

Supervisory expectations for climate-related and environmental risks

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1. Introduction

A sustainable growth model is based on the full integration of environmental, social and governance (ESG) factors. This change in the paradigm of traditional economic growth, which is now at the heart of the international political agenda, can foster long-term progress that is resilient to external shocks and is therefore essential to manage the changes that society and the economic system will face in the coming years: the effects of climate change and of decarbonisation policies; the degradation of ecosystems and the loss of biodiversity; the fragility and lack of security in the labour market; and the risks linked to low levels of social inclusion and rising inequality.

Among the ESG components, particular attention is paid at this stage to the environmental ones. The international agenda on the subject has been progressively stepped up since the signing of the Paris Agreement in 2015, with which the international community committed itself to keeping average global warming well below 2 degrees Celsius relative to pre-industrial levels, and to continuing its efforts to limit the increase in global warming to 1.5 degrees. These objectives were reconfirmed at the COP26 (Glasgow; October 2021). At European level, they were summed up in the 'Green Deal' presented in 2019 by the European Commission, in which EU countries committed themselves to reducing their carbon emissions by at least 55 per cent (compared with those in 1990) and to achieving carbon neutrality by 2050. Italy, in turn, has adopted these objectives and has also included them in its National Recovery and Resilience Plan (NRRP).

Although the development and implementation of policies designed to counter the effects of climate change are mainly the task of government authorities, the role of the financial system remains central: in fact, the amount of investment needed to support the transition requires the contribution of private resources, making the role of the banking and financial industry as a channel for directing financial flows essential.

The ongoing transformation therefore provides new opportunities for the financial sector as well as new risks. It is important for market participants to put appropriate safeguards in place and to develop appropriate practices to identify, measure, monitor and mitigate such risks, continuing to ensure the necessary access to credit and supporting companies engaged in the long and complex transition process with new financing and adequate consulting services. Equally important is the ability to adequately communicate the integration of climate-related and environmental risks into their strategic and operational model, avoiding unfair practices (e.g. greenwashing), which would instead discourage the development of sustainable finance and undermine the reputation of market participants.

Box 1 — International regulatory and supervisory initiatives

In 2015, the Financial Stability Board set up the Task Force on Climate-related Financial Disclosure (TCFD) for the purpose of studying financial risks relating to climate change and encouraging financial firms' awareness and transparency with regard to climate-related financial risks. In 2017, the TCFD published a set of [recommendations](#) (updated in 2021) that became an international benchmark for improving the consistency, quality and comparability of the information disclosed by public and private institutions. By the end of 2021, eight jurisdictions (including the European Union) had established reporting rules in line with the

recommendations of the TCFD. These rules cover four main areas: governance mechanisms, strategy, risk management, metrics and targets.

In recent years, the Network for Greening the Financial System (NGFS) has drawn up recommendations, guidelines and climate-related scenarios, with the aim of supporting central banks, supervisors and market participants in integrating climate-related and environmental factors into their risk management activities and procedures, in particular to make use of [analyses based on standard scenarios](#). From a strictly prudential perspective, the Basel Committee on Banking Supervision is investigating whether and to what extent the current regulatory framework is suitable for adequately capturing the financial risks relating to climate change (with regard to Pillar I, Pillar II and Pillar III); among the initiatives already adopted, in November 2021, the Committee published for public consultation a document with [Guidelines for banks](#) and supervisors on effective climate risk management.

At the European level, the European Commission published an Action Plan on Sustainable Finance in 2018, proposing measures to strengthen the role of the financial sector in achieving a sustainable economy in social and environmental terms. Among the Action Plan's various proposals, the entry into force of the EU Taxonomy Regulation¹ in July 2020 and of the Sustainable Finance Disclosure Regulation (SFDR)² in March 2021 stand out. The European Commission has also adopted a package of measures to promote capital flows to sustainable activities across the Union, including amendments to the delegated acts of the MiFID II, UCITS and AIFMD directives that incorporate sustainability factors and risks in the provisions applicable to investment service providers and fund managers, in particular in governance and in risk management systems. In order to facilitate the application of the Taxonomy for sustainable investment, the Commission has prepared a [Taxonomy Compass](#), which provides a visual representation of the contents of the taxonomy itself that market participants can use to assess the assets it includes, the objectives to which they contribute and the criteria they have to meet in order to mitigate and manage climate change adaptation.

In addition, the 'EBA guidelines on granting and monitoring loans' entered into force in June 2021; they recommend that banks incorporate the ESG factors and the risks associated with them into their credit risk management policies, adopting a holistic approach. At the same time, the EBA published its 'Report on ESG risk management and supervision', which introduces a common definition of ESG risks, discusses their transmission channels and identifies the methodologies for managing and including them in the regulatory and supervisory framework of banks.

At supervisory level, the ECB published an important and specific [guide to climate-related and environmental risks](#) in November 2020, setting out the expectations as to how to integrate climate-related and environmental risk into the business strategy and model, governance processes and the risk management framework of significant banks in the SSM, as well as the type of information to be published as part of public disclosure.

¹ Regulation (EU) 2020/852 — which entered into force in July 2020 — supplements the sustainability disclosure rules in the financial services sector set out in Regulation (EU) 2019/2088, which lays down harmonised transparency rules for financial market participants and financial advisors with regard to the integration of sustainability risks and the consideration of adverse effects on sustainability into their processes and the disclosure of sustainability-related information on financial products. The first delegated act setting out the criteria for identifying green economic activities was adopted on 4 June 2021 and the second, aimed at providing guidance to companies subject to the Non-Financial Disclosure Regulation (NFRD), was approved on 6 July 2021.

² The SFDR aims to implement disclosure to investors on the approach to be followed when dealing with ESG issues, and to establish harmonised rules for all financial market participants. Specifically, transparency requirements are in place with regard to the integration of sustainability risks and the possible adverse effects on sustainability stemming from investments.

The Bank of Italy is aware that climate-related and environmental risks — which in turn can affect traditional financial risks (credit, market, operational and liquidity risks) — also have implications for the banks and non-bank financial intermediaries under its direct supervision.³ In line with similar initiatives already taken by the ECB and other national supervisory authorities, this document contains a first set of supervisory expectations regarding the integration of climate-related and environmental risks into business strategies, governance and control frameworks, the risk management framework and the disclosure of supervised banking and financial intermediaries. The Bank of Italy reserves the right to supplement the document over time, in order to take into account the development of best practices and any changes in the regulatory framework, possibly extending it to social and governance issues as well.

In taking into consideration the numerous regulatory and supervisory activities under way at international level, the document focuses on matters pertaining to the Bank of Italy and relating to the objectives assigned to it by law, without prejudice to the responsibilities assigned to the other sectoral authorities.

Although the expectations focus on environmental aspects, intermediaries will also be able to consider them with reference to the broader category of ESG risks, where they are relevant for their operations and taking account of the regulatory requirements in the sector.

2. Nature and scope of the document

The document is addressed to all entities whose activities are subject to authorisation and supervision by the Bank of Italy in accordance with the Consolidated Law on Banking and the Consolidated Law on Finance (banks, SIMs, SGRs, self-managed SICAVs/SICAFs and financial intermediaries under Article 106 of the TUB and related parent companies, payment institutions, EMIL), in accordance with a principle of proportionality, to be applied based on the operational, size and organisational complexity of the intermediaries and the nature of the activities performed.

The expectations aim to provide general, non-binding guidance; their operational application is carried out by the individual intermediary. It is therefore a priority for each intermediary to carry out independent analyses and assessments to evaluate the importance of the issues concerned on the basis of their business model. It is up to individual companies to apply the solutions most consistent with the actual degree and intensity of exposure to risks, according to the type, size and complexity of the activities performed and the corporate system.

In relation to the specific situations of banks and non-bank financial intermediaries, and in line with its supervisory action, the Bank of Italy will, as part of routine discussions with individual intermediaries, have an initial discussion — as early as 2022 — on the extent to which they meet expectations and on their adjustment plans. This assessment will be included in the supervisory

³ For an analysis of these risks for central banks, see Bernardini E., Faiella I., L. Lavecchia, F. S. and Mistretta A. (2021), 'Central banks, climate-related risks and sustainable finance', *Questioni di Economia e Finanza (Occasional Papers)*, 608, Banca d'Italia.

analysis processes, with the aim of ensuring that corporate practices are progressively aligned with current expectations.

3. Definitions

The report uses the definitions of climate-related and environmental risks adopted by the ECB (*ECB Guide on climate-related and environmental risks*) and by the EBA (*EBA Report on management and supervision of ESG risks for credit institutions and investment firms*). Particular reference is made to physical risk and transition risk.

Physical risk refers to the economic impact of the expected increase in natural events whose occurrence can be described as ‘extreme’ or ‘chronic’. Extreme physical risks depend on the occurrence of extreme environmental phenomena (such as floods, heat waves and droughts) linked to climate change that increase their intensity and frequency. Chronic physical risks, on the other hand, are driven by climate events that emerge over time (e.g. gradually rising temperature and sea levels, deterioration in ecosystem services and loss of biodiversity). All these types of events affect the level of production activity and can also permanently compromise it.⁴

Transition risk refers to the economic impact of the adoption of regulations to reduce carbon emissions and encourage the development of renewable energy, of technological developments and of changes in consumer preferences and market confidence.⁵

Both risks are elements that influence traditional prudential risks, such as credit, market, operational and liquidity risks⁶ (see Table 1).

4. Supervisory expectations

4.1 Governance

Robust governance is an essential prerequisite for the development of a healthy and resilient business model.⁷ The management and control bodies and the internal structures of intermediaries constantly face new challenges posed by changes in the external environment, by new sources of risk, and by the evolution of the regulatory and supervisory framework, guiding and governing the change. The

⁴ An assessment of the exposure of loans/activities exposed to physical risk, and in particular to flood risk, is provided in Faiella I. and F. Natoli, ‘Natural Catastrophes and Bank Lending: the Case of Flood Risk in Italy’, Banca d’Italia, *Questioni di Economia e Finanza* (Occasional Papers), 457, 2018.

⁵ Some indicators to calculate the exposure of loans to transition risk are presented in Faiella I. and L. Lavecchia, ‘The carbon content of Italian loans’, *Journal of Sustainable Finance & Investment*.

⁶ According to recent assessments, about two thirds of bank lending to Italian firms are exposed to at least one of the risks and one seventh to both. See Chapter 15 ‘Central banks, climate-related risks and sustainable finance of the Bank of Italy’s 2020 Annual Report.

⁷ The tasks assigned to the ‘management body’ of banks, financial intermediaries under Title V of the TUB, SIM, SGR, SICAF, SICAV, PI and EMIL are allocated in accordance with the distribution of responsibilities between functions provided for in the relevant sectoral regulations (Circular 285, Part One, Title IV, Chapter 1; Circ. 288, Titolo III, Cap. 1; Bank of Italy Regulation of 5 December 2019 implementing the TUF; Supervisory provisions for PI and EMIL, Chapter I).

growing importance of climate-related and environmental risks therefore calls for intermediaries to assess how to incorporate such risks into their decision-making processes and to adapt organisational and operational frameworks, by preparing appropriate action plans.

Expectation 1

The management body of intermediaries plays an active role in steering the integration of climate-related and environmental risks into the corporate culture and strategy, into the corporate risk appetite framework (where applicable) and into the risk limits of the portfolios managed, consistently defining the main corporate policies and the adaptation of organisational and management systems. In this regard, the management body approves an appropriate action plan.

In order to effectively fulfil these expectations, the management body should pay particular attention to the following:

- *Expertise.* In order to be able to make informed and robust decisions, the management body has to fully understand and assess the implications of climate-related and environmental risks for the business model and strategy. Specific training initiatives should also be assessed in this respect.
- *Roles and responsibilities.* The management body explicitly assigns roles and responsibilities in relation to climate-related and environmental risks to its members and/or existing intra-board committees; alternatively, intermediaries may consider establishing a dedicated committee. This framework must be formalised.
- *Information flows.* For a robust and reliable decision-making process, the members of the management body need to have adequate information. The management body therefore sets up a reporting framework on climate-related and environmental risks with a focus on the medium- to long-term outlook, specifying the minimum content and frequency of information. The management body is encouraged to set measurable and quantifiable Key Performance Indicators (KPI) and Key Risk Indicators (KRI) which take into account climate-related and environmental risks, through which to monitor and analyse the targets set. In the absence of robust and consistent quantitative metrics, the reporting uses internal and external qualitative information to ensure an adequate representation of climate-related and environmental risks to the management body.

4.2. Business model and strategy

The income capacity of intermediaries and the ability to achieve stable and lasting economic equilibriums depend, among other things, on the strategic choices made. Analysis of the business environment and of its variables (macroeconomic scenario, competitive landscape, company policies,

regulation, available technology and social and demographic developments) is particularly important for an accurate definition of the corporate strategy.⁸

Expectation 2

In order to ensure the resilience of their business model and guide its development prospects, in drawing up and implementing their business plan, intermediaries identify climate-related and environmental risks that could affect the business environment, understanding and measuring their potential impacts.

The Bank of Italy expects the intermediaries to be able to assess the materiality of climate-related, environmental, physical and transition risks that could affect the business conditions. Materiality, understood as the ability to influence the sustainability of current and future corporate returns, own portfolios and those managed on behalf of third parties, must be determined in accordance with the principle of proportionality, taking into account the complexity, risk profile and type of business model. The impact of investment activity on the environment must also be identified. Once risks have been identified, intermediaries are expected to understand and measure their impact on the business environment, in the short, medium and long term, also in order to steer strategic choices and thus ensure the resilience of the business model. Indeed, it is important that intermediaries take into account the results of the impact analysis in their strategic planning, defining key performance indicators and monitoring their achievement. Climate-related and environmental risks can have effects beyond the usual timeframe for strategic planning, for example in line with public policy commitments to transition to a more sustainable economy. In this context, although they are not required to change the time horizon of strategic planning, intermediaries may include in their planning the assessments obtained from longer-term analyses of climate-related and environmental risks.

Box 2 — Integration of sustainability factors into investment decision-making

For firms providing investment and collective asset management services involving investment decisions, the integration of sustainability factors into decision-making on investment will have to be carried out both at entity level and with respect to the financial products offered.

The Bank of Italy expects intermediaries to define their general approach to sustainability issues and the commitment they intend to make to achieve sustainability targets or to combat climate change as part of the broader strategic planning process. Intermediaries will translate these guidelines into investment policies which take into account the impact of sustainability risks on the managed portfolios and allow them to develop a supply strategy that is consistent with the strategic line pursued and capable of meeting investors' expectations.

⁸ The Bank of Italy's provisions on the corporate governance of banks provide that the body responsible for strategic supervision shall take into account, inter alia, sustainable finance objectives and, in particular, the integration of environmental, social and governance factors (ESG) into corporate decision-making processes (see Circular 285, Part One, Title IV, Chapter 1, Section III, paragraph 2.2(f)).

4.3 Organisational system and operational processes

Once climate-related and environmental risks have been included in the strategy, the management body ensures that this is consistently implemented. To this end, it explicitly identifies the internal structures in charge of climate-related and environmental risks, clearly describes the mandate and adapts the relevant policies and procedures. Tasks relating to climate-related and environmental risks can be assigned to existing structures or to an ad hoc organisational unit with the mission of coordinating the overall approach to climate-related and environmental risk management (Box 3, 'Organisational practices for the governance of climate-related and environmental risks').

Expectation 3

The management body adapts the different interventions on the organisation and on operational processes to address climate-related and environmental risks in a manner that is consistent with and proportionate to their materiality.

Box 3 — Organisational practices for the governance of climate-related and environmental risks

As part of the actions to strengthen governance and apply to the operational functions that the market is carrying out, there are various possible approaches:

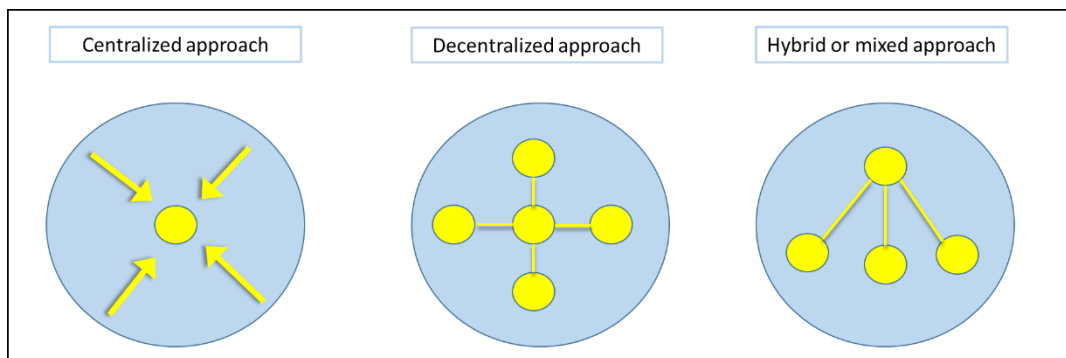


Figure 1. Governance of climate-related and environmental risks: possible organisational solutions.

The 'centralised' approach envisages the establishment of an *ad hoc* structure to govern climate-related and environmental risks and that serves as a reference point for all issues relating to sustainability. In terms of effectiveness, this structure works best when it reports directly to the management body responsible for defining and approving sustainability policies.

In the 'decentralised' approach, the management of sustainability issues is spread over the various units involved, through the allocation of roles and responsibilities in line with the scope and processes for which each of them is responsible.

Finally, the 'hybrid' or 'mixed' approach, which is an intermediate organisational solution. It provides for the coordination of climate-related and environmental issues by a dedicated structure, which is tasked with incorporating these factors into the activities of other functions, to which it assigns specific responsibilities for activities requiring ad hoc expertise depending on the level of technicality and complexity.

The management body shall assess the adequacy of human resources both from a quantitative and qualitative point of view in order to support a strategy that includes climate-related and environmental

risks. A similar assessment should be made with reference to the analysis, monitoring and reporting tools available.

According to the provisions applicable to the different types of intermediaries, remuneration policies and practices foster behaviour consistent with the approach adopted to climate-related and environmental risks.⁹ To encourage such behaviour, the variable remuneration is linked to the achievement of the 'green' goals adopted.¹⁰

Moreover, the Bank of Italy expects the management body to ensure that:

- the corporate functions are involved in training programmes so as to develop widespread expertise on the topic;
- IT systems are adequate to meet the need to systematically collect and aggregate the data necessary to assess the exposure to climate-related and environmental risks;
- the analyses supporting investment and lending decisions take into account and document the associated climate-related and environmental risks;
- the Risk Management function incorporates climate-related and environmental factors into the assessment and monitoring of exposure to the various risks, preparing comprehensive reports on the type and level of materiality of the climate-related and environmental risks to which the intermediary and the individual and collective portfolios which it may manage on behalf of third parties are exposed;
- the Compliance function ensures that risks arising from climate-related and environmental risks are duly considered in all material processes;
- the Internal Audit verifies the adequacy of the measures to mitigate climate-related and environmental risks.

Lastly, in view of the current and future context, the adoption of organisational and process-based solutions that can positively affect the degree of energy efficiency of the intermediary's corporate business is also particularly important.

4.4 Risk management framework

The Risk Management function is responsible for the correct implementation of the risk management process aimed at identifying, measuring, preventing and mitigating all the risks taken or that may be

⁹ The provisions concerning the remuneration of banks (Circular 285, Part One, Title IV, Chapter 2, Section 1, paragraph 5) stipulate that remuneration systems are designed in line with company objectives and values, including sustainable finance objectives that take into account, inter alia, environmental, social and governance (ESG) factors. In addition, credit institutions and other intermediaries providing financial advice and/or portfolio management services (individual and collective) must include information on how such policies are consistent with the integration of sustainability risks in their remuneration policies and must publish this information on their websites, starting from March 2021, pursuant to Article 5 of Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019, on sustainability-related disclosures in the financial services sector

¹⁰ Where the financial impacts of climate-related and environmental risks are difficult to quantify, the management body may consider incorporating appropriate qualitative criteria into the remuneration policy.

taken by the intermediary. In this context, although climate-related and environmental risks are quite specific, their materialisation has an impact on traditional prudential risks (i.e. credit, market, operational and liquidity risks).¹¹ Managing climate-related risks involves some complexities stemming from, on the one hand, a high degree of uncertainty about the magnitude of the effects of climate change (depending on policies, possible adjustment actions and possible transmission channels) and, on the other hand, the need to adopt longer assessment time horizons. The NGFS scenarios support intermediaries (and central banks) in drawing up scenarios for identifying the main risk factors and the transmission channels through which risks are conveyed.

Expectation 4

The intermediaries carry out a mapping of the events that could occur as a result of climate and environmental risks (physical and transition) and consequently integrate the risk management system, identifying the risks that would be potentially affected and the implications of a prudential nature.

Table 1: Climate-related and environmental risks as drivers of prudential risks: some examples

	Physical risks	Transition risks
<i>Credit risk</i>	The increased vulnerability to physical risks of certain geographical areas (e.g. areas subject to hydrogeological risks) or of certain economic sectors (e.g. agriculture) could lead to a deterioration in the counterparty's creditworthiness (e.g. PD and LGD trends).	Legislative and regulatory initiatives intended to speed up the 'green' transition could — especially if introduced in a disorderly and unexpected way — generate higher costs and/or lower revenues for those companies with a bigger carbon footprint, known as 'brown' companies (e.g. the transformation and transport of fossil energy sector, motor vehicles and so on), resulting in a deterioration in the counterparty's creditworthiness. This risk is intensified for those companies whose business model is not projected towards a circular economy.
<i>Market risks</i>	Adverse climate-related events could lead to losses for more exposed counterparties, with a change in market expectations and therefore a decrease in the value and/or an increase in the volatility of the pricing of securities issued by these entities.	Regulatory changes aimed at speeding up the process of transition towards a circular economy could lead to a reduction in the value and/or an increase in the volatility of the pricing of securities issued by 'brown' entities.

¹¹ Each intermediary shall identify the prudential risks to be considered on the basis of its operations and the prudential regime to which it is subject. In the case of intermediaries managing assets on behalf of third parties, risks that affect the portfolios under management are included.

<p><i>Operational/reputational risk</i></p>	<p>The occurrence of extreme climate-related events (e.g. a serious flood) could compromise the business continuity of intermediaries (e.g. damage to commercial premises or servers), resulting in operational losses.</p>	<p>The growing focus and sensitivity of savers to climate-related and environmental issues could intensify the reputational risks arising from choices that are not aligned with stakeholders' expectations, as well as the legal risks associated with behaviours that are not compliant with environmental protection or with greenwashing practices.</p> <p>In addition, reputational risks could involve those intermediaries that have not defined clear targets for the reduction of carbon¹² emissions, as envisaged in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and in the Paris Climate Agreement.</p>
<p><i>Liquidity risks</i></p>	<p>The occurrence of an adverse climate event could:</p> <ul style="list-style-type: none"> i) require the customer to draw on their deposits to finance the costs of repair and restructuring, resulting in a reduction in the bank's liquidity; ii) cause a sudden repricing of certain financial instruments held by the intermediary, resulting in an increase in refinancing risk. 	<p>The need for some counterparties to incur expenditure to finance the process of transition towards a low-carbon economy (e.g. property and plant interventions) could contribute to a reduction in the bank's deposits.</p> <p>Regulatory initiatives to support the 'green' transition could result in a reduction in the value of securities issued by 'brown' companies and held by the intermediary as high-quality liquid assets that can be easily liquidated, causing a reduction in liquidity buffers.</p>

The efficiency and effectiveness of a risk management framework are largely dependent on the availability of reliable data and a robust information system. With regard to climate-related and environmental risks, there are additional challenges relating, on the one hand, to features related to their peculiar nature (e.g. the medium to long-term horizon) and, on the other hand, to the availability and quality of data. Availability of reliable, comprehensive, comparable and sufficiently detailed data on climate-related risks is essential for an informed management of such risks by intermediaries.

Expectation 5

Intermediaries take action to create a comprehensive, high-quality database for climate-related and environmental risk profiles integrated into an information system suitable to support the development of metrics for assessing climate-related and environmental risks.

¹² For example, reference is made to initiatives such as the Science Based Targets Initiative.

Intermediaries are required to make substantial efforts to collect and store data, developing a constructive dialogue with counterparties. The relationship with external data providers is also important. Lastly, the robustness and integrity of the data collected are to be tested (including through comparison with aggregate institutional sources) also in order to detect data gaps that might undermine the completeness of information.

Expectation 6

Based on adequate materiality analyses, banks incorporate climate-related and environmental risks into their internal capital and liquidity adequacy assessment processes by integrating the risk limits system.¹³ The intermediaries not required to assess internal capital must supplement the limits system to take into account the impacts of climate-related and environmental risks on the value of their portfolios under management and/or operating volumes.¹⁴

The materiality assessments of climate-related and environmental risks take into account: (i) geographical, economic and regulatory factors; and ii) specific factors linked to the business model (services provided and reference markets), the composition and quality of assets on and off - balance sheet (credit portfolio, financial investments, collateral), the composition of funding sources and logistics.

As noted above, the feasibility and significance of such assessments are influenced on the one hand by still insufficient methodological experiences and, on the other hand, by low availability and poor quality of information. While recognising the existence of such problems, intermediaries are expected to gradually develop a toolkit (indicators, questionnaires, scenario analysis and stress tests) to support the regular measurement of these risks.¹⁵ Given the limitations of analyses based on historical data for assessing these risks, forward-looking assessments (sensitivity analyses and stress tests) are encouraged.

¹³ For intermediaries subject to the obligation to submit ICAAP/ICARAP and ILAAP reports, these documents set out how climate-related and environmental risks are integrated into the respective frameworks for estimating capital and liquidity needs.

¹⁴ For intermediaries subject to the obligation to submit ICAAP/ICARAP and ILAAP reports, the reasons underlying the assessment of non-materiality are included in those reports.

¹⁵ The process for identifying the metrics, including drawing on the most recent methodological developments, may be initiated gradually, firstly by using static indicators based on data from internal sources (e.g. a classification of counterparties/issuers by economic sector and geographical area of activity, intensity of carbon emissions by individual counterparty), also with a view to adapting the methods used to collect, store and classify data on climate-related and environmental risks.

Expectation 7

In view of the highly dynamic nature of climate-related risks, intermediaries set out/draw up a programme for the regular review and updating of the decisions taken on methodologies and tools for assessing climate-related risks in order to maintain their continued validity and significance.

Credit risk

Expectation 8

Intermediaries integrate climate-related and environmental risks into all phases of the credit process, adapting their lending policies and procedures in line with the EBA GLs on loan origination and monitoring (EBA/GL/2020/06).

Climate-related and environmental risks and their impacts on credit risk must be considered, specifically when granting new loans, monitoring the sectoral and geographical concentration of the loan portfolio, and assessing the collateral supporting the funding.

When granting credit, banks are required to formalise qualitative and quantitative operational criteria, according to which sectors of economic activity and individual borrowers can be differentiated by their exposure to climate-related and environmental risks. Qualitative criteria include, among other things, the 'heatmaps', aimed at providing a representation of vulnerabilities to such risks.

Intermediaries have to map borrowers' geographical position and the economic sector of their business, drawing up classifications based on the degree of vulnerability to physical risk and transition risk.¹⁶ In addition, for customers with higher environmental and climate-related risks, an in-depth analysis of their business model is advisable, taking into account the current and/or future impacts of regulatory policies.

Market risk

Expectation 9

Intermediaries take account of the possible impact of climate-related and environmental risks on the pricing of investments in financial instruments, both their own and those managed on behalf of third parties, including on a forward-looking basis, in order to minimise the risk of losses.

Physical events could lead to changes in expectations, an increase in the risk premium, higher volatility and losses for asset values in some markets. Transition risk factors could generate the sudden repricing of financial instruments linked to sectors affected by environmentally unsustainable

¹⁶ An example of this exercise is given in Section 5 of Bernardini E. et al. (2021), op. cit.

activities. Moreover, the growing interest of investors in sustainable investment strategies could lead to an increase in the demand for financial instruments classified as 'green' compared with others, resulting in a relative price change, due – other things being equal – to how compliant issuers are with the ESG framework.

The integration of climate-related and environmental factors into market risk could entail updating investment policies, for example by compiling a list of less sustainable sectors, where the intermediary decides to limit and/or reduce exposure (i.e. phasing-out), always taking into account the risks of less diversification that exclusion strategies bring with them.

In the area of asset management, intermediaries supplement the investment process by defining criteria for taking into account climate-related and environmental risks in accordance with the objectives pursued by the various products (best-in-class strategies, adoption of climate-related benchmarks, exclusion lists for specific issuers/sectors and so on).

Operational risk

Expectation 10

Institutions consider the possible impact of climate-related and environmental risks on business continuity as well as on their reputation, also taking into account the possible involvement in legal disputes.

Intermediaries consider the possible adverse impact of physical risk on business continuity that could be disrupted by physical damage to real estate, branches and data processing centres as a result of extreme climate-related and environmental events. Moreover, changes in consumers' sensitivity regarding climate-related issues may create reputational and liability risks for intermediaries as a result of environmentally controversial financing. Intermediaries may also be exposed to reputational risk if stakeholders believe that sustainability issues are promoted exclusively for marketing purposes, without the concrete implementation of actions to support the environmental transition.

Liquidity risk

Expectation 11

Intermediaries integrate climate-related and environmental risks into the measurement and management of liquidity risk, estimating potential deteriorations in the liquidity position due to cash outflows and/or decreases in the amount of reserves and/or changes in the liquidity of financial instruments which are either directly owned or included in managed portfolios.

The institutions subject to the obligation to prepare and submit the ILAAP report include in it considerations on climate-related and environmental risks potentially impacting the liquidity risk; otherwise, they assess possible links between liquidity and climate-related and environmental risks in the ICAAP or in other similar documentation.

Liquidity risk could also increase for greenwashing practices; where stakeholders perceive that compliance with the ESG regulatory framework is merely formal, intermediaries may see market access limited, with repercussions on their ability to meet their liabilities under the contractual terms envisaged (i.e. funding liquidity risk) or find themselves having to deal with significant redemption requests from the funds managed.

4.5 Disclosure to the market

The provision of sufficiently detailed, comprehensive and comparable information on exposure to climate-related and environmental risks enables the intermediaries to increase the overall quality of their market disclosure and to signal to all stakeholders their position in the transition process towards a more sustainable economy.

Expectation 12

Intermediaries put in place the infrastructures, data and processes necessary to communicate how they integrate drivers of environmental risk into their business strategy, internal organisation and risk management mechanisms, including the metrics used to assess climate-related risks and sustainability objectives.

Box 4 — Regulatory framework for ESG disclosure

The Pillar 3 disclosure framework fosters transparency as the main driver of market discipline in the financial sector, in order to reduce asymmetric information between credit institutions and information users, and to address uncertainties about the potential risks and vulnerabilities faced by institutions. The Pillar 3 rules on the prudential disclosure of ESG risks aim to enable the market to compare the sustainability performance of institutions and their financial assets and to support institutions in disclosing meaningful and comparable information on how risks and vulnerabilities, including transition and physical risks, can exacerbate other risks on their balance sheets. It also helps institutions to provide transparency on how they are mitigating such risks and includes information on how they are supporting their customers and counterparties in the process of adapting to climate change and in the transition to a more sustainable economy.

Article 449a of CRR II provides that, from 28 June 2022, large institutions subject to the application of the CRR that have issued securities admitted to trading on a regulated market in any Member State are required to publish information on ESG risks. In the implementation of the CRR mandate, in January 2022, the EBA published the Implementing Technical Standard (ITS) on Pillar 3 disclosures on ESG risks.¹⁷

Looking ahead, it should also be taken into account that the European Commission's proposal for updating the CRR provides for this disclosure obligation to be extended to¹⁸ all institutions, including smaller ones. Therefore, banks that do not currently fall within the scope of application laid down in Article 449a of the CRR will also be required to publish climate change risks considered material over a medium- to long-term time horizon in the Pillar 3 disclosures, taking into account the principle of proportionality.

¹⁷ See Article 449a of CRR.

¹⁸ See the proposal to amend Article 449a CRR of the *Banking package* published by the European Commission on 27 October 2021.

The ability of intermediaries to effectively meet Pillar 3 requirements crucially depends on the availability of adequate information on the ESG risks of financed firms and on how this availability is stimulated by the regulatory framework applicable to them.

Directive 2014/95/EU (Non-Financial Reporting Directive - NFRD) introduced a requirement for certain types of listed entities (including banks and other listed financial intermediaries) above certain size thresholds to publish a non-financial declaration (NFD), in order to provide the information necessary to ensure that a business's activity, performance, results and impact on environmental, social and governance aspects are understood. As a complement to the NFRD, the European Commission has published two non-binding guidelines aimed at supporting entities in drawing up an NFD and at supplementing the recommendations published by the TFCF (see Box 1).¹⁹

In order to increase the comparability of information relating to climate change, Regulation (EU) 2020/852 on the Taxonomy²⁰ established a common classification system for sustainable economic activities at the EU level and supplemented the transparency requirements for entities obliged to publish an NFD. In the same direction, the European Commission's Corporate Sustainability Reporting Directive (CSRD) proposal, published in April 2021, will update the current NFRD by expanding the range of companies subject to disclosure requirements, requiring the use of uniform sustainability reporting standards, necessary for financial intermediaries to carry out their own assessments, and thus contributing to increasing the availability and standardisation of information on climate-related risks. The requirements set out in the CSRD proposal follow a step-by-step and proportionate approach, with the obligation to publish sustainability information from 2024 for entities currently within the scope of the NFRD (i.e. large public-interest entities), 2025 for large unlisted companies, and 2026 for small and medium-sized listed companies that will also be able to use simplified reporting standards.

¹⁹ [Guidelines on non-financial reporting: supplement to reporting climate-related information](#)

²⁰ See Box 1.