EBA/GL/2025/02
16 January 2025

Consultation Paper

Draft Guidelines on ESG Scenario Analysis

Contents

1. Responding to this consultation

The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 7.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed/ rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

Submission of responses

To submit your comments, click on the 'send your comments' button on the consultation page by 16.04.2025. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested in accordance with the EBA's rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA's Board of Appeal and the European Ombudsman.

Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EU) 1725/2018 of the European Parliament and of the Council of 23 October 2018. Further information on data protection can be found under the Legal notice section of the EBA website.

2. Executive Summary

On the 9 January 2025, the EBA published Guidelines on the management of ESG risks. Those guidelines address the mandate set out in Article 87a(5) of Directive 2013/36/EU relating to minimum standards and reference methodologies for the identification, measurement, management and monitoring of Environmental, Social and Governance (ESG) risks by institutions. The present guidelines complement those Guidelines on the management of ESG risks on the area of scenario analysis.

For institutions using the IRB approach for calculating the own funds requirements for credit risk, these guidelines are also intended to specify the way in which ESG risks, and in particular physical and transition risks stemming from climate change, are taken into account in the scenarios used for credit risk internal stress testing. In this respect, these guidelines are intended to fulfil the mandate of Article 177(2a) of Regulation (EU) No 575/2013.

Scenario analysis is a process for identifying and assessing the potential implications of a range of plausible future states of the world on the strategy of institutions and the risks they are subject to. It ranges from very basic, purely qualitative 'what if' approaches to highly sophisticated approaches requiring in-house expertise and up-to-date monitoring of available data and methodologies. In an unstable and, in all probability, increasingly challenging environment, scenario analysis is a highly valuable tool for anticipating and better preparing for risks, as well as for seizing opportunities.

These guidelines focus more specifically on the role of scenario analysis in fostering institutions' resilience against environmental risks, starting with climate. They are built around the distinction between scenario analysis used i) to test the institution's financial resilience to severe shocks in the short to medium term and verify its capital and liquidity adequacy and ii) to challenge the business model resilience of the institution, including in the long term, and help it navigate an uncertain future.

The guidelines are divided into three sections. The first section aims to specify the different uses institutions should make of scenario analysis and to propose a progressive and proportionate approach to incorporating scenario analysis into the institution management system. The second section provides guidance on what is required before undertaking a scenario analysis and more specifically on the criteria for setting scenarios and identifying the transmission channels for translating climate risks into financial risks. Finally, the third section specifies, on the one hand, the distinctive features to be taken into account when conducting a climate stress test in addition to the requirements set out in the Guidelines on institutions' stress testing and, on the other hand, the use of scenarios to help define and adjust the institution's strategy and test the robustness of its business model to a range of plausible futures.

Next steps

The EBA is consulting on the draft guidelines for a period of three months. Feedback from the public consultation will be taken into account when finalising the guidelines. It is planned that the guidelines will be finalised by the second half of 2025 and apply from 11 January 2026 to institutions other than small and non-complex institutions (SNCI) and, at the latest, from 11 January 2027 for SNCI.

3. Background and Rationale

3.1 A change of mindset

1. Climate change, environmental degradation, biodiversity loss, social issues and other environmental, social and governance (ESG) factors are posing considerable challenges for the economy. The impact of acute and chronic physical risk events, the need to transition to a low-carbon, resource-efficient and sustainable economy as well as other ESG challenges are causing and will continue to cause profound economic transformations that impact the financial sector.

2. At the same time, an important role of institutions is to finance the economy. In essence, the resilience of institutions depends on the resilience of the economy and vice versa. Understanding and proactively accompanying changes in the economy is central to the institution's strategy and the adaptation of its business model.

3. The Commission's Renewed Sustainable Finance Strategy and the banking package, Directive 2013/36/EU (Capital Requirements Directive, CRD), and Regulation (EU) N° 575/2013 (Capital Requirements Regulation, CRR) recognise that the financial sector has an important role to play both in terms of supporting the transition towards a climate-neutral and sustainable economy, as enshrined in the Paris Agreement, the United Nations 2030 Agenda for Sustainable Development and the European Green Deal, and for managing financial risks that this transition may entail and/or stemming from other ESG factors.

4. Environmental risks, including climate-related risks, are expected to become even more prominent going forward through different possible combinations of transition and physical risks. These may affect all traditional categories of financial risks to which institutions are exposed. In addition, institutions' counterparties or invested assets may be subject to the negative impact of social factors, such as breaches of human rights, demographic change, digitalisation, health or working conditions, and governance factors, such as shortcomings in executive leadership or bribery and corruption, which may in turn lead to negative financial impacts that institutions should assess and manage.

5. Against this backdrop, to manage risks and seize opportunities, institutions will need to strengthen their capacity for anticipation and the forward-looking dimension of their management systems. Scenario analysis is one of the key tools to support this change.

6. Under Article 87a(5) of Directive 2013/36/EU, the EBA has been mandated to issue Guidelines on the identification, measurement, management and monitoring of Environmental, Social and Governance (ESG) risks by institutions which encompasses ESG-related scenario analysis (including stress testing) as an important tool of institutions' risk management framework.

7. The EBA has published on 9 January 2025 Guidelines on the management of ESG risks[1] which largely cover the mandate referred to in Article 87a(5) paragraphs (a) to (c) of Directive 2013/36/EU. These guidelines are intended to complement the Guidelines on the management of ESG risks and to cover, inter alia, Articles 87a(5) paragraph (d) and Article 87a(3)[2]. They aim to support institutions in developing their internal capabilities and skills necessary for setting and using scenarios, primarily to test the shock-absorbing capacity of their capital and liquidity reserves, as well as the resilience of their business model, including in the long-term.

Question 1: Do you have any comments on the interplay between these Guidelines and the Guidelines on the management of ESG risks?

8. For institutions using the IRB approach, these guidelines are also intended to specify the way in which ESG risks, and in particular physical and transition risks stemming from climate change, are taken into account in the scenarios used for credit risk internal stress testing[3]. In this respect, these guidelines are intended to fulfil the mandate of Article 177(2a) of Regulation (EU) N° 575/2013. These guidelines also clarify that the methodology for performing credit risk stress test in accordance with Article 177(2) of the Regulation (EU) No 575/2013 should be generally consistent with section 4.7.1 of the EBA Guidelines on institutions' stress testing.

9. ESG related risks do not create a new category of financial risks for the institution, but are potential drivers of all traditional categories, including credit, market, operational, reputational, liquidity, business model, and concentration risks. However, ESG risks have specific features that make it difficult, for the time being, to fully and appropriately include them into the institution's management system. Three aspects specifically require further examination and a change in perspective: the extended time horizon, the new risk transmission channels not fed by existing data and finally, the fundamental uncertainty surrounding the shifts in economies around the world.

[1] Final Guidelines on the management of ESG risks.pdf

[2] EBA shall issue Guidelines to specify (...)
(d) *criteria for setting the scenarios referred to in paragraph 3 [see below], including the parameters and assumptions to be used in each of the scenarios, specific risks and time horizons.*
Paragraph 3: *Competent authorities shall ensure that institutions test their resilience to long term negative impacts of environmental, social and governance factors, both under baseline and adverse scenarios within a given timeframe, starting with climate related factors. For the testing, competent authorities shall ensure that institutions include a number of environmental, and social and governance scenarios reflecting potential impacts of environmental and social changes and associated public policies on the long-term business environment. Competent authorities shall ensure that for the testing, institutions use credible scenarios, based on the scenarios elaborated by international organisations.*

[3] As a reminder, banks are required to use stress tests as part of their ICAAP / ILAAP framework (in accordance with article 73 and 86 of Directive 2013/36/EU) but also, as part of pillar 1 internal model approaches, as 'challenger models' for banks using IRB approaches.

- While some ESG-related risks are already tangible and could intensify in the short term, scientists[4] expect a significant rise in these risks over the longer term. Institutions therefore need to adapt their management systems to overcome the maturity mismatch between traditional risks and ESG-related risks. In compliance with Article 87a(2) of Directive 2013/36/EU, institutions' strategy, policy, processes and systems should consider, in a proportionate manner, short, medium and a long-term horizon of at least 10 years.

- While traditional risk models rely heavily on past data to predict future risks, the unprecedented, potentially non-linear and rapidly evolving nature of ESG risks, including compound risks, feedback loops and tipping points, calls for a much more forward-looking approach. Hence, first and foremost, institutions need to identify and seek to model as effectively as possible the transmission channels through which ESG risk drivers may translate into impacts on their financial variables.

- The third specific feature of ESG risks is the degree of uncertainty as to the timing and magnitude of the materialisation of the risks, even if they appear somewhat unavoidable. The use of scenario analyses is intended to respond to this profound uncertainty with which institutions are increasingly confronted concerning the economic conditions in which they operate.

3.2 Getting ready

10. As defined by the Task Force on Climate-related Financial Disclosures (TCFD)[5], scenario analysis is a process for identifying and assessing the potential implications of a range of plausible future states of the world under conditions of uncertainty. Scenarios are hypothetical constructs and not designed to deliver precise outcomes or forecasts. Instead, scenarios provide a way for institutions to consider how the future might look like if certain trends continue or certain conditions are met and make decisions accordingly. As such, scenario analysis is prone to become a key analytical tool for institutions in a changing environment.

11. The TCFD recommends the use of climate scenario analysis to help firms to explore the potential range of climate-related outcomes, analyse the business impacts of these alternative states of the world in a structured way, and thus better cope with or even anticipate them.

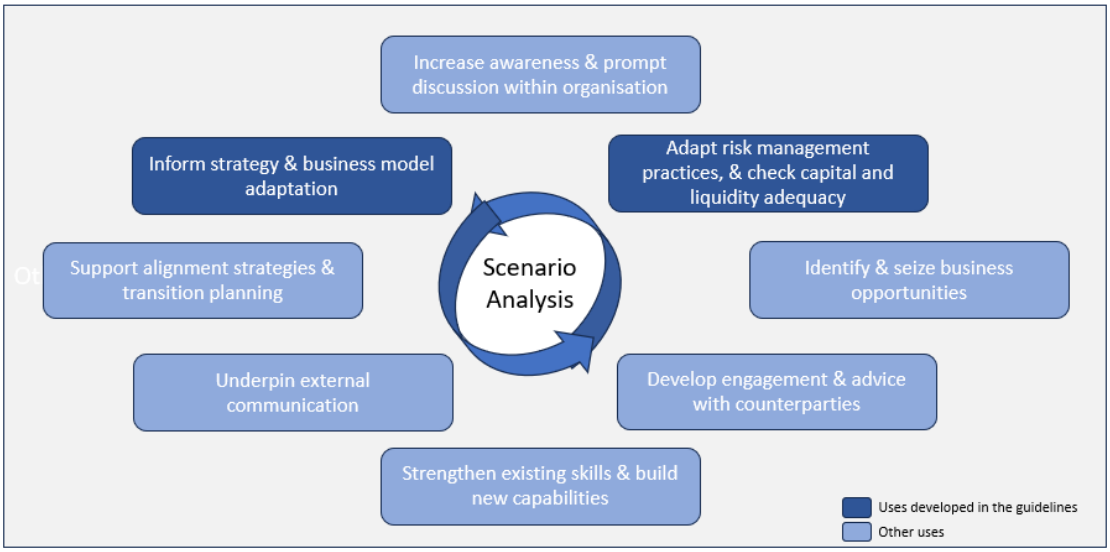
12. Scenario analysis is more than just a tool, it is designed to support a culture of constant change and adaptation. It has an important role to play in sharing a common vision throughout the institution, by developing a plausible, coherent narrative that is understood, widely shared and acted upon. It is also

[4] See the Sixth assessment report of the Intergovernmental Panel on Climate Change (IPCC) AR6 Synthesis Report: Climate Change 2023 — IPCC, or the Global assessment report of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services IPBES) ipbes_global_assessment_report_summary_for_policymakers.pdf.
See also the United Nations (UN) Guiding Principles on Business and Human Rights or the OECD Guidelines for Multinational Enterprises for the social and governance aspects

[5] See TCFD Report 2017 - Overview

a key foundational aspect of the institution's transition planning process as set out in the Guidelines on the management of ESG risks. Figure 1 presents the different uses of scenario analysis:

Figure 1: Uses of Scenario Analysis in the banking sector



Question 2: Do you have comments on the proposed definition of scenario analysis and various uses as presented in Figure 1?

13. A coherent approach to the narratives and scenarios used for these different purposes seems straightforward but may lead the institution to reconsider the scenarios previously used (e.g. for accounting, budgeting or other financial purposes).

14. Carrying out a scenario analysis requires a number of preliminary steps. In particular, institutions should start with an in-depth analysis of the business environment in which they operate and the way it might evolve. Based on this analysis, institutions should define the narratives and associated scenarios they will use for the exercise.

15. To this end, institutions are invited to draw on the existing resources, as required by Article 87a(3) of Directive 2013/36/EU (CRD), especially those made available by the Network for Greening the Financial System (NGFS[6]), the EU Joint Research Center (JRC[7]) or national (government) bodies. The scenarios developed by the International Energy Agency (IEA[8]) are also a valuable resource, particularly as regards the assumptions relating to the deployment of renewable energies and the

[6] NGFS Scenarios Portal

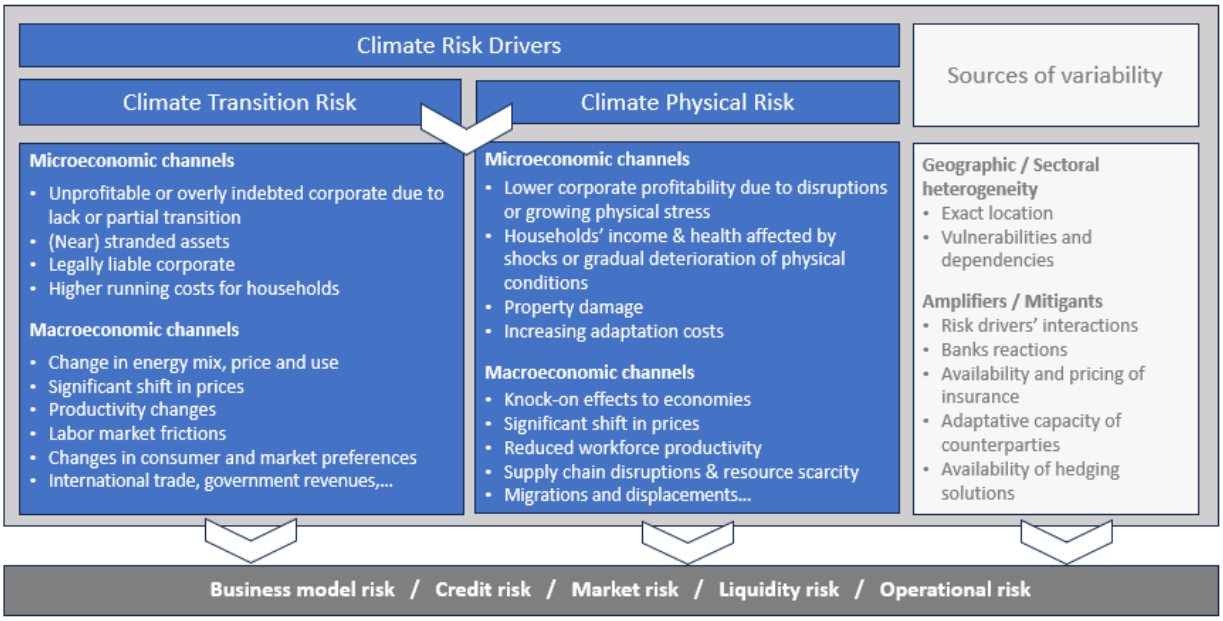
[7] Central scenario - European Commission

[8] Global Energy and Climate Model – Analysis - IEA

decline in fossil fuels, as well as the resulting sectoral trajectories. For long-term scenario analyses, it should nevertheless be noted that the IEA scenarios may have limitations[9].

16. Beyond setting scenarios, defining the transmission channels that lead an ESG event to translate into a concrete impact on institutions' financial variables and metrics is another prerequisite. These ESG-specific transmission channels need to be incorporated into the institutions' models before scenario analyses can be carried out, even if, initially at least, more qualitative approaches based on expert judgement will be needed to overcome the limitations of the models. The chart below summarises the various transmission channels that institutions should consider within the limit of their climate-related materiality assessment.

Figure 2: Summary of climate-related risk transmission channels



17. Given the sheer volume of data required to carry out scenario analyses, institutions should ensure that the data collection and processing systems are streamlined and kept agile. Institutions should address any skills and capabilities gap in climate data and explore potential technological resources to enhance data collection.

18. Enhancing and extending database, while maintaining a clear focus on the purpose of the analyses, should be an ongoing process. To this end, institutions are strongly encouraged to collaborate

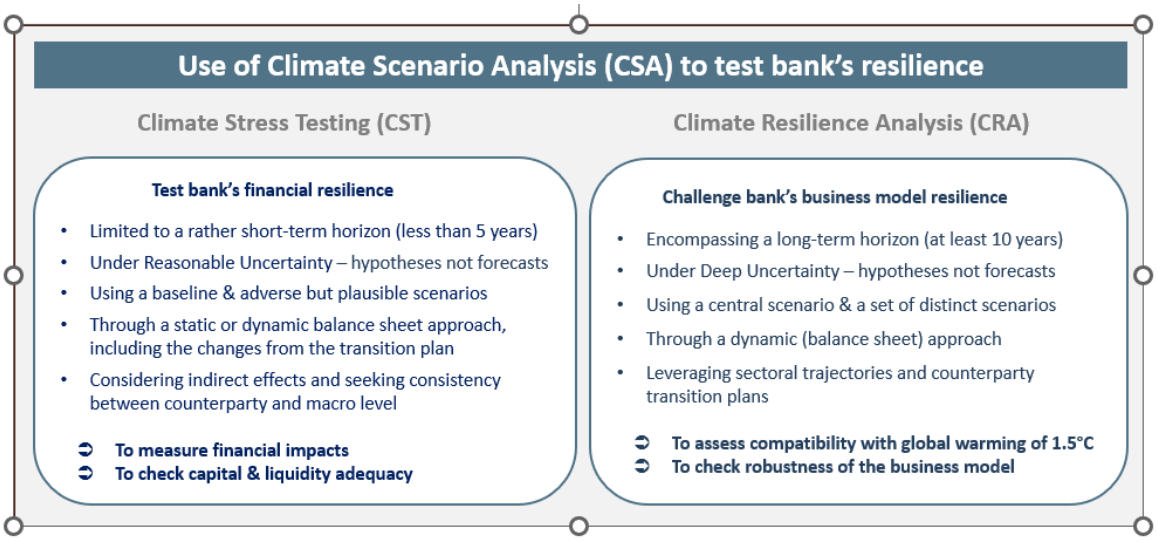
[9] The World Energy Outlook scenarios of 2024 do not take physical risks into account and are based on a standard assumption of world GDP growth of 2.7% per year

internally and with each other, and leverage guidance from (inter)governmental organisations, non-governmental organisations (NGOs), and academia.

19. More generally, when integrating scenario analysis into their management system, institutions may find useful to leverage ESG stress testing or other resilience testing exercises conducted by the supervisors within the financial sector.

20. Scenario analysis could primarily be used to test the institution's resilience, both its financial resilience in the short- to medium-term and the resilience of its business model in the longer term. The figure below provides a schematic illustration of these two main uses of scenario analysis for climate change.

Figure 3: A schematic illustration of the use of Climate Scenario Analysis to test bank resilience



21. Regarding financial resilience, these guidelines complement the EBA Guidelines on institution's stress testing[10] published in 2018. In the light of the latest developments, institutions should integrate material risks related to climate and other ESG factors within their stress testing models and consider the results of these stress tests when assessing capital and liquidity adequacy as part of their ICAAP[11] and ILAAP[12] processes.

22. As mentioned above, ESG-related risks present specificities that require traditional risk management approaches to be adapted, possibly in substantial depth. To integrate material ESG risk drivers, starting with climate, into their stress testing approach, institutions need to consider plausible adverse climate scenarios. They also need to identify and model the transmission channels through which

[10] EBA GL/2018/04 - Guidelines on institutions' stress testing
[11] Internal Capital Adequacy Assessment Process (ICAAP) as required by Article 73 of Directive 2013/36/EU
[12] Internal Liquidity Adequacy Assessment Process (ILAAP) as required by Article 86 of Directive 2013/36/EU

these risk drivers are likely to impact their financial position. The quality of a Climate Stress Test (CST) depends on a detailed understanding of the nature of climate-related risks and the way in which they are likely to have a direct or indirect impact on the institution's performance, capital base and liquidity position.

23. In addition to stress tests, these guidelines aim to enable institutions to test their resilience to the long-term negative impacts of ESG factors in accordance with Article 87a(3) of Directive 2013/36/EU and more generally to challenge their ability to adapt their strategy and business model to guard against ESG headwinds while seizing related opportunities.

24. The Climate Resilience Analysis (CRA) is a proposed new tool that institutions should use to navigate and be agile in a highly uncertain future by scaffolding "What if" hypotheses. It is based on the concepts developed as part of the Supervisory Review and Evaluation Process (SREP)[13] on Business Model Analysis (BMA). It is a forward-looking assessment of the potential impacts of a set of distinct (plausible) long-term (from now until at least 10 years) climate scenarios, encompassing both transition and physical risks, on the viability and resilience of an institution's business model.

25. The general approach consists of a detailed analysis of their business environment and the dynamics at work, on which risk-adjusted profitability analyses are drawn up for each area and/or activity within the institution's current and projected scope. The projections carried out on the basis of a central scenario defined by the institution (i.e. the most likely scenario according to the institution) are used to define the strategy, factoring in the ambition set out in their transition plan[14], in particular where such institutions are subject to Directive (EU) 2024/2760[15] and/or to Directive 2013/34/EU[16] and disclose a plan in accordance with Article 19a paragraph 2 (a) (iii) or Article 29a paragraph 2 (a) (iii) of that Directive. The use of a range of alternative scenarios provides an effective means of challenging the viability of the institution's business model and sustainability of its strategy. Institutions are invited to make this tool their own by specifying its implementation and testing its effectiveness at an operational level.

Question 3: Do you have comments on the proposed distinction made between short-term scenario analysis (CST) and longer-term scenario analysis (CRA) as illustrated in Figure 3?

Question 4: Do you have any comments on the interplay between these Guidelines and the Guidelines on institution's stress testing?

[13] EBA GL/2022/03 on common procedures and methodologies for the SREP, see Title 4 on Business Model Analysis

[14] Regarding the connection between the transition plan required under the Corporate Sustainability Due Diligence Directive, CSDDD and the plan required under Article 76 of the CRD, please refer to Guidelines on the management of ESG risks.

[15] Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence, amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859

[16] The Accounting Directive as amended by the Corporate Sustainability Reporting Directive, CSRD (Directive (EU) 2022/2464)

26. The figure below provides an illustration of the framework for a scenario analysis based on climate issues.

Figure 4: Synthetic view of the Climate Scenario Analysis (CSA) framework

Question 5: Do you have comments on the Climate Scenario Analysis framework as illustrated in Figure 4?

Proportionality

27. The guidelines have been drafted taking into account the proportionality principle set out in Article 87a(2) of Directive 2013/36/EU. This means that proportionality should firstly be understood as driven by the materiality of ESG risks associated with the institution's activities and business model. As such, institutions should rely on the results of their materiality assessment of ESG risks as sets out in the Guidelines on the management of ESG risks when designing and implementing proportionate scenario analyses.

28. Given the recent nature of ESG scenario analysis in the banking sector, another driver of proportionality applicable to all institutions is the degree of maturity of the approaches, including availability of data, understanding of transmission channels and existing ESG risk modelling capabilities. Institutions are expected to gradually and continuously enhance their approaches. They are also expected to closely monitor the activity of the various stakeholders ((inter)governmental organisations, NGOs, peers, academia, consultants, etc.) and keep abreast of the latest scientific and operational knowledge.

29. At the outset, given the potential complexity of ESG scenario analysis, a significant increase in granularity will not necessarily lead to a better analysis, particularly with regard to transition risks. Likewise, an excessive focus on quantification can impair strategic thinking, however some quantification should be a goal once more data is available, and institutions and supervisors gain more experience in the development and implementation of scenario analysis.

30. At all times, institutions will have to question the balance between developing credible and all-encompassing scenarios as part of increasingly sophisticated models, while ensuring that the tool is well understood and leaves sufficient room for common sense and expert judgement.

31. Smaller institutions are not immune to ESG risks, for example in case of concentrations of exposures in ESG-sensitive economic sectors or in geographical areas prone to physical risks. At the same time, the size and complexity of institutions do play a role in the level of available resources and capacities to manage ESG risks. As already provided for in the Guidelines on institutions' stress testing, the use of tools to test an institution's resilience may be carried out at a level of sophistication, frequency and scope commensurate with the institution's size, nature and complexity of activities.

32. At least initially, and without prejudice to the requirements set out in the Guidelines on the management of ESG risks and the Guidelines on institution's stress testing, Small and Non-Complex Institutions (SNCI) may rely on predominantly qualitative scenario analyses.

3.3 A long journey ahead

33. ESG Scenario Analysis is still at a nascent stage. The intent of these guidelines is to set the first milestones but given the complexity and the rapidly evolving nature of ESG scenario analysis, they may need to be reviewed in the future as provided for at the end of Article 87a(5) of the CRD.

34. Of particular note is the work of the Basel Committee on Banking Supervision (BCBS) on climate scenario analysis, with the publication of a discussion paper in April 2024[17]. Any follow-up to this work leading to significant developments at the international level may need to be incorporated into a revised version of the guidelines.

35. Likewise, the work carried out by the NGFS on short- and medium-term scenarios, on physical risk scenarios and on nature-related risks, is another stream of work to be followed. Scenarios covering time horizons of 5 years or less could find their place in the implementation of climate stress tests. On market risk, the work done by regulatory bodies[18] but also by the financial industry associations on scenario analysis for the trading book is also worth highlighting.

36. Macroeconomic models were initially designed without any environmental issues in mind. When used as part of climate, or more broadly ESG, scenario analysis, they come up against a number of challenges. While a number of these challenges, such as the granularity of sectoral and geographical data or the harmonization of methodological approaches tend to be resolved, or largely reduced, other limitations remain.

37. In particular, macroeconomic models tend to assess deviations from long-run equilibria rather than fundamental shifts in the economy. They usually have a limited representation of energy and agricultural systems. Incorporation of feedback loops and tipping points is also very complex. Added to this is the question of the time horizon, which, the further out it gets, introduces major uncertainties and the need to resort to numerous assumptions.

38. All these limitations call for great caution when translating the outcomes of climate scenario analysis derived from traditional macroeconomic models into decisions, or when using them for internal and external communication.

39. On the whole, the increasing degree of uncertainty as the time horizon lengthens, the multiplicity of assumptions used in the modelling or, conversely, the simplifications applied to avoid excessive

[17] The role of climate scenario analysis in strengthening the management and supervision of climate-related financial risks (bis.org). The purpose of the BCBS discussion paper was to gather feedback from stakeholders on the practical application of CSA and its role in strengthening the management of climate-related financial risks. Although it is not prescriptive, it has been used as a source of inspiration for these guidelines, particularly with regard to the key features and usage-specific considerations for CSA.

[18] See for instance the market risk methodology applied for the Fit-for-55 climate scenario analysis.

complexity in the process, all reduce the relevance of the results of the scenario analysis and justify a cautious approach.

40. When conducting a scenario analysis, and in the light of current knowledge, institutions should keep in mind that scenario analyses are designed to inform but not dictate decisions. Part of the benefits of a scenario analysis come through undertaking the process, rather than from the end result.

41. Institutions should therefore be careful not to overinterpret scenario results or to cherry-pick individual scenarios to draw general conclusions. For Climate Resilience Analysis (CRA), in view of the impossibility of assigning meaningful probabilities to each scenario, institutions should consider the findings from the full range of the scenario set and not only focus on low-impact scenarios. When the institution uses the scenarios of an external party, it should ensure, by reviewing the scenarios of other scenario providers, that its approach seems appropriate in terms of covering plausible futures.

42. Both in the context of a stress test exercise and a business model resilience analysis, it is critical that institutions understand the assumptions beyond the scenarios and modelling applied. Models are only as good as the assumptions that go into them.

43. Conducting a scenario analysis requires the mobilisation of a wide range of expertise and a broad approach integrating many of the institution's business lines and functions.

44. Institutions are encouraged to adopt a pragmatic and proportionate approach to data quality and model validation approaches.

45. Scenario analysis should be designed with adaptability and modularity in mind to allow for ongoing refinements as the environment and knowledge evolve. Institutions should maintain a constant watch to stay in tune with the latest scientific knowledge.

Starting with climate

46. Although scenario analysis is intended to inform decision-making on the potential impacts of all ESG factors, in practice there are still very few elements available to carry out quantitative, comprehensive and in-depth analyses beyond climate risks or certain aspects of the other environmental risks.

47. This is why, as reflected in the mandate and in line with the holistic and sequenced approach adopted by EBA regulatory products on ESG risks[19], these guidelines put emphasis on climate-related risks and use it as an illustration of ESG scenario analysis, which will then have to be gradually replicated, in a more or less adapted way, on the other factors.

48. With that in mind, it is nevertheless expected that institutions progressively develop tools and practices that aim at assessing and managing the impact of a sufficiently comprehensive range of

[19] See EBA Roadmap on Sustainable Finance EBA Roadmap on Sustainable Finance.pdf

environmental risks, as defined in Article 4(52e) of the CRR, extending beyond climate-related ones and also including other ESG risks[20] such as increased risk of disease outbreaks, human migration, ecosystem collapse and species extinction[21], terrorism and warfare, political instability, which are often interrelated with or amplified by climate-related risks.

[20] Annex 1 of EBA Report on management and supervision of ESG risks provides a non-exhaustive list of ESG risks (EBA/REP/2021/18)

[21] Given the dependence of economic activity on nature, it is particularly relevant that institutions properly understand the potential physical and transition risks that could result from nature degradation as well as actions aimed at protecting and restoring it.

4. Draft guidelines

In between the text of the draft Guidelines that follows, specific questions for the consultation process appear in framed text boxes.

EBA/GL/2025/xx

DD/MM/YYYY

Draft Guidelines on scenario analysis

To Test the Resilience of Financial Institutions to Environmental, Social and Governance Factors

1. Compliance and reporting obligations

Status of these guidelines

1. This document contains guidelines issued pursuant to Article 16 of Regulation (EU) No 1093/2010[22]. In accordance with Article 16(3) of Regulation (EU) No 1093/2010, competent authorities and financial institutions must make every effort to comply with the guidelines.

2. Guidelines set the EBA view of appropriate supervisory practices within the European System of Financial Supervision or of how Union law should be applied in a particular area. Competent authorities as defined in Article 4(2) of Regulation (EU) No 1093/2010 to whom guidelines apply should comply by incorporating them into their practices as appropriate (e.g. by amending their legal framework or their supervisory processes), including where guidelines are directed primarily at institutions.

Reporting requirements

3. According to Article 16(3) of Regulation (EU) No 1093/2010, competent authorities must notify the EBA as to whether they comply or intend to comply with these guidelines, or otherwise with reasons for non-compliance, by [dd.mm.yyyy]. In the absence of any notification by this deadline, competent authorities will be considered by the EBA to be non-compliant. Notifications should be sent by submitting the form available on the EBA website with the reference 'EBA/GL/2025/xx'. Notifications should be submitted by persons with appropriate authority to report compliance on behalf of their competent authorities. Any change in the status of compliance must also be reported to the EBA.

4. Notifications will be published on the EBA website, in line with Article 16(3).

[22] Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC, (OJ L 331, 15.12.2010, p.12).

2. Subject matter, scope and definitions

Subject matter and scope of application

5. These guidelines complement the EBA Guidelines on the management of ESG risks (EBA/GL/2025/01) with regard to scenario analysis. They specify the criteria for setting the scenarios that institutions should use to test their resilience to the negative impacts of environmental, social and governance factors, starting with climate factors, in accordance with Article 87a(5) of Directive 2013/36/EU[23]. As such, these guidelines fulfil, inter alia, the requirement of Articles 87a(3) and 87a(5) point d of the above-mentioned Directive.

6. These guidelines also complement the Guidelines on institutions' stress tests (EBA/GL/2018/04) by specifying the way in which ESG factors, and in particular climate, should, over time, be integrated into a stress testing programmes.

7. In addition, these guidelines assist institutions resorting to the IRB approach in the use of scenarios that include ESG risks, in particular the physical and transitional risks arising from climate change, as part of their credit risk stress tests which institutions, in accordance with Article 177 of Regulation (EU) No 575/2013, should regularly perform to assess the effect of certain specific conditions on their total capital requirements for credit risk.

8. Institutions, under the supervision of competent authorities, should apply these guidelines in accordance with the level of application set out in Article 109 of Directive 2013/36/EU.

Addressees

9. These guidelines are addressed to competent authorities as defined in Article 4(2) point (i) of Regulation (EU) No 1093/2010 and to financial institutions as defined in Article 4(1) of Regulation No 1093/2010 which are also institutions in accordance with Article 4(1) point 3 of Regulation (EU) No 575/2013[14].

Definitions

Unless otherwise specified, terms used and defined in Directive 2013/36/EU, Regulation (EU) 575/2013, Guidelines on institutions' stress tests (EBA/GL/2018/04) and Guidelines on the management of ESG risks (EBA/GL/2025/01) have the same meaning in these guidelines.

[23] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p. 338).

Question 6: While respecting the definitions provided in other parts of the regulation, is there any concept/s used in these guidelines that it would be useful to include in an annexed glossary?

3. Implementation

Date of application

10. These guidelines apply to institutions other than Small and Non-Complex institutions (SNCI) from 11 January 2026. For SNCI, they apply, at the latest, from 11 January 2027.

4. Scenario analysis, an integral part of risk management and the strategic process

Purpose and governance

11. Institutions should develop forward-looking approaches and perform scenario analyses as part of their toolkit to manage ESG risks and inform strategic decisions.

12. Institutions should use scenario analysis for the purposes of identifying business risks and opportunities, assessing the vulnerabilities of their portfolios to physical and transition risks, and testing their resilience to the potential negative impacts of ESG factors, starting with climate change.

13. In addition, institutions should use scenario analysis to support the development of their strategy and transition planning process as set out in the Guidelines on the management of ESG risks, and challenge their business model to ESG factors, including long-term factors.

14. Institutions may also use scenario analysis to raise awareness and support embedding the consideration of ESG risks in the corporate culture. When using scenario analysis, institutions should provide clarity in the purpose, expectations and limitations of the analysis.

15. From the outset, institutions should define a credible, coherent narrative that describes their vision of the most likely evolution of the business environment in which they operate. This narrative is at the heart of any scenario analysis and constitutes the backbone of the institution's central scenario as referred to in section 5.1. It should be endorsed by senior management and used, where appropriate, throughout the entire organisation.

16. Institutions should develop and implement scenario analysis gradually, with a view to embedding it in the entire management system of the institution. When using scenario analysis to test the resilience to potential negative impacts of ESG factors, institutions should consider the following two types of resilience:

    - The financial resilience, which includes maintaining sufficient capital to absorb potential losses during the period of stress and sufficient liquidity to meet short-term obligations and other cash requirements. Institutions should assess their financial resilience through Climate Stress Test (CST) in accordance with Section 6.1;

    - The business model resilience, which includes maintaining diversified revenue streams and the ability to respond to changing market conditions and customer preferences. Institutions should assess their business model resilience through Climate Resilience Analysis (CRA) in accordance with Section 6.2.

17. When developing and implementing ESG scenario analysis, institutions should apply governance arrangements in accordance with the EBA Guidelines on Internal Governance[24] and the EBA Guidelines on the management of ESG risks. In particular, institutions should set up a process to ensure the robustness of the common narrative and scenarios used across the institution and ensure that these narrative and scenarios are regularly reviewed, especially in the case of significant changes in the business environment.

18. To enhance the consistency of the assumptions and estimates made across business functions as well as to ensure that the outcomes of scenario analyses are relevant and usable to existing processes, institutions should develop a cross-functional approach. Such collaboration among multiple departments should ensure that expertise and insights from various functions contribute to a comprehensive and robust scenario analysis framework.

19. As part of their ICAAP/ILAAP and strategic planning, institutions should substantiate and document their scenario analyses, including scenario and modelling choices, assumptions made, proxies used to cope with data gaps, factors included or excluded as well as the main results and conclusions reached.

20. Institutions should ensure the effective dissemination and integration of scenario analysis results throughout the institution, including but not limited to management board, risk management functions, and business units. Senior management should demonstrate a strong understanding of the potential and limitations of scenario analysis to actively promote its use in decision-making processes across all business lines.

Question 7: Do you have comments on section 4.1 Purpose and governance?

Proportionality and learning curve

21. Institutions should focus their analyses on material ESG risks, starting with the most material. To do this, institutions should map ESG risks and transmission channels (see Section 5.2) in relation to the sectoral and geographical exposure of their portfolios and activities. Institutions should refer to the Guidelines on the management of ESG risks when carrying out their materiality assessment.

22. Institutions may use qualitative or quantitative approaches, or a combination of the two. Institutions are encouraged to consider an iterative process, possibly starting with a predominantly qualitative approach and, while leveraging existing research, data and models, progressively moving towards a more refined modelling approach, as appropriate.

23. As new data becomes available, including counterparties' transition plans and as modelling approaches develop in line with evolving scientific understanding of climate impacts (e.g. speed,

[24] EBA Guidelines on internal governance under Directive 2013/36/EU (EBA/GL/2021/05)

scale, tipping points, etc), institutions should update the scenario analyses and develop their approaches accordingly.

24. The degree of sophistication of the approach adopted to conduct scenario analysis should be commensurate with the size, nature and complexity of the institution's activities, the outcome of its ESG risk materiality assessment and it should correspond to the intended use of the scenarios. When a very comprehensive quantitative scenario analysis seems disproportionate to the institution's capabilities or expected benefits, the institution should consider a simplified, more qualitative scenario analysis.

25. Likewise, and consistently with the provisions of the Guidelines on institutions' stress testing, the frequency and scope of scenario analyses should be commensurate with the institution's needs and capabilities.

26. At least initially, and without prejudice to the requirements set out in the Guidelines on the management of ESG risks and the Guidelines on institution's stress testing, Small and Non-Complex Institutions (SNCI) may rely on predominantly qualitative scenario analyses.

Question 8: Do you agree that the proposed proportionality approach is commensurate with both the maturity of the topic and the size, nature and complexity of the institution's activities?

5. Steps for scenario analysis

Setting climate scenarios

27. When setting their climate scenarios, institutions should consider a number of intertwined factors designed to ensure that the scenarios are as relevant as possible. Namely, institutions should consider the following elements:

- Socioeconomic context, i.e. assumptions about global or regional socio-economic conditions, including population growth, economic development and social inequalities; and other macroeconomic factors, including inflation and monetary policies, increased protectionism, etc.;

- Technological evolution, i.e. the level and pace of innovation, technological adoption, and the availability of infrastructure to support new technologies;

- Climate policies, i.e. the level of policy intervention aimed at mitigating climate change or managing its impacts through adaptation policies; this can range from highly ambitious to minimal actions;

- Energy systems, i.e. the structure of energy production, consumption, and infrastructure, including reliance on fossil fuels vs. renewable energy sources;

- Consumer preferences, i.e. potential shifts in consumers' appetite for goods and services considered as sustainable, locally produced, healthy, etc.;

- Sectoral pathways to net-zero emissions, i.e. how the different sectors transition and adapt to a sustainable economy, including, where relevant, the international outlook, such as the International Energy Agency (IEA), the Science Based Target initiative (SBTi) or the Net Zero Banking Association (NZBA) sectoral decarbonisation pathways, the regional context, foremost among which the European Green Deal strategy, the Fit for 55 package, and the 2050 climate-neutrality target, and the national policies and climate strategy;

- Emission's level and ensuing climate impact, i.e. concentration of greenhouse gases emissions and how temperature and other biophysical processes will develop in the future.

28. To guide them in setting scenarios, institutions should use credible scenarios, based on the most recent scientific knowledge, elaborated by widely recognised international or regional organisations such as the Network for Greening the Financial System (NGFS), the Joint Research Center of the EU Commission (EU JRC) or national (government) bodies.

Question 9: Do you agree with the proposed references to organisations in paragraph 28? Would you suggest alternative or complementary references?

29. Institutions should further refine and customise the chosen scenarios based on their scope, granularity and the objectives of the scenario analysis being conducted. For example, when conducting climate stress tests, institutions should consider relatively short-term scenarios, focusing more on acute physical risks (i.e. sudden materialisation of extreme climate events) than on chronic physical risks (i.e. gradual shift in climate conditions) and with greater emphasis than in longer-term scenarios on the potential negative impacts of a strong disconnect between the climate regulation agenda, the business cycle and the consumer and market sentiment.

30. Institutions should ensure a good fit between the defined scenarios and the unique risk characteristics of their portfolios and business model.

31. Where a climate scenario does not include some of the elements listed in paragraph 27, institutions should assess the potential materiality of these factors and consider the extent to which the results of the analysis should be adjusted.

32. When setting climate scenarios institutions should consider both physical risk and transition risk. Even if modelling can lead to setting up separate scenarios for each of these risks, institutions should ensure, where appropriate and especially when conducting climate resilience analysis, that there is a high degree of consistency between the scenarios given that the risks are strictly correlated over the long-term:

    - a limited transition in the short-term may result in exacerbated physical risks in the long-term;
    - actions to mitigate potential future disruptions due to physical risks may result in immediate, more or less severe, transition risks.

33. Institutions should select the specific aspects of transition risk and physical risk hazards to be covered by the scenario based on their materiality assessment, which may differ according to the time horizon concerned.

34. With regard to transition risk, institutions should consider the different aspects of transition listed in paragraph 27 in the light of the policies of the countries in which they operate and the related level of commitment of the various stakeholders.

35. Among the possible pathways of the transition, institutions should consider the following:

    - Rapid, coordinated global action to reduce emissions, with low transition risk but higher immediate costs for high-carbon sectors. Such coordinated transition is prone to mitigate physical risks in the long-term;

- Delayed or uncoordinated actions leading to higher economic shocks as governments or markets respond suddenly to climate impacts. Such transition is also expected to mitigate physical risks in the long-term but at higher costs;

- Minimal or no mitigation actions, leading to severe physical risks from climate change (e.g. more frequent and exacerbated floods, droughts, storms, etc.).

- Delays and international divergences in climate policy ambition that imply elevated transition risks in some countries and high physical risks in all countries due to the overall ineffectiveness of the transition.

36. With regard to physical risk, institutions should ensure that the hazards considered in their scenario are properly linked to the location of their exposures (to be mapped against acute physical risks) and specific vulnerabilities of their counterparties to chronic physical risk (e.g. customers relying on agriculture, forestry, water utilities, energy, real estate or transportation sectors). To the extent possible, institutions should also consider, when setting their scenarios, any significant dependencies of their customers throughout their value chain. Particular attention should be paid to large exposures or a group of exposures sharing a common dependency and to the specific vulnerability of global supply chains to acute physical events.

37. For the purposes of paragraphs 27 to 36, in application of the proportionality principle, institutions may initially, or depending on the size, nature, complexity of their activities, or more generally on their ESG materiality assessment, focus on a narrower scope, less input factors, less different scenarios and/or reduced complexity as that they deem most relevant to their business.

38. In CST, institutions should use a baseline scenario (i.e. the benchmark scenario), as well as a set of adverse scenarios which are defined as severe (i.e. tail risk) but plausible (i.e. reasonably probable) scenarios.

39. When defining their baseline scenario, institutions should assume a continuation of current conditions and trends and that, except in special cases, there is no significant worsening in terms of assumptions and in the underlying climate, macroeconomic and financial variables. It is important, however, that the baseline scenario takes into account the policies adopted or about to be adopted over the period under consideration. For the set of adverse scenarios, institutions should consider climate scenarios with and without additional adverse macroeconomic shocks. When shocks of different origins (climate and others) are combined, institutions should examine in greater depth the consequences of these compound risks that potentially amplify the impacts beyond a simple aggregation of the impacts of climate and macroeconomic scenarios analysed separately.

40. In CRA, institutions should use their central scenario, i.e. the scenario which reflects the most likely path that future developments could take, according to the institution. The central scenario extends the baseline scenario by covering a much longer time horizon, and in so doing may diverge more or less from a continuation of observed trends. Institutions should also use a representative set of

sufficiently distinct, plausible long-term scenarios, aimed at assessing, through quantitative and qualitative approaches, subject to proportionality considerations as outlined in section 4.2, the consequences for the institution's profitability and exposure to risks of a future economic landscape and climate that significantly differ from those of the central scenario.

41. Institutions should ensure that scenarios are internally consistent. The trend in each of the key factors should be considered in relation to the trend in each of the other key factors. Institutions should also ensure that the scenarios are consistent over the different time horizons.

42. Based on their materiality assessment, institutions should take proactive steps to gather the necessary data in accordance with section 4.2 of the Guidelines on the management of ESG risks. To allow for meaningful results, institutions should ensure that the design of the scenario and its granularity are commensurate with the purpose of the analysis.

Question 10: Do you have additional comments on section 5.1 Setting climate scenarios?

Defining climate transmission channels

43. Institutions should identify the relevant transmissions channels to use in their climate scenario analyses by adopting a broad and complete comprehension of the numerous significant climate threats that individually or collectively are likely to cause serious damage to the institutions' soundness.

44. In order to identify climate-related transmission channels, institutions should list the risk drivers by considering:

    - For transition risks, socio-economic changes, political and regulatory decisions, technological developments and the evolution of consumer and market preferences: and

    - For physical risks, acute risks resulting from the increasing frequency and severity of extreme climate or weather events (such as heat waves, floods or storms) and chronic risks arising from long-term shifts in climate and weather patterns (such as rising average temperatures or sea level rise).

45. In accordance with paragraph 21, institutions should take account of their business model, portfolio composition and geographical exposure when carrying out this review, focusing on material risks.

46. Institutions should distinguish between microeconomic and macroeconomic transmission channels, taking into account both direct and indirect impacts and incorporate external factors and trends that may shape future business conditions. They should consider:

    - Microeconomic transmission channels relating to:

(i) individual counterparties affected by a climate related factor that, in turn, produces financial risks for the institution;

(ii) direct pathways through which a climate related factor affects institution's operations or funding capacity; and

(iii) indirect effects on financial assets (e.g. bonds or equities) held by the institution; and,

- Macroeconomic transmission channels relating to:

(i) mechanisms through which climate-related factors affect the economic environment where the institution operates (e.g. impacts on clients, markets or operations which in turn affect the institution);

(ii) patterns through which climate-related factors affect macroeconomic variables (e.g. GDP, inflation, etc.) that, in turn, have an impact on the institution's activities.

47. For transition risks, institutions should factor the following transmission channels into their analysis, if deemed material:

- Microeconomic channels:

(i) Corporates are no longer profitable or overly indebted, or at risk of becoming so, due to increasing climate-related costs (e.g. costs for transitioning to greener technologies, supply chains and production processes, increasing energy costs, increasing taxation on emissions, etc.) and/or changes in consumers' preferences and competitive dynamics;

(ii) Assets are stranded or significantly impaired, or at risk of becoming so, as they are no longer adapted to current standards or consumer preferences;

(iii) Corporates are legally liable, given a partial failure to align with the transition;

(iv) Households bear transition costs (e.g. costs of bringing properties up to standard or capital loss on sale, increased taxation, higher energy prices, etc.) that significantly affect their financial condition and loan demand;

- Macroeconomic channels:

(i) Fundamental change to energy mix, energy price levels and energy uses that affects the whole economy;

(ii) Significant shifts in prices, especially for energy-intensive products;

(iii) Productivity changes;

(iv) Labour market frictions resulting in unemployment and sectors under pressure due to the lack of skilled workers;

(v) Changes in consumer and market preferences;

(vi) Other impacts on international trade, government revenues, fiscal space, interest rates and exchange rates.

48. For physical risks, institutions should factor the following transmission channels into their analysis, if deemed material:

- Microeconomic channels:

  (i) Corporate profitability is impacted by severe disruptions to business or the value chain due to highly adverse weather conditions, by gradual deterioration due to working conditions, or by rising costs (e.g. adaptation costs, price of key inputs);

  (ii) Household income is affected by climate-related disruptions, by gradual deterioration of economic activities, or by impact on health;

  (iii) Corporate assets or household properties are damaged by severely adverse weather conditions or gradually deteriorated (e.g. shrink-swell of clays), potentially resulting in higher leverage for reconstruction or adaptation.

- Macroeconomic channels:

  (i) Knock-on effects of severely adverse weather and other global warming effects to the entire economy of a certain geographical area;

  (ii) Significant shifts in prices from supply shocks resulting in inflationary pressure;

  (iii) Reduced workforce productivity and health impacts;

  (iv) Supply chain disruptions and resource scarcity;

  (v) Migrations and displacements.

49. Institutions should analyse the extent to which their counterparties, starting with the largest or most concentrated, are indirectly subject to climate-related risks through their value chain and the spillover effects of a potential climate event on the local economy. If these impacts are material, institutions should strive to include these indirect impacts into their transmission channels.

50. Institutions should establish transmission channels that account for the risks related to counterparties‘ climate transition, as well as those arising from their inability to successfully undertake such transition.

51. According to the time horizon of the scenario, institutions should also consider mitigation / amplification factors, including private and public insurance coverage - being mindful of current and future insurance gaps -, counterparties' adaptation plans and any local / governmental adaptation measures without relying on overly optimistic government actions or financial support schemes.

52. Institutions should be able to effectively translate the identified transmission channels related to transition and physical risks as set out in paragraphs 47 and 48 into the traditional financial risks, considering at least:

    - Business model and strategic risk (e.g.: higher cost of risk and lower profitability),
    - Credit risk (e.g.: counterparties default or increased probability of default, collateral values severely impacted),
    - Market risk (e.g.: loss of value of financial assets, increased volatility, widening of credit spreads on certain assets),
    - Liquidity risk (e.g.: difficulties in accessing financing or liquidating assets, increased liquidity needs of customers), and
    - Operational risk (e.g.: sudden or gradual disruptions to processes, including absence of staff and IT outages).

53. Institutions should adopt the identification of relevant transmission channels as a continuous process, considering both the changes of the business environment in which they operate and the changes within the institution or its portfolios and clients.

54. Institutions should closely monitor the activity of international organisations and supervisors regarding climate-related transmission channels, as they represent a valuable source for improving their own models.

Question 11: Do you have comments on the description of the climate transmission channels?

6. Scenario analysis development processes and use in decision making

Testing financial resilience through Climate Stress Test (CST)

55. Institutions should develop CST in accordance with the EBA Guidelines on institution's stress testing and the ICAAP/ILAAP methodology requirements.

56. In accordance with Article 177 of Regulation (EU) No 575/2013, institutions using the IRB approach should regularly perform credit risk stress tests based on severe but plausible recession scenarios that include ESG risks, in particular physical risk and transition risk drivers stemming from climate change. The methodology for performing credit risk stress test in accordance with Article 177(2a) of the Regulation (EU) No 575/2013 should be generally consistent with section 4.7.1 of the EBA Guidelines on institutions' stress testing.

57. When incorporating climate-related variables into their existing stress testing framework, institutions should conduct a thorough gap analysis of their internal models to identify areas where current modelling capabilities need to be improved. Given the specificities of climate risks, institutions should consider an in-depth overhaul of their approaches, rather than simply piling on quick fixes.

58. To facilitate a smooth integration of these climate-related variables, institutions may adopt a two-phased approach, both for technical aspects and for analysis and decision making. On a technical level, institutions may consider testing newly developed climate risk modules in a separate IT environment before full implementation within standard operating IT systems.

59. Given the importance of the sector/country crossover approach when dealing with climate risks, institutions should ensure that these dimensions are properly taken into account in their models. While developing new models or extending the granularity of existing models, institutions should introduce variables sensitive to climate risks in connection with the identification of transmission channels provided for in section 5.2.

60. Where possible and taking into account their materiality assessment, institutions should apply climate shocks related to adverse scenarios directly at the exposure level. For risks whose materiality is primarily the result of a concentration effect, institutions should apply the shocks to groups of counterparties with a similar profile of exposure to climate risks.

61. Institutions may use a static or dynamic balance sheet approach in their CST. However, if, as part of its approved strategy, significant changes in the composition of its portfolios are expected to take effect over the course of the stress test period, the institution should consider incorporating these changes when performing the exercise.

62. Institutions should consider challenging the calibration of their CST model by:

    - comparing with external, including supervisory, observations from credible sources to assess the consistency of their own assumptions and results;
    - carrying out an internal review focusing on model design;
    - where a third-party model is used, verifying that the validation framework of the external suppliers complies with the EBA Guidelines on outsourcing arrangements[25].

63. In addition, institutions may perform sensitivity analyses to test the degree of stability and consistency of their models' outputs to a set of key input variables. Sensitivity analyses may also be used to identify the effect of potential non-linearities not included in the scenarios.

64. To address the residual shortcomings of their internal models, institutions should consider accounting the impacts of the factors that could not, at this stage, be otherwise integrated (e.g. risks stemming from counterparties' value chain), by applying additional stress factors determined based on expert judgement.

65. More generally, institutions should use expert judgement when carrying out quantitative analyses and to overcome the limitations associated with incomplete or approximate climate data, the absence of historical data and the impossibility of carrying out a comprehensive back-testing of the assumptions, parameters and results of the CST. With regard to climate risks, institutions may not fully comply with the backtesting requirement set out in paragraph 18 of the Guidelines on institutions' stress testing.

66. Institutions should progressively develop their CST approaches, starting with credit risk, and aiming at capturing the impacts of climate change on other traditional risk categories, including market, operational, and liquidity risk across all relevant portfolios, sectors, and geographies. This may necessitate the adaptation of models' calibration to comprehensively capture the diversity in risk profiles associated with the heterogeneity of borrowers.

67. In line with paragraph 31 of the Guidelines on institutions' stress testing, the key outputs from a CST exercise should be implied losses as well as capital and liquidity requirements.

[25] GL/2019/02 on outsourcing arrangements

68. Institutions should identify and implement credible management actions that address the results of the CST and aim to ensure their solvency throughout the adverse scenarios. To that purpose, institutions should refer to the management measures provided for in paragraph 198 of the Guidelines on institutions' stress testing and those set out in section 5.1 of the Guidelines on the management of ESG risks.

Question 12: Do you have comments on climate stress test (CST) tool and its use to test an institution's financial resilience?

Challenging business model resilience through Climate Resilience Analysis (CRA)

69. Institutions should carry out as detailed an analysis of the environment as possible, building on and consistent with the adoption of the institution-specific narrative as referred to in paragraph 15 and the development of the internal scenarios as set out in section 5.1 of these guidelines. Institutions should tailor their analysis to the specific features of their key portfolios, markets and geographic areas. As part of this analysis, institutions should strive to embed potential mitigation / amplification effects as set out in paragraph 51.

70. Institutions should also consider the feedback loops stemming from the adaptation of the financial sector to rising risks and its contribution to the financing needs of the economy. To this end, institutions should monitor capital reallocation movements and possible crowding-out effects in certain sectors or types of economic agents.

71. In parallel to this in-depth analysis of their environment, institutions should draw up a precise map of the qualitative and quantitative features of their current business model, including underlying profitability, assets and liabilities mix, funding structure, key success drivers and key dependencies.

72. Based on their central scenario, institutions should make approximate projections of those material features of their business model, and more specifically of their risk-adjusted profitability for their various activities, consistently over several time horizons, including a long-term horizon of at least 10 years, and possibly focusing on the sector/portfolio level.

73. To perform those projections, institutions should use a dynamic balance sheet approach that incorporates both the anticipated evolutions of the environment and their expected response to those evolutions.

74. Institutions should provide detailed qualitative and quantitative information, considering proportionality as outlined in section 4.2, on the robustness of the strategy over a manageable time horizon (e.g., 5 years). Beyond that, as the time horizon lengthens, the approach may only offer a general approximation of the strategy's expected performance. Institutions should break down the

analysis into several time horizons to understand the transition risks likely to materialize before the end of the projection period.

75. Institutions subject to Directive (EU) 2024/1760[26] which are required, as such, to implement a transition plan to ensure the compatibility of their business model with the transition to a sustainable economy and with the limiting global warming to 1.5°C in line with the Paris Agreement, or are subject to Directive 2013/34/EU and disclose a plan in accordance with Article 19a paragraph 2 (a) (iii) or Article 29a paragraph 2 (a) (iii) of the Directive, should ensure that their projections, particularly in terms of financed GHG emissions on the three scopes, comply with the targets set in their plan.

76. To challenge the resilience of their strategy, institutions should reproduce the projections made on the basis of the central scenario with alternative scenarios, breaking down the analysis into several time horizons, while ensuring consistency of the scenarios across the different time horizons.

77. Institutions should consider carrying out the CRA at a disaggregated level, leveraging the work on portfolio alignment that institutions should conduct in accordance with paragraphs 35 to 41 of the Guidelines on the management of ESG risks. Where an institution carries out the CRA at a disaggregated level, analyses by subset should be reaggregated and completed by cross-cutting impacts.

78. Institutions should consider combining quantitative approaches, such as sensitivity analyses, with more qualitative approaches, in all cases supported by sound expert judgement and justifications.

79. The key output of a CRA is a qualitative assessment of the viability of the institution's business model and the sustainability of its strategy under each of the scenarios tested. Institutions should consider the findings from the full range of the scenario set as recommended in paragraph 35 and not only focus on those of middle range scenarios (i.e. scenarios that deviate only moderately from the central scenario).

80. If it is not the case for the central scenario, institutions should include, among their alternative scenarios, a high emission climate scenario as well as a climate scenario compatible with limiting global warming to 1.5°C.

81. The implementation of a CRA should support the institution in establishing, and documenting in a substantiated manner, a strategy over a horizon that includes at least the next 10 years, respecting its risk appetite and maximising its probability of achieving the objectives of its transition plan, as required, where applicable, by Directive (EU) 2024/1760, or as reported, where applicable, through the plans institutions disclose in accordance with Article 19a paragraph 2 (a) (iii) or Article 29a paragraph 2 (a) (iii) of the Directive 2013/34/EU, while limiting the potential negative impacts of

26 Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on corporate sustainability due diligence and amending Directive (EU) 2019/1937 and Regulation (EU) 2023/2859 (OJ L, 5.7.2024)

adverse scenarios. More generally, on the basis of the CRA, institutions should put in place a process for adapting their business model to the developing changes in the environment.

82. Among possible follow-up actions, institutions should consider, in addition to the combination of risk management and mitigation tools provided for in paragraph 46 in the Guidelines on the management of ESG risks, and among other things, the following:

(i) provide for a gradual increase in capital over time to strengthen the institution's resilience in the face of changing environmental conditions;

(ii) regularly update risk inventory with any newly identified significant climate risk. This involves identifying new risk factors, their transmission channels and their potential impact on the resilience of the business model;

(iii) perform further analysis on a segment of the portfolio for which a vulnerability has been identified, in order to refine the course of action.

Question 13: Do you have comments on the Climate Resilience Analysis (CRA) tool and its use to challenge an institution’s business model resilience?

Question 14: Do you have any additional comments on the draft Guidelines on ESG Scenario Analysis?

5. Accompanying documents

5.1 Draft cost-benefit analysis / impact assessment

On June 2024, the European Commission published the directive amending the Capital requirements directive (from now on CRD VI). Article 87a(5) of the CRD VI mandates the EBA to issue Guidelines to specify minimum standards and reference methodologies for ESG risks management practices. On 9 January 2025, the EBA published Guidelines on the management of ESG risks in response to this mandate, with the exception of the section on scenario analysis. These Guidelines complement the aforementioned Guidelines on this aspect.

As per Article 16(2) of the ESAs regulation (Regulation (EU) No 1093/2010, (EU) No 1094/2010 and (EU) No 1095/2010 of the European Parliament and of the Council), any guidelines developed by the ESAs shall be accompanied by an Impact Assessment (IA) annex which analyses 'the potential related costs and benefits' of the guidelines. Such annex shall provide the reader with an overview of the findings as regards the problem identification, the options identified to remove the problem and their potential impacts.

The EBA prepared the IA included in this consultation paper analysing the policy options considered when developing the guidelines. Given the nature of the study, the IA is qualitative in nature.

Problem identification

Environmental, social and governance (ESG) factors are causing and are expected to increasingly lead to significant changes in the real economy that will in turn impact the financial sector through new risks and opportunities.

Following the adoption of the Paris Agreement on climate change and the UN 2030 agenda for Sustainable Development in 2015, governments around the world are taking action to encourage the transition to low-carbon and more sustainable economies. In Europe in particular, the European Green Deal targets the ambitious objective of making Europe the first climate-neutral continent by 2050 and it is expected that the financial sector will play a key role in this process.

In this regard, the European Commission has launched a set of initiatives to enhance the resilience and contribution of the financial sector. As a result, several efforts have been initiated to incorporate ESG risks into prudential supervision. These guidelines target the inclusion of scenario analysis in the internal management system of institutions as an essential tool in a changing economic environment.

Policy objectives

The main objective of these guidelines is to respond to the mandate set up in Article 87a(5) of the Directive 2013/36/EU in conjunction with the Guidelines on the management of ESG risks and to fulfil the mandate of Article 177(2a) of Regulation (EU) No 575/2013.

Baseline scenario

The current framework does not specify any guidelines about how institutions shall perform internal ESG scenario analysis to test their financial and business model resilience. As a result, institutions may follow different approaches when performing their internal ESG scenario analysis which would create divergencies in the way institutions define their scenarios and incorporate them into their stress testing and other scenario analysis processes. Such situation pose difficulty for the work of supervisors who have to monitor and control that institutions are prepared to face the potential materialisation of ESG risks.

Options considered

When drafting the present guidelines, the EBA considered several policy options under 4 main areas:

1) Scope of the guidelines on scenario analysis

Defining the expectations to perform scenario analysis to test institutions' resilience to the negative impacts of climate but also of other ESG risks is a very ambitious target, considering the near absence of stress test / scenario analysis work beyond climate risks. Therefore, while developing these guidelines, the EBA has analysed three possible options:

- Option 1: To focus equally on the three aspects
- Option 2: To focus on climate aspects only
- Option 3: To mainly focus on climate aspects but give some guidance on the rest of environmental aspects and social and government aspects.

2) Time horizon for Climate Scenario Analysis

The decision on the time horizon significantly drives the outcome of scenario analysis. Any decision on the time horizon should therefore depend on the final purpose of the exercise. Therefore, while developing these guidelines, the EBA has analysed three possible options:

- Option 1: To use a relatively short time horizon (up to 5 years).
- Option 2: To use longer time horizon (beyond five years).
- Option 3: To define two different types of scenario analysis, with a short time horizon (up to 5 years) and with a longer time horizon (beyond five years).

3) Use of scenarios from widely recognised orgarnisations

Several organisations have developed climate stress test scenarios based on the most recent scientific knowledge. However, such scenarios may not completely adapt to institutions' risk characteristics or purposes of their exercises. Therefore, while developing the current guidelines, the EBA has analysed three possible options:

- Option 1: To fully rely on credible scenarios elaborated by widely recognized international or regional organisations.
- Option 2: To rely on institutions' self-developed scenarios.
- Option 3: To use scenarios elaborated by widely recognized international or regional organisations as a guide but adapt them to institutions' own characteristics.

4) Proportionality

ESG factors are causing and will continue to cause profound economic transformations that will impact the financial sector. Although it is an important aspect that banks need to introduce in their risk management practices including stress test and scenario analysis, there is a significant cost associated with this process. Therefore, while developing these guidelines, the EBA has analysed several possibilities to introduce certain degree of proportionality.

In relation to the materiality of risk, although institutions may be subject to a large number of ESG factors, some of those factors will be more material than others. Therefore, while developing these guidelines, the EBA has analysed two possible options:

- Option 1: To cover all risks associated with ESG factors.
- Option 2: To focus on the most material ESG risks.

In relation to the size of the organisation, it is understood that smaller institutions may face more difficulties in implementing these processes. However, the whole financial system will be challenged by the effect of climate risk. Therefore, while developing these guidelines, the EBA has analysed three possible options:

- Option 1: To completely exempt SNCI from completing scenario analysis.
- Option 2: To request SNCI to perform scenario analysis but allowing for a lower degree of sophistication.
- Option 3: To request all institutions to complete scenario analysis with the same features and level of sophistication.

Assesment of the options and preferred option

In respect to the different options considered, the EBA has assessed their potential cost and benefits, and has selected a preferred option in the four main areas considered:

1) Scope of the guidelines on scenario analysis

ESG risks include environmental, social and governance factors. Article 87a of Directive 2013/36/EU mandates the EBA to issue guidelines on scenario analysis for the full scope of these risks. However, the developments of regulations and practices are much more advanced for climate than for the other factors. Although it is important to continue the development of management practices and scenario analysis for all ESG factors, it is also important to allow sufficient time for institutions to introduce the necessary changes. Therefore, in order to reduce the burden for institutions and the time pressure to adapt to the new regulatory developments, it is considered that the guidelines should focus primarily on climate risk, while introducing some guidance on other ESG aspects. Therefore, the preferred option is Option 3: to focus primarily on climate aspects while providing guidance on other ESG aspects.

2) Time horizon for Climate Scenario Analysis

Climate risks have different impacts over different time horizons, although the most significant impact is likely to occur in the long term. In this sense, the decision on the time horizon will significantly influence the outcome of the scenario analysis. However, it should be borne in mind that setting too long a time horizon may reduce the ability of institutions to accurately assess the impact of climate risks. This is why the EBA considered that ESG stress tests should keep a short time horizon (up to five years) in order to allow a relatively accurate measurement of impacts. At the same time, it is important that scenario analyses are carried out over a longer time horizon, which will better reflect the forward-looking nature of climate risks, even if the analysis is more qualitative in nature. Therefore, the preferred option is option 3: to carry out two different types of scenario analysis, with a rather short time horizon (up to 5 years) and with a longer time horizon. The two types of scenario analysis will meet different objectives while complementing each other.

3) Use of scenarios from widely recognised organisations

Paragraph 3 of Article 87a(5) of Directive 2013/36/EU directs the choice towards the use of scenarios developed by widely recognised organisations. The organisations that develop such type of scenarios have significant expertise, which makes them a reliable and robust source. At the same time, the usage of scenarios developed by recognised organisations would allow for a better degree of comparability across different institutions. However, such scenarios may not fully adapt to institutions' own characteristics and risks. Therefore, the EBA considers that it would be adequate to introduce a degree of flexibility and encourage institutions to make changes to these scenarios. In addition, the EBA considers that scenarios developed by regional and national organisations could also be considered. Therefore, the preferred option is Option 3: to use scenarios elaborated by widely recognised international, regional or national organisations as a starting point but adapt them to institutions' own characteristics.

4) Proportionality

The reflection of ESG factors in scenario analysis is not an easy task. Although such factors will continue to cause profound economic transformations that will impact the financial sector, it is important to give time for institutions to adequately incorporate such factors in their management framework. A

good materiality analysis is also essential to enable banks to optimise the cost/benefit balance. Therefore, the preferred option is Option 2: To focus on the most material ESG risks.

Separately, performing such assessment requires an intensive use of resources creating a burden for institutions. It seems disproportionate to request all types of institutions to perform such assessment, as small institutions have limited resources available and such request could be very burdensome for them. An adequate balanced approach would allow SNCI to perform a scenario analysis which is simplified in nature and could be limited, as a first step, to qualitative aspects. Therefore, the preferred option is option 2: To request SNCI to perform scenario analysis but allowing for a lower degree of sophistication.

5.2 Overview of questions for consultation

Question 1: Do you have any comments on the interplay between these Guidelines and the Guidelines on the management of ESG risks?

Question 2: Do you have comments on the proposed definition of scenario analysis and its various uses as presented in Figure 1?

Question 3: Do you have comments on the proposed distinction made between short-term scenario analysis (CST) and longer-term scenario analysis (CRA) as illustrated in Figure 3?

Question 4: Do you have any comments on the interplay between these Guidelines and the Guidelines on institution's stress testing?

Question 5: Do you have comments on the Climate Scenario Analysis framework as illustrated in Figure 4?

Question 6: While respecting the definitions provided in other parts of the regulation, is there any concept/s used in these guidelines that it would be useful to include in an annexed glossary?

Question 7: Do you have comments on section 4.1 Purpose and governance?

Question 8: Do you agree that the proposed proportionality approach is commensurate with both the maturity of the topic and the size, nature and complexity of the institution' s activities?

Question 9: Do you agree with the proposed references to organisations in paragraph 28? Would you suggest alternative or complementary references?

Question 10: Do you have additional comments on section 5.1 Setting climate scenarios?

Question 11: Do you have comments on the description of the climate transmission channels?

Question 12: Do you have comments on climate stress test (CST) tool and its use to test an institution's financial resilience?

Question 13: Do you have comments on the Climate Resilience Analysis (CRA) tool and its use to challenge an institution's business model resilience?

Question 14: Do you have any additional comments on the draft Guidelines on ESG Scenario Analysis?