7. Environmental and climate-related risks within the FMI landscape

Dorien De Beuckeleer

The Bank continues to monitor climate-related and environmental risks not only for banks and insurance companies[1] but also for financial market infrastructures (FMI), custodians, payment transaction processors and providers of financial messaging services. After a first stocktake in late 2021/early 2022 when a sample of Belgian institutions active in these fields was requested to complete a questionnaire,[2] the Bank decided to continue interaction with these institutions and to analyse climate-related and environmental risks in a structural manner. This structural follow-up includes both firm-specific and horizontal analyses, as well as a combination of global reviews and in-depth analyses of selected areas impacted by climate-related and environmental risks (see the 2023 FMI Report[3] for more information on the areas in which the Bank is focusing its climate-related reviews).

During the first stage of this structural follow-up, the Bank sent a questionnaire to a sample of FMIs, custodians, payment transaction processors and providers of financial messaging services. Based on the answers received, the Bank performed a global review of the maturity of these institutions in the areas referred to above (e.g. assessment of the materiality of various climate-related risks, the impact of climate-related risks on the business model, etc.). This assessment consisted of two parts, the first of which entailed a firm-specific analysis of maturity in each area. When performing this maturity assessment, the Bank took into account the expectations set out in the 2023 FMI Report.[4] Next, a comparison of the institutions and an analysis of the horizontal trends, similarities and differences observed was performed. This article presents the results of the maturity assessment as well as general trends and sector-wide observations for each aspect. It should be noted that the assessment and sector-wide observations are based on the answers provided by institutions to the questionnaire. The underlying documentation and other forms of evidence complementing the self-assessment will be analysed in the context of in-depth, topic-specific reviews, to be carried out in the coming years.

The assessment found that climate-related risks are adequately embedded in the governance framework of the institutions surveyed, thereby demonstrating their awareness of climate-related risks, but that the appropriate integration of such risks in the risk management framework and business strategy remains an area for improvement. Most institutions have an adequate to strong level of understanding of the materiality of climate-related risks and make public disclosures on such risks. They have processes in place to capture climate-related risks in their materiality assessments, but there are substantial differences in terms of the extent to which these risks are embedded in the enterprise risk framework. Climate-related risks are embedded in a high-level or *ad hoc* fashion in the business strategy and risk management of all institutions concerned, and improvements are

1 See the "Prudential regulation and supervision" section of the Bank's Annual Report 2023, available at https://www.nbb.be/doc/ts/publications/nbbreport/2023/en/t1/report_2023_t1_complet.pdf.
2 See https://www.nbb.be/doc/ts/publications/fmi-and-paymentservices/2022/fmi-2022_climate.pdf.
3 See https://www.nbb.be/doc/ts/publications/fmi-and-paymentservices/2023/fmi-2023_brexit.pdf.
4 See https://www.nbb.be/doc/ts/publications/fmi-and-paymentservices/2023/fmi-2023_brexit.pdf.

generally needed in order to achieve full, structural integration. Several institutions are currently implementing or have plans to implement actions to enhance the integration of climate-related risks in various aspects of their internal organisation.

The institutions surveyed did not identify potential risks in the short term, but rather listed potential impacts in the medium to long term, mainly related to operational, business and reputational risks. From a governance perspective, climate-related risks have been embedded at different levels of each organisation, from the operational level to the board level.

In terms of potential business-specific effects, institutions identified many different possible impacts, ranging from higher costs and changes at the product level to business disruption and consequences for employee availability and reputation. Mitigating actions are mainly being carried out in the areas of measuring and monitoring and energy (cost) savings, as well as through third party-related initiatives (e.g. factoring ESG aspects into the assessment of new suppliers and clients, collaboration with suppliers to reduce the impact of greenhouse gas emissions throughout the value chain, etc.). The direct impact of FMIs' own activities on climate change is typically less significant than in other sectors. Nonetheless, the institutions surveyed distinguished three different ways in which they could tackle climate-related risks: (1) taking actions to reduce their own emissions, (2) encouraging stakeholders to reduce their impacts and (3) developing and adjusting products and services to help customers meet their climate-related goals. Certain institutions have already developed key performance indicators (KPIs) and key risk indicators (KRIs) to monitor the impact of climate-related risks on their business while others are in the process of doing so. Existing KPIs and KRIs mainly relate to carbon footprint measurement.

In general, however, climate-related risks are already adequately integrated into business continuity management.

Most institutions publish sustainability-related information on a regular basis, but this information is either quite high level or at an early stage of development for at least some institutions. Institutions have also obtained and published (or plan to publish in the future) one or more external ratings relating to their climate responsibilities.

More information on the analysis is set out below.

Materiality assessment

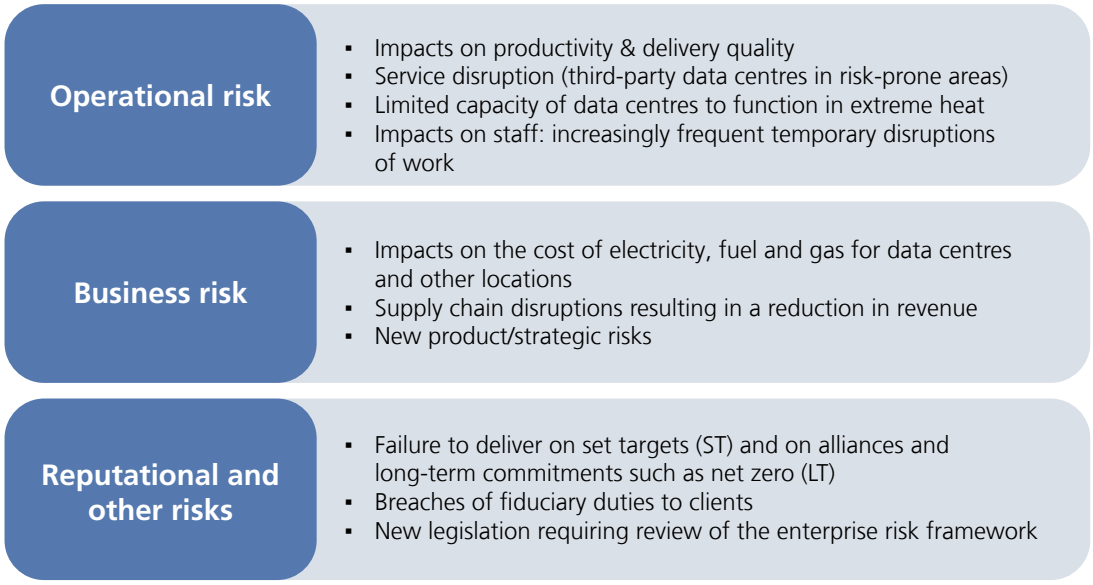
Most of the institutions included in the assessment have an adequate to strong level of understanding of the materiality of climate-related risks and processes in place to identify relevant climate-related risk drivers. They perform regular assessments to identify and assess the materiality of these drivers. These assessments meet a wide range of criteria, such as the tailoring of analyses to the business model and environment, the consideration of different time ranges, etc. Notwithstanding regular materiality assessments, however, the degree to which such risks are embedded in the enterprise risk framework as well as the completeness of these reviews remains an area in which further improvement could be made by some institutions, although institutions mentioned several remediation actions that are currently in progress. Examples of possible enhancements are the inclusion of climate-related risks in the risk library to ensure that the drivers of these risks are considered in annual risk identification and assessment processes, rather than assessing the materiality of climate-related risks solely via *ad hoc* analyses, and the performance of a double materiality assessment[1] on a regular basis. The materiality assessments range from integrating climate-related risks into and aligning them with the risk frameworks and processes that already exist for other types of risks to the introduction of regular, dedicated assessments. The assessments are mostly performed on a yearly basis. Institutions identify few short-term risks, but do list potential material impacts in the medium to long term, which are largely concentrated in three areas: operational risk, business risk (at the level of product development as well as on the cost/revenue side) and reputational/legal/fiduciary risks.

1 A double materiality assessment entails considering both the impact an organisation has on climate and the environment and the impact of climate-related and environmental risks on the organisation.

The diagram below provides some examples of potential risks identified by institutions in their materiality assessments.

Figure 11

Potential risks identified by institutions in their materiality assessments



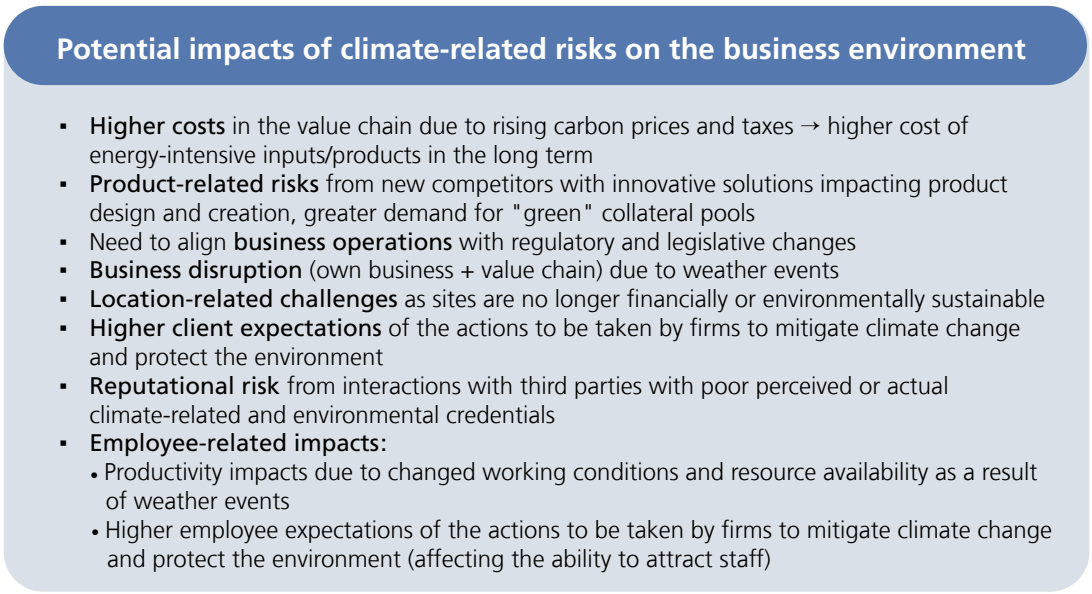
Business environment, business model and strategy

The inclusion of climate-related risks in the business environment, business model and strategy is an area that requires further action. For the most part, climate-related risks are integrated into business management in a high-level manner. In general, the institutions surveyed perform an adequate assessment of the impact of climate-related risks on the business environment in which they operate. Nonetheless, at several institutions, monitoring of the impact of such risks on the business, via key performance indicators (KPI) and key risk indicators (KRI), requires further attention. Progress is expected in this area based on the answers provided to the questionnaire, as the institutions that are the least advanced in this area stated that they are in the process of developing and/or implementing KPIs/KRIs. Current KPIs and KRIs mainly concern carbon footprint measurement and related science-based targets. Some institutions are going a step further and have created a climate-risk dashboard containing a series of reporting metrics covering financial and non-financial risks and impacts. The monitoring of KPIs and KRIs can be complemented by regular point-in-time and forward-looking business model risk assessments which consider the longer-term strategic implications of climate change. The KPIs/KRIs and these strategic assessments are reported to management which incorporate them into strategy-setting processes.

The answers to the questionnaire revealed various potential impacts that climate-related risks could have on the business environment, ranging from higher costs and the need to align business operations to legislative changes, to business disruption and reputational risks. The figure below provides an overview of the potential impacts identified by respondents.

Figure 12

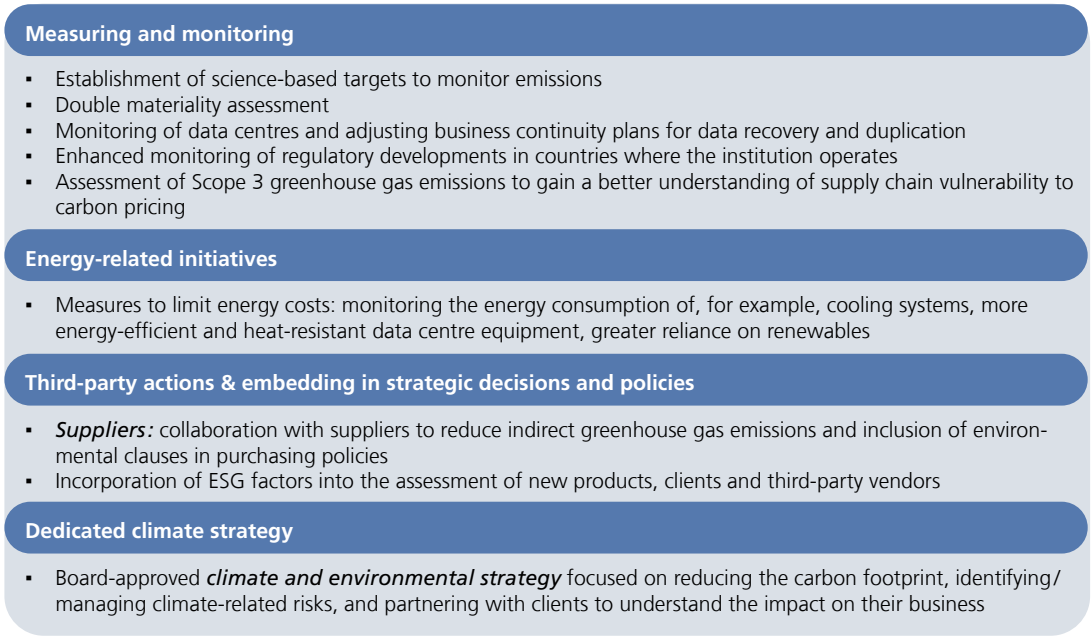
Potential impacts of climate-related risks on the business environment



Institutions have taken actions to mitigate these potential impacts. These actions include measuring and monitoring activities, energy-related initiatives and third party-related actions, the embedding of climate-related aspects in strategic decisions and policies, and the determination and implementation of a dedicated climate strategy. Some examples of the actions taken in these areas are set out below.

Figure 13

Actions taken to mitigate potential impacts on the business environment



1 Scope 3, also called value chain emissions, covers all other indirect emissions which are the result of activities from assets not owned or controlled by the reporting organisation, but that the organisation indirectly impacts in its value chain. Sources include purchased goods and services, transportation, business travel, and employee commuting.

In general, institutions estimate the impact of climate-related risks on their business to be rather limited compared with other sectors. However, they identified three types of actions they can take within the financial sector with regard to climate-related and environmental concerns.

Firstly, they mentioned that they can take actions to reduce their own impacts. In general, institutions intend to take initiatives to optimise the energy efficiency of their operations and to embed ESG in all aspects of their organisation. Examples include setting science-based targets, investing in carbon removal technologies, improving the energy efficiency of buildings, changing travel policies, encouraging employee involvement through the development of dashboards that provide employees with information on certain scope 1[1] and scope 2[2] emissions, adjusting (individual and corporate) printing practices, and taking into account supplier and vendor commitments (to science-based targets) when selecting new commercial counterparties.

Secondly, they believe they can inspire and encourage stakeholders within and beyond the financial community to mitigate climate change. Institutions can communicate on their ambitions to achieve Paris-aligned carbon reduction targets and encourage suppliers to do the same. Due to their central role in the financial sector, they can also put this topic on the agenda of events and conferences they organise. They perform lifecycle assessments to determine which parts of the lifecycle of a product or service have the most impact on climate and the environment and can work to convince other actors in the ecosystem to collaborate, based on the results of these assessments.

Thirdly, institutions can support their customers by offering solutions to help their participants tackle climate-related and environmental risks and achieve sustainability-related targets. For example, CSDs and custodians can support their clients in the issuance, safekeeping and administration of green bonds. Moreover, CSDs and custodians can offer collateral management services to clients in which they can integrate the possibility of adding ESG factors to the collateral eligibility scheme negotiated between the collateral giver and taker. One institution surveyed has integrated ESG elements into the platform where clients register their KYC data and can access their counterparties' KYC data.

Governance

On average, the inclusion of climate-related risks in the governance framework is the area in which institutions have made the most progress. All institutions that completed the questionnaire received an adequate or even strong score in this area. Climate-related risks are integrated at different levels of the organisation, ranging from operational to board level. They are often integrated into the existing organisational structure, such as within certain committees, with committee mandates having been adapted to include climate-related risks (e.g. the designation of a committee member responsible for climate-related risks, changing the nomination committee to the nomination and ESG committee, establishing a social and environmental responsibility committee at board level). These measures are often complemented by additional initiatives, such as the establishment of a multidisciplinary ESG steering committee or the creation of ESG roles to lead and coordinate the implementation of ESG activities across the institution in a consistent manner.

Risk appetite and risk management

Risk appetite and risk management remain areas for improvement when it comes to tackling climate-related risks. Such risks are generally included or considered at a high level or on an *ad hoc* basis in the risk management framework. Most institutions surveyed do not consider climate-related risks to be a separate risk category but rather a driver of other types of risks. Actions are expected, in particular, in the areas of regular measurement and the determination of risk appetite, as the latter exercise is a core part of good risk management. Some institutions

1 Scope 1: all direct CO_2 emissions from the activities of the institution, including on-site fuel combustion.
2 Scope 2: indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the institution. These emissions are created during the production of energy.

have already made progress in this area, although points for attention remain such as data challenges (resulting from differences in the methodologies used for data sources), while plans are underway at other institutions to include climate-related risks in their risk appetite. The inclusion of climate-related risks in stress and/or sensitivity testing can also be improved at certain institutions. Climate-related aspects are already considered when performing such activities to confirm the materiality of climate-related risks for business continuity planning and assessment purposes. Such risks are taken into account, for instance, in location management for business continuity purposes.

Institutions also state that they are performing or starting to perform (different types of) assessments along their value chains. For example, ESG factors are included in assessments of new clients, products, processes, third parties and vendors. ESG data obtained from external suppliers (such as Ecovadis)[1] are often used in these assessments. Another example is the establishment of a requirement that suppliers agree, during the onboarding process, to adhere to minimum climate-related and environmental standards.

Disclosures

Most of the institutions surveyed publish sustainability-related information on a regular basis. This information may relate to financial impacts, risks, opportunities, materiality assessments, risk management and key metrics or the role the institution wishes to play. However, the information released tends to be quite high level. Moreover, the institutions surveyed have obtained and/or published one or more external ratings from CDP[2] and EcoVadis or plan to do so in the future.

1 Ecovadis is a provider of business sustainability ratings (www.ecovadis.com).

2 CDP, a non-profit charity, runs a global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts (www.cdp.net).