMA – Financial Market Authority, Austria

GVA – gross value added

NBR – National Bank of Romania

NGFS – Network for Greening the Financial System

PCAF – Partnership for Carbon Accounting Financials

1 Context of the Closing Conference

The Closing Conference of the REFORM/SC2021/033 – Environmental Scenario Analysis and Climate Risk Assessment Practices project was held as part of Deliverable 10 of the Request for Service. It is funded by the European Commission (EC) through the Directorate-General for Structural Reform Support (DG Reform). The beneficiaries of the project are the Financial Market Authority of Austria (FMA) and the National Bank for Romania (NBR).

The general objective of the project is to contribute to institutional and administrative reforms in Austria and Romania by enhancing the beneficiaries' capacity in the field of environmental and climate risk assessment. More specifically, the purpose of the project is to document best practices, develop monitoring frameworks, identify, and close data gaps, and develop scenarios associated with the impact of environmental risks and climate change on the national economies of both countries. As such, beneficiaries will improve their capacity to measure environmental and climate risks using specific indicators and develop forward-looking solutions to mitigate them, with a view to ensuring sustainable economic growth.

The main goal of the Closing Conference was to present the outcomes of the project's Deliverable 4 ("Evaluating data gaps"), Deliverable 5 ("Closing Data Gaps"), Deliverable 6 ("Monitoring Framework") and Deliverable 7 ("Climate Scenarios").

Furthermore, the Closing Conference aimed at fostering mutual learning, strengthening the working relationships between the parties involved in the project and allowing for discussions about potential development beyond the end date of the project.

The presentation of Deliverable outcomes was preceded by a public panel discussion that offered the NBR and the FMA the possibility to further raise awareness of climate and environmental risk management within the financial system at EU level. The public session also aimed at informing supervised entities about the supervisors' plans for climate and environmental risk monitoring within Austria and Romania.

Finally, the Closing Conference provided both beneficiaries the possibility to interact with and discuss climate and environmental risk practices with experts (guest speakers) from Banque de France (BdF) / Network for Greening the Financial System (NGFS), the European Commission and the European Banking Authority (EBA).

1.1 Agenda and setup of the conference

The Closing Conference took place on March 17th, 2023 in a hybrid format. A web-based live stream was available to all invitees via the Deloitte dedicated platform, whereas invitees selected for physical attendance could participate at the NBR headquarters in Bucharest – the venue arranged for the Conference.

The event was divided into two main parts: a public session in the morning and a private session in the afternoon. The public session included the extension of invitations to supervised entities of the FMA and the NBR, as well as to further selected participants from business, governmental institutions and academia (see Annex 5.1). The private session, implying the presentation of the outcomes of deliverables four to seven, was restricted to members of the FMA, the NBR and DG Reform.

As displayed in the agreed conference agenda (Figure 1), the public session was allocated two hours between 10:00 and 12:00 and consisted in an introductory note held by the Vice-Governor of the NBR, Mr. Leonardo Badea, and a panel discussion between high-ranked experts within the field of climate and environmental risk management and representatives of the FMA and the NBR¹. The private session hosted by Deloitte Austria and Deloitte Romania began after a one-hour break, taking place between 13:00 and 15:30².

Figure 1: Agenda of the Closing Conference

Environmental and Climate Risk Assessment – expert panel discussion		09:00 – 12:00
Public session	Check-in & coffee	09:00 – 10:00
	<ul style="list-style-type: none">Introductory note by Mr. Leonardo BadeaPanel discussion about inter-institutional and cross-country cooperation on managing climate and environmental risks, overcoming challenges in related risk analysis, detection, assessment, mitigation measures and capacity building. The discussion also aims to provide insights into future related workstreams and supervisory expectations:	10:00 – 10:10
	<p>Ms. Nathalie Berger, Director, Directorate for Support to Member State Reforms, DG REFORM, European Commission</p> <p>Mr. Jean Boissinot (Deputy Director, Directorate of Financial Stability Banque de France; Head of Secretariat, NGFS)</p> <p>Mr. Stéphane Boivin (Acting Head of ESG Risks Unit, European Banking Authority)</p> <p>Ms. Katharina Muther-Pradler, Managing Director for Integrated Supervision, Financial Market Authority of Austria</p> <p>Mr. Eugen Radulescu, Director of the Financial Stability Department, National Bank of Romania</p> <p>Moderated by Dimitrios Goranitis (Partner – CE leader for the Financial Services Industry, Deloitte Romania)</p>	10:10 – 11:50
	<ul style="list-style-type: none">Q&A Session (Q&A also available on the go)	11:50 – 12:00
Lunch Break		12:00 – 13:00
Outcomes of Deliverables 4 – 7, lessons learned and potential for future development; each deliverable will also touch on capacity building (D8) and Digitalization (D9)		13:00 – 15:30
	<ul style="list-style-type: none">Project overview & initial scopeDeep-Dive on Deliverables 4, 5 and 6 for the FMA (Austria) – identified & closed data gaps; monitoring frameworkQ&A (on the go & end of session)	13:00 – 13:10 13:10 – 13:50
Short Break		13:50 – 13:55
Private session	<ul style="list-style-type: none">Deep-Dive on Deliverables 4, 5 and 6 for the NBR (ROMANIA) – climate questionnaires & data gathering; monitoring frameworkQ&A (on the go & end of session)	13:55 – 14:35
Long Break		14:35 – 14:45
	<ul style="list-style-type: none">Deep-Dive on Deliverables 7: Climate & Environmental Scenarios, capacity building & feasibility for digitalizationQ&A (on the go & end of session)	14:45 – 15:30

¹ See section 2.1 for details on the content and section **Error! Reference source not found.** for details on questions asked by the audience.

² See section 2.2 for details on the content and section 3.2 for details on questions asked by the audience.

1.2 Speakers and panellists

The panel of the public session was composed of **Mr. Leonardo Badea** (Vice-Governor of the NBR), **Ms. Nathalie Berger** (Director, Directorate for Support to Member State Reforms, DG REFORM), **Mr. Jean Boissinot** (Deputy Director, Directorate of Financial Stability, BdF / Head of Secretariat, NGFS), **Mr. Stéphane Boivin** (Acting Head of ESG Risks Unit, European Banking Authority), **Ms. Katharina Muther-Pradler** (Managing Director for Integrated Supervision, FMA) and **Mr. Eugen Rădulescu** (Director of the Financial Stability Department, NBR). The panel was moderated by Mr. **Dimitrios Goranitis** (Global Leader for the Financial Services Industry, Deloitte).

Ms. Nathalie Berger's speech was focused on the project's multi-country collaboration aspect EU public funds and programmes, the EU sustainable finance framework and DG REFORM's technical support in this area. It emphasized DG Reform's priority to strengthen inter-institutional and cross-country ties for sustainable finance and ESG risk assessment projects and highlighted the need to mobilize supervised entities for the green transition, including funding from the REPowerEU program for climate-related projects.

Mr. Jean Boissinot has a double role as Deputy Director of the Directorate of Financial Stability of Banque de France and as Head of the Secretariat of the Network for Greening the Financial System (NGFS). As a BdF representative, he mainly spoke about BdF stress-testing practices in collaboration with the Autorité de Contrôle Prudentiel et de Résolution (ACPR). From the point of view of his NGFS role, he spoke about the outcomes of climate-related tests documented at NGFS level, tools provided within the working groups of the NGFS, and the common challenges with climate scenarios faced by supervisors at global level.

Mr. Stéphane Boivin's speech focused on climate change challenges for credit institutions, but also further elaborated on the EU ESG framework. He laid out the EBA's future pathway with regard to climate & environmental risk assessment & mitigation (including forward-looking perspective on Pillar 1, Pillar 2 and stress-testing) and highlighted the potential for future cooperation.

Ms. Katharina Muther-Pradler spoke about the FMA's general approach to sustainable finance, lessons learned from the project, identified data gap constraints and provided an outlook on further capacity building beyond the timeline of the project.

Mr. Eugen Rădulescu focused on the NBR's standpoint on sustainable finance, climate risk management and related supervisory expectations. He concluded his speech with the development of the green bonds framework and the collaboration with the Ministry of Finance on a future issuance of such products. He further emphasized the need for proactive steps taken by financial institutions in assessing and mitigating climate and environmental risks.

2 Summary of public and private sessions

2.1 Summary of the public session

The event began with the welcoming remarks of the moderator, Mr. Goranitis, highlighting the significance of the project for Deloitte, as a service provider, and its commitment to supporting the greening of the financial system. He expressed Deloitte's ambition to work with regulators and supervisory institutions in building a favourable framework for the green transition. Afterwards, he provided an overview of the event's agenda, along with an introduction of the panellists, before closing with an encouragement for online participants to submit questions or messages using the dedicated platform set up for the event. The floor was then handed over to Mr. Badea for an introductory note, setting the stage for the discussions to follow.

2.1.1 The introductory note of Mr. Leonardo Badea

Mr. Badea delivered an engaging introductory note, setting the tone for the event. He shared his perspectives on the project and its significance for the green transition and the greening of the financial system. He focused his speech on climate change and its economic consequences in different sectors, emphasizing the need to integrate climate risk in national policies. He concluded by congratulating the progress and outcomes of the project. He also mentioned that the NBR joined the NGFS in 2021.

After delivering the introductory note, Mr. Badea handed the floor back to Mr. Goranitis, who would continue to lead the event and facilitate the discussions between panellists and participants. The event was poised to be informative and dynamic, with a focus on exploring the key themes related to the project and its impact on the sustainable finance landscape. Before Ms. Berger started her speech, Mr. Goranitis asked her what the key takeaways of the first multi-country project on climate and environmental risk funded by DG Reform were, as the end of the project approached.

2.1.2 The speech of Ms. Nathalie Berger

Ms. Berger highlighted the project's format as a multi-country collaboration, noting that it was a new kind of setup established during the bidding process that has now become a priority within DG Reform, aimed at strengthening ties between EU Member States. Lessons learned from previous multi-country projects were discussed, with an emphasis on the positive impact that such collaborations can generate. The overall approach of the Commission and the EU towards sustainable finance and supervision was also addressed. Various areas of support related to sustainable finance and the green transition were mentioned, underscoring the need to mobilize supervised entities to contribute to the sustainability agenda.

The significance of the REPowerEU program was mentioned in the context of the current energy crisis and growing climate risks. The availability of funding for climate-related mitigation projects was highlighted, showcasing the importance of programs like REPowerEU in addressing pressing climate challenges and driving the transition to sustainable energy generation.

Ms. Berger also spoke about the issuance of green bonds and the improvement of the resilience of the finance sector. The European Union supported Member States in carrying out these growth-enhancing reforms based on EU regulations and invited Member States to further establish collaboration on the fronts of energy transition and implementation of the Taxonomy Regulation.

2.1.3 The speech of Mr. Jean Boissinot

Mr. Goranitis requested the head of the NGFS secretary, Mr. Boissinot, to elaborate on the current objectives of this global initiative and how the organization is managing workstream integration. Mr. Boissinot was further asked to detail how the NGFS is addressing the issue of data gaps related to climate and environmental risk analysis.

As a NGFS representative, Mr. Boissinot highlighted that this network, as a broader community of central banks and supervisors, serves as an integrator for national initiatives. The goals of the NGFS were explained, including setting international standards to achieve comparable results in sustainable finance. The tools provided by the NGFS to individual supervisors and central banks were discussed, showcasing the support and resources available to help them in their efforts to stimulate the growth of the sustainable finance framework. Regional and European help initiatives, in line with the global trend, were also highlighted, showcasing the collaborative approach of the NGFS towards addressing climate-related challenges.

The next steps and challenges as viewed within the NGFS were discussed, including the NGFS scenarios version 3 and their potential use, as well as ongoing workstreams on top of the progress already made. Data constraints and overcoming data gaps were also mentioned as areas of focus for the NGFS.

Mr. Goranitis extended the prior question to Mr. Boissinot as a representative of the BdF. As such, Mr. Boissinot provided updates on the progress and outcomes of the climate-related stress test conducted by BdF in collaboration with the APCR (French supervisor for the banking and insurance sectors). The ongoing work and next steps related to the stress-testing efforts were discussed, showcasing BdF's commitment to addressing climate risks through robust assessment and proactive measures.

Overall, Mr. Boissinot highlighted the efforts of the NGFS and BdF in setting international standards, providing tools and support, and addressing challenges in sustainable finance and climate-related stress testing, underscoring their commitment to advancing the green transition in the financial system.

2.1.4 The speech of Mr. Stéphane Boivin

Mr. Goranitis inquired Mr. Boivin about the EBA's roadmap on sustainable finance and how he envisions the integration of this roadmap into Pillar 1 and Pillar 2 Regulation.

Mr. Boivin highlighted the EBA's focus on climate and ESG considerations, providing a forward-looking perspective on climate and environmental risk assessment and mitigation, with potential for cooperation. He discussed Pillar 1, specifically the quantification of climate risk, referring to the published decision paper on potential amendments to the Pillar 1 framework to better reflect environmental risk, also taking into account existing data gaps. He also touched on the inclusion of ESG considerations in the risk management of banks, and the potential overlap with Pillar 2.

Insights were provided on stress testing input from the perspective of the EBA, discussing how stress-testing scenarios can be transformed into assessing climate and environmental impacts. Mr. Boivin also summarized the EBA roadmap on sustainable finance, highlighting the various aspects that need to be considered in this context.

The topic of "greenwashing" was addressed, providing insights for the industry on this important issue. Mr. Boivin also mentioned reports and collaboration with the EIOPA and the ESMA, highlighting the authority's collaborative approach in addressing sustainable finance challenges.

Difficulties in applying the Sustainable Finance Disclosure Regulation (SFDR) were discussed, shedding light on the practical implementation issues faced by the industry. Mr. Boivin's comprehensive summary provided valuable insights into the Authority's efforts in addressing climate and environmental risks, promoting sustainable finance, and collaborating with other stakeholders to build a more sustainable financial system. Also, the need for transparent and high-quality data and the ESG dimensions in risk management systems in the banks were one of the main points of his speech.

2.1.5 The speech of Ms. Katharina Muther-Pradler

Mr. Goranitis asked Ms. Muther-Pradler about the approach of the FMA to climate risk and sustainable finance overall, and about the key challenges and objectives of the authority following this project.

Ms. Muther-Pradler firstly highlighted how the FMA approached the topic of sustainable finance, and how it is implemented in the FMA's strategy, and shared past initiatives and plans. Lessons learned from the project were discussed, including areas where the FMA could provide valuable information to the audience, such as the climate-related supervisory dashboard.

She acknowledged that supervisors often faced challenges in evaluating the self-assessment of supervised entities, particularly in the context of data gaps. This issue of data gaps was emphasized, including the need to work on closing such gaps, deal with potential remaining data gaps, and ensure comparability and integration of data from different providers.

The importance of supervised entities using approved and generally accepted data for their risk frameworks, rather than relying on whatever data source is available, was highlighted. Ms. Muther-Pradler also linked the data gap issue to current policies of the Commission to close data gaps, emphasizing the need to combine environmental data with financial information and collaborate with other authorities, both at national and European level (e.g., environmental agencies) to obtain comprehensive data points.

A message was conveyed to the Commission (DG Reform) regarding the need for more EU-wide cooperation and assistance, including multi-country cooperations and consistency in data across the EU. The importance of capacity building to bring staff up to speed after the project was also emphasized.

Ms. Muther-Pradler's summary provided insights into the FMA's approach to sustainable finance, challenges, and lessons learned from the project, and highlighted the need for collaboration, data consistency, and capacity building for an effective implementation of sustainable finance initiatives. Key takeaways from the project were:

- Data is key, the lack of reliability is a challenge, and rating standardization remains an issue;
- There is need for greater cooperation on sustainability and climate change at national and EU-wide multi-country levels, involving academics and participants from the industry;
- There is a need to create new instruments and change the supervisory approach.

2.1.6 The speech of Mr. Eugen Rădulescu

Before the speech of Mr. Rădulescu, Mr. Goranitis inquired about the NBR's approach to climate risk and sustainable finance from a financial stability perspective. Mr. Goranitis was interested in understanding the current policy framework and the key takeaways from the project, as well as any insights into the NBR's plans within the sustainable finance paradigm.

Mr. Rădulescu expressed the NBR's stance on sustainable finance and climate & environmental risk management from a financial stability perspective. The current position of the NBR on these topics was presented, along with a forward-looking overview of mitigation measures. He also touched upon the "green bonds" topic, which was further elaborated by the representative of the Ministry of Finance.

Mr. Rădulescu emphasized that the NBR expects financial institutions to proactively assess and mitigate climate and environmental risks while acknowledging that the NBR is also building its own capacity in this area. The private sector was encouraged to take steps towards risk assessment and mitigation as well, setting expectations for the audience. The outcomes of the project, including the climate dashboard and the questionnaires sent to firms, were highlighted. He also mentioned that a future questionnaire would be conducted with financial institutions (related to Deliverable 4b of the project), indicating the NBR's ongoing efforts in this regard.

During his speech, Mr. Rădulescu invited Ms. Diana Popescu (General deputy director, Treasury and Public Debt, Ministry of Finance) to discuss the green bonds framework at the sovereign level. It was noted that this framework is part of the strategy for developing capital markets for Romania, included in the debt management strategy and sovereign financing plan for the current year. Romania also has an inter-ministerial committee for climate change chaired by the Prime Minister, reuniting 20 national-level institutions and experts³, to ensure that climate concerns are integrated into government policies. There is a significant engagement in financing activities that contribute to environmental objectives under the EU taxonomy regulations, with the Ministry of Finance being a catalyst within this framework.

Mr. Rădulescu continued with the project results over the last 18 months by mentioning the three objectives in mind. The first objective, aimed at closing the data gap on climate risk, was the most challenging. Romania encounters difficulties in accessing and using public data relevant to the supervision of climate risk. A survey was developed in collaboration with Deloitte and sent to 12,000 non-financial companies to reduce data gaps and increase awareness of the private sector regarding the risks posed by physical and transition risks to their business models. The results of the analysis are publicly available. The second objective aimed at improving expertise within the financial stability division on the monitoring framework for climate risk, while the third objective focused on gaining a better understanding of climate scenarios with a view to incorporating them into the stress testing framework of the NBR.

Mr. Rădulescu's summary emphasized the NBR's focus on financial stability, its expectations for financial institutions and the private sector, and the outcomes of the project in terms of risk assessment tools and questionnaires.

At the end of Mr. Rădulescu's speech, Mr. Goranitis asked if the NBR is planning to conduct a climate-related stress test on Romanian banks. Mr. Rădulescu responded that the NBR is currently conducting stress tests on banks but not on topics related to climate and environmental risks yet. This topic is still in its early stages, but it is helping to show that banks have a long way to go in transitioning from brown to green lending. Mr. Goranitis also asked about the Romanian markets' capacity to respond to this initiative. In response, Mr. Rădulescu stated that the NBR needs to continue making market participants aware of where they stand and why it is important to move towards green initiatives. It is necessary to improve the understanding of the benefits of transitioning towards environmentally-

³ Full list of members can be found in the corresponding Governmental Decision ([link here](#))

friendly practices and to create a sense of urgency in the market to move towards sustainable practices.

2.2 Summary of the private session

The private session of the Closing Conference implied a presentation focused on the results of Deliverables four, five, six and seven of the project. The session was split into 4 parts. The key points of each part are summarized below.

- **Part 1 - Project scope and context:** Following global initiatives (e.g. NGFS, EBA, ECB), the NBR and the FMA seek to operationalize their own framework for prudential supervision of climate and environmental risks. Deloitte strives to assist them in building their capacity of identifying, measuring, modelling and mitigating climate and environmental risks impacting the financial system's stability. The first part ended with a "project in numbers" section highlighting the multi-country aspect of this 18-month project (e.g., ca. 40 project team members from at least 9 nationalities and cooperation with more than 13 EU-wide institutions through 8 Steering Committee meetings and more than 60 regular and work meetings).
- **Part 2 - Overview of deliverables 4, 5 and 6 for the FMA:** Stephanus Kogler from Deloitte Austria laid out the outcomes of the gap evaluation report, the gap closure report and the monitoring framework. These three deliverables are tightly connected. Deliverable 4 assesses the data availability and data requirements and defines resulting data gaps. Deliverable 5 extends these efforts in order to close the identified gaps. Deliverable 6 is a fully functional climate risk dashboard prototype. It serves to identify risk potential connected to climate-related hazards for the Austrian financial sector, facilitate information transfer and visualize identified hazards. As of now, sixteen indicator types, covering physical, transition and pandemic risks (flood, heat, drought, wildfire, avalanche, landslide, hail, storm, Notre Dame gain, Real Estate GHG emissions, sovereign GHG emissions, corporate GHG emissions, general transitional risks, waste, refinitiv scores, pandemic risks) are evaluated for five types of supervised entities (banks, asset managers, pension funds, occupational pension funds and insurance firms). After a discussion of the general approach and data sources and structures, the various dashboard views were presented and the graphs and figures explained.
- **Part 3 - Overview of deliverables 4, 5 and 6 for the NBR:** Andrei Culda from Deloitte Romania started the presentation with an overview of the work performed under Deliverable 4, in which Deloitte analyzed an ESG-questionnaire disseminated by the NBR to the Romanian banking sector in 2020, assessed potential improvements and produced an updated questionnaire. Then, Anamaria Stroia-Tilley discussed the objective of Deliverable 5, namely developing and carrying out a survey targeting SMEs and non-financial corporates to assess climate change influence on associated risks and opportunities and their mitigation measures (e.g. decarbonization, energy efficiency) and to transfer knowledge to the business environment. Finally, Andrei Culda concluded with the presentation of the outcomes of Deliverable 6 which was about the enhancement of the existing monitoring framework and the annual climate dashboard reporting of the NBR and its tailoring to the specific national context.
- **Part 4 - Climate & environmental scenarios and stress testing:** The last talk was held by Catalin Ruja from Deloitte Romania. He stated that for climate risk modelling, the NGFS scenarios may be currently considered best-practice. From the 6 available scenarios, the three most used are

Current Policies, Net Zero 2050 and Delayed Transition⁴.

As of now, sector-level impacts are missing in NGFS scenarios. Therefore, additional models were used based on practices by other banks: Scope 2&3 emissions were calculated based on the Partnership for Carbon Accounting Financials (PCAF) methodology and sector-level models were designed based on sophisticated methodologies similar to those developed by the BdF and the Oesterreichische Nationalbank (ÖNB). Deloitte designed a carbon elasticity model at sector level that can account for individual businesses' deviation from the average sector emissions. Additional variables (equity prices, interest rates and real estate prices) have been modelled following the European Insurance and Occupational Pensions Authority (EIOPA) approach.

The quantification of the economic impact of physical risks was more challenging than the modelling of transition risks, also due to the gaps in the NGFS model. For floods, most models are on regional or river-basin level. The quality of the outcomes is still disputed. For droughts, the focus was on the gross value added (GVA)-impact of crop yield losses. As the NGFS scenario predicts an increase in crop yields – which makes limited sense in a drought scenario – the model was adjusted with historical data.

⁴ **NGFS scenarios** consist in six scenarios, all covering short-, medium- and long-term outlooks based on a common framework. Different assumptions are explored (technology pathways, policy responses, temperature targets).

- **Orderly:** ambitious climate policies and net zero emissions
 - **Net zero 2050**
 - **Below 2°C**
- **Disorderly:** delayed and/or unanticipated climate policies
 - **Divergent net zero**
 - **Delayed transition**
- **Hot house world:** “business as usual” scenario
 - **Nationally Determined Contributions**
 - **Current Policies**

3 Q&A Sessions

After each session, time was allocated to Q&As, as detailed below.

3.1 Q&A of the Public session – Panel discussion

1. *Q: How does the Commission plan to address the challenge posed by the increasing sustainability requirement framework for both supervisory institutions and the private sector, and ensure sufficient awareness and understanding of these requirements to promote compliance and facilitate the sustainability transition? [addressed to Nathalie Berger, EC]*

A: For example, in the context of a multi-country project related to the EU taxonomy implementation aiming at issuing a sustainable finance roadmap for large companies, start-ups, and SMEs in the financial sector, a workshop dedicated to the challenges related to sustainable investments for both the financial sector and SMEs and start-ups was held in Estonia and Latvia. The workshop consisted in case studies aimed at highlighting the challenges and shortcomings of current legislation and understanding the EU taxonomy and related sustainability reporting.

After a retail investor survey in both countries, 83% of responders are concerned about sustainability issues, an important factor when considering investment opportunities. However, only 14% of large companies have fully integrated ESG criteria into their decision-making process, even if there is a customer demand for ESG integration.

Three main issues arise: 1) raising awareness among both public authorities and the private sector about sustainability requirements done through awareness-raising campaigns, 2) standardization and availability of climate and environmental data, 3) consultation hubs as one-stop shop to share their concerns and issues.

2. *Q: How does BdF / ACPR's overall framework for monitoring climate & environmental risk look like? And how do you collaborate with French financial entities in this respect? [addressed to Jean Boissinot, BdF/NGFS]*

A: At BdF and ACPR levels, in the overall monitoring framework, structural risks are divided into categories. Furthermore, there are always discussions regarding different risks to look at, observing what is happening in the current state of the financial industry and markets, and how these risks can crystallize.

Regarding collaborations, the ACPR has a dedicated subcommittee that reports to the board that brings together the experience from academics and the industry to advise the supervisory board on climate and ESG matters, bringing outside expertise into decision making.

Additionally, the ACPR is holding working groups with the industry reviewing specific studies that were identified by stress tests to find ways to make collective progress in collecting data in non-financial corporates and to monitor physical risks.

3. *Q: Is it planned to extend EU-wide climate risk guidelines to other environmental risks? If that is the project you have in mind, which type of scenarios will be used? [addressed to Stephane Boivin, EBA]*

A: Climate risk stress testing has rapidly become one of our top priorities, we are working in collaboration with BdF and all supervisors around the table. As part of our founding regulation,

we do have the requirements to develop common methodologies for climate stress testing, they must be run regularly and the guidelines on stress testing must be updated accordingly. Discussions have started within the EBA and are expected to be published next year, depending on the final deadlines which are put in the banking package which is still in negotiation. Also, one of the first deliverables will be on the exercise that will be launched by the end of the year by DG FISMA and to be performed by the three European Supervisory Authorities (ESAs).

Mr. Boissinot continued: The mandate for the exercise is to explore nature-related risks in the European system, which is an ongoing work, as for the NGFS's perspective, they are also working on these issues but since natural-related risks are more local, there are unclarities if there will be a need to develop global scenarios as well.

Mr. Boivin added: It is important to translate these scenarios into actual capital impacts for banks, even though they are quite challenging. To correctly model all the correct transmission channels and structural assumptions for the time horizon. If a relatively short time horizon is used, the balance sheet can be considered static, and if a longer time horizon is used, then assumptions to have a dynamic balance sheet are done with all the issues that come.

4. *Q: What are the three key insights gained from the Austria and Romania project that can be transferred to commercial banks? [addressed to Eugen Rădulescu, NBR]*

A: The challenges faced by banks in promoting sustainable and green finance are the following three key elements. Firstly, there is a gap between banks' intentions to prioritize sustainability and the actions they are taking to achieve it. To bridge this gap, top management needs to recognize that this is not just a future concern, but an issue that needs to be addressed in the near future due to potential material risks associated with brown exposures.

Secondly, to address the issue of sustainable finance, banks need to improve their databases and IT systems to better capture the developments in this field. According to a recent survey, banks are lacking in this area compared to their desire for more adequate systems. Finally, green lending in Romania is lower than the EU average. To ensure sustainable and green finance in the country, it is necessary to increase awareness and encourage more action from the banks.

The following question was addressed via the public web service organized for the conference (online chat):

1. *What are the market's expectations from the FMA regarding their capacity building efforts in the climate and environmental sphere, and how does the FMA plan to collaborate with supervised entities on these topics in the future? [addressed to Katharina Muther-Pradler, FMA]*

As an authority in the supervisory field for 23 years, it is important to acknowledge that the topic of sustainability differs from other supervisory topics. Regularly, regulations are implemented in a cycle that involves consultations, drafting, negotiations, and implementation in the supervisory environment. However, sustainability is an ongoing process that involves continuous development of the regulatory framework, layer after layer. Both the authority and the market have the same goal of preventing climate change and stopping the increase of temperatures, but different approaches are required to achieve this. As such, there is a need for an ongoing dialogue with market participants to ensure that the results of the project are

shared effectively. Extensive data investigation is required for this topic, and obtaining the correct data is crucial to ensure that the results are useful. Therefore, it is essential to exchange views and discuss together to achieve the best outcome for all the parties involved.

Mr. Boissinot added: The NGFS has dedicated significant time to addressing data gap issues and has identified key lessons learned throughout the process. One major issue is the perceived gap in data, despite the existence of a vast amount of data on the topic. The challenge lies in disseminating and understanding the available information. As a solution, the NGFS has published a directory of 800 data sources to address the lack of knowledge and encourage crowd-sourcing efforts. Additionally, the fragility of data is not well understood, with many sources of emission data coming from the same source (CDP). This leads to the impression that there is a significant amount of information available whereas in reality, the data spectrum is quite narrow. To make progress in Europe and globally, the NGFS hopes to increase capacity-building efforts due to the importance of addressing these issues.

3.2 Q&A of the Private session

The questions described in this section, related to the Private session, were asked by the physically present audience.

- 1. Regarding Deliverable 6 - Monitoring framework, what is the frequency of data updates? Is there a potential to automatise the data upload and data flow? What are the data sources and how are they gathered?*

Data is drawn from a multitude of sources. For some, automatization of acquisition is possible, for others, manual retrieval is unavoidable. Deloitte did not yet engage too much in automatization efforts which may be part of the digitalization deliverable. On the other hand, processing is already automatized if data follows certain format requirements.

The FMA added: Analysis of the data environment and data acquisition are a huge effort. Deloitte helped structure and filter a multitude of sources, which helped the FMA to gain a better idea of how to combine data, what is needed and helpful. In Austria, there exists a good database on natural sources (eHora). It was an explorative work to match this data with banking data and see how far one can get. The frequency of portfolio data updates depends on data types (e.g., quarterly for insurance, monthly for banks). It needs to be further discussed which timeframe is reasonable.

- 2. What is the replicability of the dashboard? How dependent is it on the current data inputs?*

Deloitte started to branch out into other EU countries. Handling many different constituencies, it was realised that available geodata quality varies greatly. Ideas for expansion include getting to identify “golden sources” related to geoinformation, especially connecting addresses to geolocation. Such efforts have already started. Parts of these efforts could be employed very soon; other parts will be more difficult to realise depending on risk data and entity type. Extension is highly encouraged, since it will show where problems are routed.

- 3. Is data on collateral available?*

The FMA is aware of data gaps for collateral (data is available on ZIP code level only). There are several methods of aggregating data for different levels of granularity (suggestion to

discuss the details separately).

4. *How are sovereign GHG emissions measured?*

In the conference, the following was stated: The applicability to sovereigns is reduced and Deloitte has concentrated on identified emitters. There are no numbers on specific sovereigns available. As the derivation would involve complicated decisions, no conclusion has been reached as of now. However, upon further post-conference consultations, the following should be added: Scope 1, 2 and 3 GHG intensities for approximately 50 countries can be computed from Exiobase data. Sovereign emissions can therefore be computed for a large part of the portfolio. Deloitte has analysed further data sources, coming with unique strengths and weaknesses, which may be employed alternatively.

The following questions were related to Deliverable 5 discussed in part 3 of the Private session. No question related to Deliverables 4 and 6 were asked.

1. *How will the data be used? Is there a plan to build indicators on the data or compute sector emissions from sample data?*

The data has already been used in the last climate dashboards to update physical risk analysis (flood, heat, drought) with firm responses. It was used to identify pressing risks. After an extreme value correction and an expert-base check, the results of the survey were published. In terms of GHG emissions, the data will help to move away from sector data and towards an assessment at firm level.

2. *How realistic is a yearly repetition of the survey, as it is a considerable effort for all participants?*

An existing survey that is run twice a year was adapted to the new risk types. The new survey is planned to be rolled out ideally, if possible, once a year. The infrastructure, the training and the human resources are already available, so a repetition should be easy to implement.

The following question was related to part 4 of the Private session.

1. *The modelling results showed huge losses on GVA. Is this reasonable?*

Deloitte confirmed so. The impact on Gross Value Added (GVA) corresponds to gross profitability. Other models predict even harsher impacts with up to 80% losses for the 2050 Delayed Transition scenario. A 40-50% loss is sensible for vulnerable sectors. Deloitte is however less convinced about the impact on crop yield for which the ECB shows positive results. Furthermore, the backflow of carbon tax into the GDP is currently not considered.

4 Feedback and lessons learned

The feedback following the conference can be summarised into two subtopics: feedback (i) on the content of the conference and (ii) on the organisation of the conference.

Content-wise, the feedback on the conference was generally satisfactory. The content of the panel discussion was welcomed by the audience and gave a good overview on different perspectives from market participants, regulators and other stakeholders within the financial sector on the challenges and risks related to climate change.

The content of the internal session reflected Deliverables four to seven. It was very well received, as it supported all parties to gain a holistic view of the project and better understand parts they were not directly involved in. This exchange of knowledge will facilitate future projects related to climate risks and the cooperation between all participants.

Organisation-wise, the event went very smoothly. The NBR premises proved to be well-suited and the technical equipment was working adequately. Deloitte's effort in preparing and assisting the running of the event was praised by all parties of the project.

5 Annexes

5.1 List of event participants



Attendees - post
event lists.xlsx

5.1.1 Austria (attending physically and remotely)

- Amundi Austria
- Austrian Bankers Association
- Austrian Financial Market Supervision
- Bank Austria Real Invest Immobilien-Kapitalanlage GmbH
- Bank of Latvia
- Bonus Pensionkassen AG
- BUAK BVK
- Deloitte
- Donau Versicherung
- Erste Group Bank AG
- Financial Market Authority, Austria
- Gutmann KAG
- Helvetia Versicherungen AG
- KEPLER-FONDS Kapitalanlagegesellschaft m.b.H.
- Lansdowne Partners Austria GmbH
- Ministry of Finance of Estonia
- Ministry of Finance of the Republic of Latvia
- Niederösterreichische Vorsorgekasse AG
- OeKB
- OTP BANK ROMANIA SA
- Raiffeisen Immobilien Kapitalanlage-Gesellschaft m.b.H
- Security Kapitalanlage AG
- UniCredit Bank Austria AG
- Union Investment Real Estate Austria AG
- VIG
- Volksbank Wien AG

5.1.2 Romania (attending physically and remotely)

- Alexandru-Ioan Cuza University, Iasi
- Allianz-Țiriac

- Alpha Bank
- Autoritatea de Supraveghere Financiară
- Babeş-Bolyai University Cluj
- Banca Comercială Intesa Sanpaolo Română
- Banca Transilvania
- BCR
- BRD – Groupe Société Générale
- Bucharest Exchange Market
- Bucharest University of Economic Studies
- CEC Bank
- Chancellery of the Prime Minister of Romania
- Energy Policy Group
- European Bank for Reconstruction and Development (EBRD)
- European Investment Bank
- European Roundtable on Climate Change and Sustainable Transition
- Garanti Bank
- ING Bank
- Intesa Sanpaolo S.P.A. Torino Sucursala Bucuresti
- Manchester Metropolitan University
- Ministry of Energy
- Ministry of Entrepreneurship and Tourism
- Ministry of Environment
- Ministry of Finance
- National Administration of Meteorology
- National Bank of Moldova
- National Bank of Romania
- National Commission for Strategy and Prognosis
- National Institute of Statistics
- OTP Bank
- Oxford University
- Presidential Administration
- Raiffeisen Bank
- Romanian Academy
- Sustainalytics
- UniCredit Bank
- University of Edinburgh
- World Bank

5.2 Presentations used within the public and private sessions



21RO25 Private
Session_integrated_



21RO25 Public
Session_final.pdf



Deloitte



Funded by
the European Union

Find out more
about the Technical
Support Instrument:



Visit our website:

