7. Specific thematic article: Environmental and climate-related risks within the FMI landscape

Dorien De Beuckeleer

As climate and environmental risks are becoming increasingly important and are gaining attention in the financial sector, the NBB has also started to pay more attention to these risks within the scope of financial market infrastructures, custodian banks, payment transaction processors and messaging services landscape. So, at the end of 2021 and early 2022, it asked a sample of Belgian institutions active in this area to complete a questionnaire on climate and environmental risks (hereafter, the NBB questionnaire). The first findings from this survey were set out in the 2022 NBB Financial Market Infrastructures Report.

Some institutions that also have a banking licence were also requested in 2021 and/or 2022 to fill in a new questionnaire under banking supervision regulations. If the bank was a significant institution[1], the questionnaire was set up and reviewed at the level of the Joint Supervisory Team (JST)[2], whereas this exercise was coordinated by the NBB for Belgian less significant institutions[3]. The main building blocks of the different questionnaires (NBB and ECB) generally covered the same topics, namely materiality, business model, governance, risk appetite and management.

Over the course of the year 2022, the NBB, along with the JST for significant banks, held several follow-up interactions on climate and environmental risks with a representative sample of the institutions covered by this article. These meetings had different objectives, e.g. dialogue regarding the reviews from the 2022 survey carried out by the supervisory teams, discussion of actions taken and presentation of corporate action plans for climate and environmental risks.

More and more market and supervisory authorities, policymakers, and other stakeholders are publishing guidance and frameworks about climate and environmental risks. These frameworks and good practices include:

- Task Force on Climate-related Financial Disclosures (TFCD); Recommendations of the Task Force on Climate-related Financial Disclosures[4].
- BCBS Principles for effective management and supervision of climate-related financial risks[5].

1 Banks under direct supervision of the single supervisory sechanism (SSM).
2 For more information, see direct versus indirect supervision: https://www.bankingsupervision.europa.eu/banking/list/html/index.en.html.
3 Banks under direct supervision of the national competent authority.
4 Available at https://www.fsb-tcfd.org/recommendations/.
5 Available at https://www.bis.org/bcbs/publ/d532.htm.

- Climate Financial Risk Forum[1]: 2020 Guide to help the financial industry approach and address climate-related financial risks[2].
- Climate Financial Risk Forum: Second set of guides to help the financial industry effectively manage climate-related financial risks (2021)[3].
- ECB guide on climate-related and environmental risks: supervisory expectations relating to risk management and disclosure[4].
- ECB: Good practices for climate-related and environmental risk management: observations from the 2022 thematic review[5].
- EBA: Final draft implementing technical standards on prudential disclosures on ESG risks in accordance with Article 449a CRR[6].
- Best Practices for Sustainability Reporting: NYSE ESG Guidance[7].
- Various guidance from the European Commission on sustainability disclosures[8].

This is a non-exhaustive list of frameworks, as supervisory authorities, policymakers and other stakeholders continuously develop and refine their frameworks, guidance and best practices. The best practices put forward in this article come from a combination of requirements and best practices as defined in the different frameworks. According to each institution's specific legal status and licence, one or more of these frameworks can refer to institutions covered by this article. Institutions within the scope of financial market infrastructures (FMI), custodian banks, payment transaction processors and messaging service providers are advised to apply the applicable frameworks. If there is no specific framework for their type of institution, they are advised to apply the most relevant best practices and recommendations.

As already mentioned, some of the institutions targeted in this article that also hold a banking licence have already been asked to comply with several of these guidelines under banking supervision regulations, such as the ECB guide on climate-related and environmental risks that lists supervisory expectations relating to risk management and disclosure[9]. The NBB approach to climate and environmental risks encompasses the entire FMI, custodian and payment transaction processors and messaging services landscape whatever their status and related set of applicable guidelines, as well as their relative maturity and implementation timeline.

Continued interaction with and analysis of climate and environment-related topics will include firm-specific analysis as well as horizontal reviews. The firm-specific analysis can point up strengths and weaknesses, opportunities and threats, as well as progress made by the institution itself. The horizontal reviews include such

1 A UK forum on climate risks bringing together senior financial sector representatives (e.g. asset managers, banks, insurers, London Stock Exchange group) to share their experience in managing climate risks; co-chaired by the PRA and FCA (website: https://www.fca.org.uk/transparency/climate-financial-risk-forum).

2 Available at https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf.

3 Available at https://www.bankofengland.co.uk/news/2021/october/climate-financial-risk-forum-session-two-outputs.

4 Available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf.

5 Available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.thematicreviewcercompendiumgoodpractices112022~b474fb8ed0.en.pdf.

6 Available at https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Draft_Technical_Standards/2022/1026171/EBA_draft_ITS_on_Pillar_3_disclosures_on_ESG_risks.pdf.

7 Available at https://www.nyse.com/esg-guidance.

8 Available at https://finance.ec.europa.eu/sustainable-finance/disclosures/corporate-disclosure-climate-related-information_en.

9 Available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf.

things as descriptions of general trends and developments observed (e.g. the climate and environmental domains in which the most progress was made and which domains are still in the early development stage) within the FMI landscape, custodian banks, payment transaction processors and messaging service providers, as well as highlighting similarities and differences noted between different institutions. More broadly speaking, these analyses can give an indication which institutions are making the most progress and which ones are lagging behind their peers on the different climate and environmental dimensions of the framework, thus giving a robust base for benchmarking and a level-playing- field setting.

Follow-up work consists of a mix of global reviews as well as in-depth analysis of selected domains impacted by climate and environment-related risks and opportunities. Information providing input for the analysis has been collected from different sources. At the end of 2021 / beginning of 2022, institutions were asked to fill in a new questionnaire on several climate and environment-related topics. Underlying documentation provided by the institutions will be analysed by the supervisory/oversight teams. Public disclosures will also be reviewed. Further meetings with the institutions will be organised to discuss the actions they have taken and any future actions plans, any information provided as well as the outcome of the analysis.

The NBB will focus on the following domains which will be impacted by climate and environmental risks when it comes to identification, management and public disclosure of climate and environmental risks.

I. Materiality, business model and environment

To ensure the sustainability as well as the resilience of their business model in the short-medium to long term, financial institutions should regularly assess the materiality and the current and forward-looking impact of potential business and risk drivers. Follow-up to the materiality assessment and business model impact includes topics like assessments carried out by the institutions, processes put in place to perform the analysis, the impact on the institutions' business model, strategy and product offering and the role institutions believe they can play within the financial sector with regard to climate and environmental risks.

The results of the NBB questionnaire have shown that some of these institutions had already carried out a preliminary qualitative assessment of the residual exposures to climate risk in the short and medium term and have taken steps to identify and measure climate and environment-related risks, but further progress on this topic is required.

As climate and environmental risks can impact different aspects of the institutions – ranging from new and greater risks, pressure on profitability, to changes to the business environment in which they operate, their competitive position and product offering – it is critically important that institutions (continue to) assess the materiality of climate and environmental risks in the short, medium and long term. They should identify which climate and environmental elements are the most important for them, any potential threats for their future business and the opportunities they could put forward. This information should enable the institution to make well-informed decisions about business strategy, risk management and regulatory compliance based on a comprehensive set of elements (including climate and environmental risks and opportunities).

Both transition[1] and physical[2] risk drivers will affect institutions' potential exposure against climate and environmental risks. The magnitude of both risk type drivers depends on multiple factors, like the type of services offered to clients, the size and timing of mitigation measures, the way the transition occurs (in an orderly or disorderly fashion). Financial market infrastructures, custodian banks, payment transaction processors and

1 Transition risk: Risk inherent in changes related to the process of adjustment aimed at reducing reliance on carbon (low-carbon economy) and its impact on climate. Risks caused by climate-related changes such as changes in public policies and legislation, technology, market and customer sentiment.

2 Physical risks: for instance, economic costs and financial losses resulting from the increasing severity and frequency of climate change-related or extreme weather events, longer-term gradual shifts in the climate, and indirect effects of climate change such as loss of ecosystem services.

messaging services are largely operation-driven institutions, implying that physical risks could heavily impact the provision of services, such as service disruptions due to IT outages resulting from floods and power cuts. This expectation was actually confirmed by the findings from the NBB questionnaire which showed that all institutions identified physical risks, such as extreme weather events and natural disasters, as an important climate and environmental risk category. However, they also listed several transition risk drivers, like higher carbon pricing and energy costs, regulatory uncertainty and legal and compliance risk caused by regulatory expectations about climate risk. Moreover, institutions can be indirectly exposed to the climate risk of their clients, service providers, sub-custodians, their cash correspondents where part of the client deposits are placed and the issuers of the securities in which some of the client deposits are also invested, deterioration in the value of the collateral put up by the clients as well as the assets under custody e.g. if these securities are issued by companies active in "brown[1]" industries or located in countries which are geographically more exposed to climate risks.

Against this background, institutions need to be able to deal with the potential impact of future physical and transition risks on their operational processes, as any disruption of services can result in direct as well as indirect losses that are due to the lost business caused for example by the reputational impact of not being able to deal with the climate and environmental risks.

Besides the impact on the operational processes, it is important for institutions to understand and identify the main issues caused by climate and environmental risks that could impact their business model in the short, medium and long term, so as to be able to take this into consideration in their strategic planning and business decisions (such as the products and services they provide in the short to medium term or develop in the longer term) to preserve their profit-generating capacity. Institutions covered in the NBB questionnaire said they could also play a role in the financial community with regard to tackling environmental and climate-related risks. Public disclosures of different institutions show that the institutions covered by this article are taking action to integrate ESG components into their product/service offering. To give some examples, Swift disclosed in its United Nations Global Compact Progress Report 2021 that it has integrated the International Chamber of Commerce's Sustainable Trade Finance Guidelines into its Know Your Customer Registry platform[2]. Euroclear has announced that it has a partnership with Greenomy, an institution which helps corporates, credit institutions and asset managers to comply with new European Union sustainable finance legislation by digitalising the data capturing and reporting process and providing data analytics features[3]. BNYM group mentioned in its 2021 ESG report that it is now offering clients the option of incorporating ESG factors into collateral negotiations and decisions with their counterparties[4].

The future course of climate change (speed of change, the way changes materialise), as well as the response of different parties (policymakers, competitors, clients) in the long term, is still uncertain. As a result, the materiality assessment conducted by institutions should be repeated on a regular basis and should consider various scenarios. The materiality review is expected to be tailored to the risk profile and the institution's business model and (long-term) strategy. Further, the analysis should consider the business environment (physical locations, counterparties within the value chain, competition, economic and political environment, etc.) in which it operates.

II. Governance, risk management and compliance

A second area of attention is the way the institutions monitor and deal with climate and environmental risks. This contains several sub-elements pertaining to governance, risk management frameworks and compliance with current and future regulation, guidance and standards.

1 Brown industries: industries that perform environmentally harmful activities, amongst others more carbon-intensive economies contributing to the climate change through the emission of greenhouse gases.
2 Available at https://www.swift.com/about-us/discover-swift/corporate-social-responsibility.
3 Available at https://www.euroclear.com/innovation/en/greenomy.html.
4 Available at https://www.bnymellon.com/content/dam/bnymellon/documents/pdf/2021-enterprise-esg-report.pdf.coredownload.pdf.

A first element is how institutions deal with these risks from a governance perspective. This review includes such things as the way the different management levels (executive committee, board and its committees) are kept informed and how they act upon relevant climate and environmental information, and also take into account this information in setting the risk appetite and business strategy of the firm. Further, the integration of these risk drivers within the three lines of defence (business level, risk management and internal audit) could be looked at. Not only should the operational level and risk management consider climate and environmental risks, but internal audit should also assess the adequacy of these institutions' management of climate and environmental risks.

It is important that boards of directors and executive committees are aware of the impact of climate and environment-related risks at the level of the company and the broader business ecosystem (suppliers, clients, stakeholders) and take this into account in their management decisions. The management body should be able to take timely corrective actions if necessary. As a result, adequate reporting throughout the institution and ongoing communication through the various functions is necessary and expected to be set up. The institution should ensure that sufficient expertise is available throughout the company, from operational and business level up to board level and that specific responsibilities are assigned within the organisation's different layers of power. The method of integrating ESG responsibilities into institutions can take different forms. While some may choose to add this new field of competence to their existing structures, others may opt to set up dedicated structures and committees to tackle and coordinate climate and environmental topics. The functions responsible for climate and environmental topics should in any event be given sufficient (financial and human) resources.

A second element concerns the risk management framework. Potential areas of interest in this regard are the existence of processes to identify, measure, mitigate and report on climate and environmental risks throughout the different layers of the institution, inclusion of any identified risks in the risk appetite (both quantitative and qualitative statements), availability of relevant data, incorporation of these risks into stress testing, scenario analysis and business continuity planning.

Climate risk can be considered as a separate risk or as a driver for different risk types. In the latter case, climate risks are mapped to the 'traditional' risk categories, such as operational, credit, market and reputational risk, and are considered as one or more of the elements that can materially impact the size of these 'traditional' risks. In both cases, institutions should include climate risk explicitly in their risk appetite, define risk limits and metrics to monitor changes in climate and environmental risks and implement mitigating measures. The magnitude of the different risk drivers will also depend on geographical location (e.g. floods, heat waves) and macroeconomic developments (e.g. energy prices).

Physical risk drivers as well as transition risk drivers need to be included in the risk appetite. Several institutions pointed out in the NBB questionnaire that they were in the process of defining a statement on their climate-related risk appetite. Adequate metrics need to be developed to monitor these risks to allow timely implementation of mitigating measures and response towards climate-related evolutions and to monitor whether they are on the right path towards meeting the climate and environmental goals set by the institution. Based on the NBB questionnaire, it was concluded that there is still wide room for improvements on internal metrics on climate and environment-related risks. The appropriateness of these internal processes and metrics are expected to be reviewed on a regular basis, taking into account current and future expected developments.

The availability of data and data aggregation capacities are crucial to provide accurate reporting. As several institutions are in the early stage of monitoring climate and environmental risks, the availability of relevant data (internal and external) could be a challenge. To ensure accurate monitoring, institutions should investigate which data they need and which data they are currently lacking.

The magnitude and probability of materialisation of climate and environmental risks should also be considered when institutions draft their business continuity plans. Stress tests and scenario analysis have to include scenarios about climate and environmental risk drivers. Several institutions have already pointed out in the NBB questionnaire that climate-change-related risk drivers are part of their stress testing or extreme risk scenario analysis. The business continuity plan should also take into account the estimated impact of these risks on the institution's service providers and outsourcing counterparties.

A third element is the compliance with relevant regulatory standards and regulation. As climate and environmental risks are gaining much more attention, supervisors, supervisory agencies and governments are developing new regulations to limit the climate risk impact and are issuing a minimum set of standards institutions are expected to comply with. Institutions should assess the potential impact of regulatory or legal changes on themselves and on their business environment. As a result, institutions need to remain informed about new regulations and guidance. The NBB questionnaire showed up two main challenges. A first challenge to deal with is the higher regulatory expectations. A second challenge is the need to improve data management to identify the right focus.

III. Public disclosures on climate and environmental risks

A third building block in the climate and environmental reviews by the regulators is the institution's public disclosure. This involves several elements, like the type of disclosed information (information on governance, materiality assessment and risk drivers, risk management and appetite, goals etc. for climate and environmental risks), the relevance and accuracy of the published information.

Disclosures on climate and environment-related risks enable market participants to make better informed analysis on the size of these risks facing the different players within the financial sector. Besides the need to develop adequate internal reporting, institutions should also publish sufficiently detailed and accurate, non-confidential information to the public. Different stakeholders (like future employees, suppliers, clients, etc.) will use this information for multiple purposes (e.g. is the institution sufficiently mitigating climate risks to make use of the services offered by the institution, more and more people are considering the impact of the institution on the environment when deciding which firms they want to work for). The NBB questionnaire findings showed that several institutions believe that tackling climate change and actively engaging to improve sustainability will be essential to maintain and strengthen their brand reputation and will also be necessary to meet expectations of clients in the short to long term. One of the institutions even mentioned that it believes proper communication about its climate and environmental measures will be crucial to attract employees in the future. Although action to mitigate climate and environment-related risks positively impact the institution's image and limit its liability risks, institutions should ensure that they do not fall into the trap of "greenwashing" by publishing misleading information which makes stakeholders believe that the company is doing more than it actually is in reality.

Based on the different existing guidance and published best practices, institutions are advised to disclose different types of information to give stakeholders a comprehensive view on the institutions' exposure and mitigating measures with regard to climate and environmental risks. The institutions should share the outcome of the materiality assessment, describe which assessment methodologies they have used, explain why they deem certain climate risk drivers as irrelevant, provide information on the management and governance process relating to these risks, discuss the actions they have taken to mitigate the impact of these risk drivers on the business and risk profile of the institution, publish relevant key metrics on climate and environment-related risks and describe the future goals as well as the current achievements. This will ensure that a comprehensive set of information is available and help stakeholders to draw conclusions and engage with the institution on a well-informed basis. In their public disclosures, institutions are urged to use both qualitative as well as quantitative information.

Policymakers, supervisors and international organisations welcome the sustainability disclosures of financial players and have published guidance on the disclosure of climate and environmental risks in order to limit potential greenwashing and enhance comparability of the institution's reporting. The following paragraphs give a set of examples.

The task force on climate-related financial disclosures, set up by the Financial Stability Board (FSB), has published a report with recommendations on climate-financial related disclosures which are considered to be widely applicable to organisations across (financial and non-financial) sectors and jurisdictions. These recommendations are structured around four areas, namely governance, strategy, risk management and metrics & targets[1].

For those institutions that also have a banking licence, the ECB/SSM and EBA have published guidance on the public disclosure of climate and environmental risks[2].

The European Union has also defined a set of disclosure requirements on sustainability matters for certain institution types, like large listed companies. At the end of 2022, the EU Council of Ministers gave its final stamp of approval to a new Corporate Sustainability Reporting Directive (CSRD)[3], which will extend the list of institutions in scope. CSRD will apply to all large companies (listed and unlisted), as well as listed SMEs. The extended scope of the CSRD will also affect several institutions covered by this article, as some of these institutions were not yet obliged to report but will now be in scope of the new reporting Directive. The exact scope of the institutions covered across the different sectors will be determined based on an analysis of the Directive. This Directive entered into force as of 5 January 2023. The application date will depend on the institution type (size, listed, etc.). The CSRD will require institutions to have a third-party audit of the publicly disclosed information.

1 Availiable at https://www.fsb-tcfd.org/recommendations/.

2 ECB: available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf. EBA: available at https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Draft Technical Standards/2022/1026171/EBA draft ITS on Pillar 3 disclosures on ESG risks.pdf.

3 Availiable at https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.