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# Integrating bank transition planning into prudential supervision

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# Summary

- **Transition plans are increasingly recognised as a tool in the governance of the low-carbon, climate-resilient transition.** Through transition planning, firms can develop a strategic response to the transition, manage and implement changes to their business model and operations, improve management of risk and opportunities related to climate change, communicate their strategy to internal and external stakeholders, and demonstrate credibility behind their commitments. The transition plan regime spans a broad range of instruments, from 'softer' levers such as voluntary guidance or expectations from investors and other stakeholders, to 'harder' levers such as mandatory disclosure obligations, due diligence obligations and prudential regulations.
- **Transition plans are drawing the attention of prudential regulators and supervisors as part of their supervisory remit.** Bank transition plans provide a forward-looking projection of how banks respond to risks and opportunities related to the transition: that is, how they identify, assess and mitigate physical and transition risks related to climate change and environmental degradation. The degree of alignment between financial sector and real economy transition planning is an indicator of the risk to financial stability arising from climate change, and therefore a micro- and macro-prudential concern.
- **Integrating bank transition planning into supervisory processes expands the prudential toolbox to address the uncertainties arising in the context of the transition in a forward-looking manner.** Taking this action complements existing practices, including detailed evaluations of climate change risks, scenario analysis and tailored stress testing. More broadly, improving banks' transition risk management through transition planning may support the achievement of related objectives such as efforts to decarbonise and to strengthen economy-wide resilience to the physical impacts of climate change.
- **Supervisors can support regulatory certainty and reduce the burden on firms by providing guidance on their own expectations for bank transition planning.** Across different jurisdictions, the transition governance landscape is evolving at varying speeds, and with different degrees of internal consistency and coherence. However, there are a set of metrics that are key to managing climate change risks (e.g. greenhouse gas emissions, geolocation and financial planning data). Prudential supervisors can efficiently leverage this information by integrating transition planning within their assessment, thereby supporting the management of such risks and therefore financial stability over the course of the transition.
- **For prudential supervisors tasked with assessing bank safety and soundness, they can draw on the series of common core elements within private sector transition plans that have emerged in the context of global initiatives.** These elements relate to information about banks' strategic direction, targets and metrics used to monitor progress, governance arrangements, implementation strategy and engagement. Such information is of relevance to supervisors in the context of the Basel Pillar 2 supervisory processes that are used to assess risks to banks' business models, the adequacy of internal governance and risks to capital. Moreover, transition planning information can support banks' approaches to internal credit scoring.
- **We propose a series of principles for supervisors to follow to effectively integrate transition plans into supervision, namely:**
  - **Principle 1:** Integrate transition planning across the supervisory review process
  - **Principle 2:** Focus on substance, not form
  - **Principle 3:** Assess transition and physical risk identification and mitigation measures

- **Principle 4:** Value qualitative information and use it to supplement existing assessments
- **Principle 5:** Remain proportional
- **Principle 6:** Coordinate assessment with other relevant authorities
- **Based on the above principles,** we explore the relevance of transition plans and information about transition planning processes to supervisory assessments of business model risk, internal governance and risks to capital. For each of these dimensions, we identify relevant transition plan elements and sub-elements and set out examples of assessment questions which may be relevant for supervisors to explore in the context of their supervisory review.

## Recommendations

- **Supervisors need to clearly articulate their expectations for bank transition planning practices and coordinate with other regulatory authorities who are developing transition planning requirements with other policy use cases in mind** (e.g. investor protection, financial market integrity). This is critical to ensure that as banks develop and implement transition plans, these meaningfully contribute to the safety and soundness of the institution, without adding to the overall regulatory burden.
- **Supervisors need to set out the criteria that they will apply when integrating transition planning information into supervisory assessments. As a starting point, we recommend that supervisors should expect banks to:**
  - **Adopt a forward-looking approach,** whereby the bank develops a robust assessment of the future business environment and potential uncertainties relating to key risk drivers such as policy, technology, and physical climate change over medium- and long-term time horizons.
  - **Include a robust materiality assessment** conducted by the bank to assess climate change risk exposure with regard to both transition and physical risk over the medium-term time horizon.
  - **Include broad coverage** and a broad scope of transition planning across geographies, sectors and activities to ensure that the banks' risk identification and management practices are adequate and do not leave sizable blind spots and vulnerabilities.
  - **Provide clarity around key assumptions and dependencies,** and that the bank is taking adequate action to mitigate and address risks arising from critical dependencies.
  - **Provide internal consistency** across business lines and functions (e.g. between disclosed transition plans, financial statements and supervisory reporting information).
  - **Include high-quality supporting evidence,** with pledges and commitments accompanied by specific and detailed examples, especially when they have a bearing on risk identification and mitigation at the client or portfolio level.
  - **Rely on science-based targets,** particularly with regard to physical risks and long-term impacts.

# 1. Introduction: the rise and relevance of bank transition plans

Climate transition plans (TPs) are a versatile new tool for use by financial and non-financial firms, policymakers and prudential regulators. For banks, they are an important building block that supports their ability to respond adequately to short-, medium- and long-term risks arising from climate change. For central banks and prudential supervisors, assessing the transition plans and planning practices of banks can help overcome some of the limitations that existing prudential frameworks face when it comes to climate change risks, in particular by supporting the assessment of business models and the adequacy of banks internal governance and risk management.

This report's analysis is designed to support prudential authorities across jurisdictions as they integrate transition plans into their supervisory review and evaluation processes. It articulates how the different aspects of the emerging transition plan governance ecosystem fit together, summarises their common elements, and explains the role that prudential supervision should play within this ecosystem. We develop a framework for identifying how specific elements of transition plans can be integrated into existing supervisory assessment procedures, with a primary focus on climate transition plans (though the approach could be expanded to cover other forms of environmental degradation, as explained below).

## Box 1.1. The distinction between transition plans and transition planning

Throughout this report, we distinguish between the internal transition planning processes of banks and externally disclosed transition plans, following relevant policy literature (see e.g. Network for Greening the Financial System [NGFS], 2023a; International Organization of Securities Commissions [IOSCO], 2024; European Banking Authority [EBA], 2025). This distinction serves to focus supervisory attention on the information relevant to assessing bank processes oriented at identifying, mitigating and managing physical and transition risk in the context of supervisory reporting and evaluation, rather than the outward-facing disclosures.

**Transition planning** is understood to capture the bank's iterative process of developing, implementing, monitoring and adjusting its strategy and physical and transition risk management frameworks.

**Transition plans** are the publicly disclosed outputs of a transition planning process, used to communicate the key aspects of this strategy to a wide range of internal and external audiences.\*

*\*Note that current market practice on the location and format of these disclosures varies for a range of practical, strategic and regulatory reasons. Some firms are producing standalone documents; others integrate the relevant information into existing formats (e.g. annual reports, sustainability reports, reports to the Task Force on Climate-Related Financial Disclosures [TCFD] etc.), or scatter it across multiple documents.*

## Context and approach

Since the Paris Agreement was signed in 2015, an increasing number of firms have been announcing their 'net zero' targets. Climate transition plans have emerged in the private sector initially to provide credibility to such claims by providing further detail on key aspects such as long- and medium-term targets, changes to governance structures and actions planned to deliver on targets. With more and more firms voluntarily developing and disclosing transition plans, policymakers have begun to introduce mandatory requirements and standards to facilitate consistency and convergence, but also to mitigate emerging greenwashing risks (CDP, 2024; EY, 2024; Transition Plan Taskforce [TPT], 2024a; Glasgow Financial Alliance for Net Zero [GFANZ], 2024). Recognition has also grown of the value of transition plans as risk management tools where these involve developing and executing a strategic response to the challenges posed by both the physical impacts of climate change and the various transition risks firms face (Dikau et al., 2022; NGFS, 2023a; NGFS, 2024, Financial Stability Board [FSB], 2024; International Monetary Fund [IMF], 2024).

Climate transition plans are being employed with several different use cases in mind. Internally for firms, transition plans might serve as a tool to develop and implement a strategic response to climate-related risks and opportunities. Firms also use transition plans to demonstrate the credibility and ambition of climate commitments to stakeholders, or communicate changes that are being implemented to align their business models with net zero and strengthen climate resilience. Externally, firm transition plans provide critical information that is relevant for the decision-making of insurers, investors, corporate clients, governments and regulators. Inadequate transition planning may expose firms to strategic, reputational and legal risks.

In this report, we explore the prudential supervisory uses of bank transition plans. Prudential frameworks have struggled to capture climate change risks given the mismatch with available data, the backward-looking nature of capital requirement calculations and the limited time horizons (Dikau et al., 2023; Vandeloise, 2024; Evain et al., 2023; Nieto and Papathanassiou, 2024; FSB, 2025). Integrating transition plan and planning information into prudential frameworks and supervisory review processes can assist in overcoming some of these limitations by providing a forward-looking perspective on bank risk management processes. Given the relative advancement of work on climate transition plans, we focus primarily on climate change-related risks, including transition and physical risks. We note, however, the growing body of literature demonstrating risk drivers linked to other forms of environmental degradation, and the accelerating discussion around the role of nature transition plans as a risk mitigant (NGFS, 2022; NGFS, 2023b; Taskforce on Nature-related Financial Disclosures [TNFD], 2024; Business for Nature [BfN] and CDP, 2024; WWF, 2024; Almeida et al., 2024). The approach put forward in this report can be extended to other risk drivers linked to environmental degradation.

Our approach takes the microprudential mandates of supervisors as a starting point. These focus on the "safety and soundness" of individual banks, thereby contributing to financial stability. We begin, in **Section 2**, by outlining the transition planning governance landscape that has emerged in recent years. In **Section 3** we then explore the relevance of banks' internal transition planning processes and outward-facing transition plans as sources of information relevant to banking supervisors; this analysis builds on previous work by the Grantham Research Institute (see, e.g. Dikau et al., 2024, Després and Miller, 2023; Dikau et al., 2022). Based on this stocktake, we identify the common transition plan elements that – as quantitative and qualitative information – have prudential significance in the context of supervisory analysis of banks' business models, internal governance and risks to capital as part of Pillar 2 assessment procedures within the existing Basel III framework. In addition, transition planning information may support banks' internal credit scoring systems, with an impact on Pillar 1 capital requirement calculations (see Auzepy and Bannier, 2025 for analysis of existing Pillar 1 and Pillar 2 approaches to integrating climate change risks in bank practice). Based on this analysis we propose a series of principles for how supervisors can effectively integrate transition plans into supervision. In **Section 4** we suggest criteria that should underpin the supervisory assessment of bank transition plans.

Transition plans and planning are of interest to prudential authorities beyond the microprudential supervision of banks. Insurers' transition plans have likewise begun to attract attention of supervisors (European Insurance and Occupational Pensions Authority [EIOPA], 2024). Transition plans and

planning practices may also be of relevance to macroprudential authorities, whose primary focus lies on supporting the stability of the financial system as a whole. In this context, transition plans (both from real economy firms and financial institutions) are a promising source of information that enables complementary assessments of climate vulnerabilities and instabilities in the financial system (e.g. see Smoleńska et al., 2025; FSB, 2025). However, these fall outside the scope of this report and will be explored in our future work.

Finally, the risk-based approach described in this report does not preclude, where this is within the scope of an institution's mandate, other regulatory intervention that directly encourages the redirection of financial flows to support a transition towards net zero and climate resilience, in line with Article 2(1)(c) of the Paris Agreement.

## 2. The emerging governance landscape around bank transition plans

Over the past few years, transition plans have received significant attention from policymakers and market actors alike as a tool to support strategic direction and risk management. As a result, banks and supervisors exploring the prudential use case of transition plans today are already faced with a complex governance landscape of existing market practices, frameworks and standards. In this section we explain the main building blocks of this landscape, and their relevance to banks and prudential supervisors. Despite the complexity, we identify a degree of convergence around the specific components of transition plans.

### Building blocks in the transition planning governance landscape

The global transition planning governance landscape is shaped by two key features:

1. **It is comprised of a highly diverse set of governance mechanisms**, ranging from ‘soft’ levers such as changing consumer preferences or expectations expressed by shareholders (individually or through coalitions such as Climate Action 100+) all the way to ‘hard’ levers such as mandatory obligations imposed via laws, regulations or financing conditions.
2. **It has evolved in an asymmetric manner across jurisdictions and sectors**. Whereas companies operating in some countries might only be loosely informed by voluntary guidance, others are already subject to several layers of mandatory requirements, implemented by different regulators with different mandates and policy objectives.

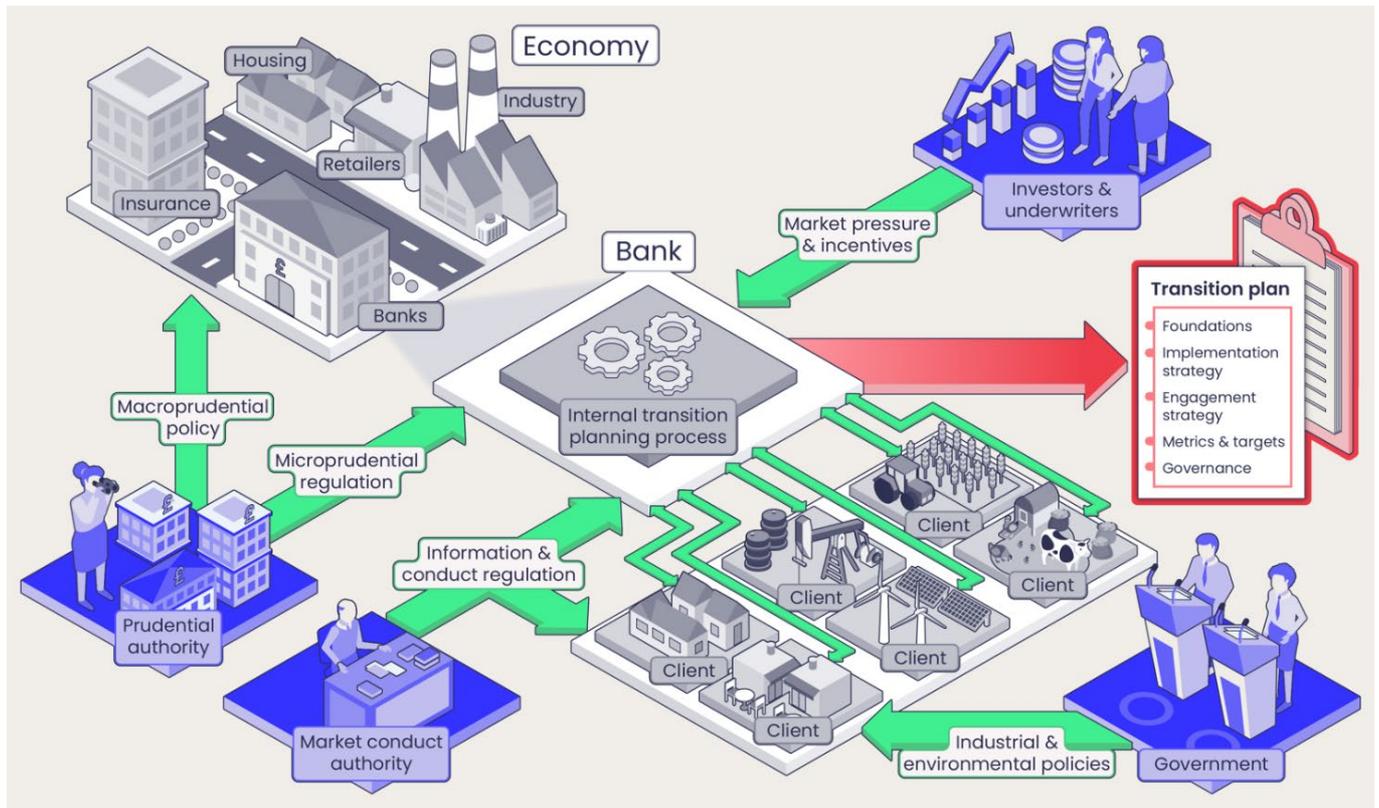
Despite the emerging complexity, it is possible to identify some common ‘building blocks’, as summarised in Table 2.1. Some directly impact both banks and their clients (e.g. transition plan disclosure obligations implemented as part of wider disclosure regimes), whereas others are specific to banks (e.g. microprudential policies).

**Table 2.1. Building blocks of the transition plan governance landscape**

| Building block   | Description  |
|--|--|
| <b>Building blocks that directly impact both banks and their clients</b> |  |
| <b>Internal transition planning processes</b>                            | A firm’s internal, iterative process of developing, implementing, monitoring and adjusting its strategy to manage risks and/or achieve climate objectives. These practices are often informed by voluntary guidance developed by private sector coalitions or other non-governmental organisations (e.g. the Glasgow Financial Alliance for Net Zero [GFANZ]). |
| <b>Conduct regulation</b>  | Regulations imposing a requirement on banks and other private sector entities to develop and/or implement transition plans (e.g. climate-related due diligence obligations such as those embedded in the EU Corporate Sustainability Due Diligence Directive [CSDDD]).   |

|   |   |
|---|---|
| <b>Information regulation</b>   | <p>Mandatory disclosure requirements relating to transition plans (e.g. EU Corporate Sustainability Reporting Directive [CSRD], IFRS S1 and S2, Basel Pillar 3 disclosures related to climate-related risks). These requirements govern what information about their internal transition planning process companies need to make available to the public to inform the decision-making of others.</p> <p>Taxonomies, which provide a classification system to categorise economic activities that are aligned with climate and environmental objectives, can provide benchmarks and thresholds which inform the decision-making of banks as well as their corporate clients, e.g. on capital expenditures (e.g. EU Taxonomy, China's Green Taxonomy).</p> |
| <b>Market pressure and incentives</b>   | <p>Pressure and incentives created by external stakeholders who rely on transition plans to inform a series of decisions (e.g. lending, procurement, underwriting, equity investment, shareholder voting), or who use transition plans to underpin financial products or instruments.</p>   |
| <b>Bank-specific building blocks</b>  |   |
| <b>Microprudential regulation</b>   | <p>Prudential guidelines and requirements implemented by microprudential authorities to ensure that banks' transition planning processes adequately address microprudential concerns (e.g. EBA, 2025; Monetary Authority of Singapore [MAS], 2023).</p>   |
| <b>Macroprudential policy</b>   | <p>Macroprudential assessments and policy calibrations that are implemented to ensure that physical and transition risks are managed at system level (FSB, 2025).</p>   |
| <b>Climate-related credit allocation policy</b>                                 | <p>Green or transition lending target policies that aim to incentivise 'green' lending (e.g. Hungary's Green Preferential Capital Requirement programme which provides a capital requirement discount for green exposures [Magyar Nemzeti Bank/MNB, 2020], or the People's Bank of China's carbon emission reduction facility, which provides interest rate discounts for lending that supports emissions reductions [PBoC, 2021]).</p>   |
| <b>Building blocks that impact banks indirectly by shaping client behaviour</b> |   |
| <b>Sectoral and environmental policies</b>                                      | <p>Economic/sectoral policies related to the low-carbon transition that shape the forward-looking strategies of companies across the economy (e.g. emissions trading systems, subsidy schemes, sectoral decarbonisation pathways, energy efficiency standards, technology or product bans).</p>   |

It is important to note that bank transition plans are also indirectly shaped by the various industrial and environmental policies that impact the current and future behaviour of their clients. Figure 2.1 provides an illustration of how these are related and shape the transition planning processes and the resulting transition plans of banks.

**Figure 2.1. The governance landscape of transition plans**

Source: Authors

## Transition plans and planning elements

Despite the multitude of frameworks and requirements that have emerged in recent years, it is possible to identify several common **core elements** of private sector transition plans (see e.g. Becker et al., 2024; TPT, 2024a). These can be meaningfully grouped following the five element structure used by several reference documents, including those developed GFANZ, the Transition Plan Taskforce (TPT) in the UK, and the European Banking Authority (EBA), which are widely applied by banks around the world (GFANZ, 2024) (see Table 2.2 for a summary, along with examples of information or data commonly included within each element that could be of particular relevance to supervisors). Importantly, these elements are not sequential. Institutions develop them in an iterative process involving monitoring and regular review. In any given year, organisations may be at different stages of advancement, and the degree of sophistication will evolve and deepen across all elements over time.

At a strategic level, transition planning requires the definition of overarching objectives and ambitions for the plans, an analysis of key dependencies and assumptions, and the integration of these into the business strategy and model of the bank (**'foundations'**). Companies need to operationalise objectives internally, introducing changes to their operations, policies and conditions, product offerings and integrating these changes into their financial plans (**'implementation strategy'**). Given (inter)dependencies across entities and sectors, achieving firm-level ambitions will likely depend on actions taken by others (e.g. suppliers, customers, public authorities). This creates a need for external engagement as part of a transition plan (**'engagement strategy'**). Transition plans need to be underpinned by a clearly defined set of metrics and targets which are used to monitor implementation and progress (**'metrics and targets'**). Finally, transition planning efforts need to be supported by and integrated into internal governance structures. For example, firms need to allocate responsibility for the oversight, design and delivery of the plan across the board, senior management and individual business divisions and align incentives to the delivery of the plan (**'governance'**).

Each of these five elements involves decisions and actions that have an impact on the future business model, risk exposure and competitiveness of a company over time. In the case of banks, decisions taken as part of transition planning processes have an impact on the overall safety and soundness of the institution and are therefore of relevance to micro-prudential supervisors. Transition planning helps shed light on aspects of bank strategy that previously may have escaped supervisory assessment. For example, information about how a bank expects certain sectoral or geographical portfolios to change in relation to science-based benchmarks, as well as key dependencies they have identified for meeting specified targets, can support the forward-looking assessment of resilience of the business model, risks to capital and market risks.

**Table 2.2. Example core elements of transition plans**

| Elements                       | Sub-elements                                | Example of sub-element-related information that could be relevant to prudential supervisors   |
|--------------------------------|---|---|
| <b>Foundations</b>             | Strategic objectives and long-term goals    | High-level strategic objectives articulated to manage climate change risks<br>Evidence of short-, medium- and long-term objectives to reduce financed and facilitated emissions (e.g. a net zero by 2050 target)<br>Information on alignment/misalignment compared with relevant climate pathways |
|                                | Scope (climate change, environmental risks) | Information about what scope of risks the TP responds to (e.g. climate-related and/or other environmental risks such as biodiversity, transition and/or physical risks)   |
|                                | Coverage (in relation to business model)    | Coverage across sectors, business lines and geographies<br>Evidence of sectoral segmentation throughout the TP  |
|                                | Assumptions and dependencies                | Information on specific underlying assumptions (e.g. on technological developments) or dependencies that may impact TP implementation (e.g. reliance on actions by third parties)   |
|                                | Scenarios<br><i>[see Box 2.1 below]</i>     | Choice of scenario provider<br>Robustness of the underlying scenario analysis used to inform and design the TP, including choice, assessment of relative likelihood and possible calibration of scenarios   |
| <b>Implementation strategy</b> | Business operations (core activity)         | Integration of client climate-related risk and client TPs in assessment and credit origination processes  |
|                                | Products and services                       | Offer and pricing of sustainable and transition finance products  |
|                                | Policies and conditions                     | Information about sustainable and transition finance frameworks used<br>Engagement, escalation and exclusion policies (e.g. towards high emitting sectors)<br>Pricing policies  |
|                                | Financial planning                          | Expected financial impact of planned changes e.g. on revenues over medium and long-term   |

|                            |                                    |   |
|----------------------------|------------------------------------|---|
| <b>Engagement strategy</b> | Public policy engagement           | Information about actions taken to address policy dependencies (e.g. direct or indirect lobbying)   |
|                            | Client engagement                  | Climate change-related engagement and dialogue to access data, understand progress, communicate priorities with counterparties, and inform decision-making in business operations   |
| <b>Metrics and targets</b> | Greenhouse gas metrics and targets | Metrics and targets used to monitor progress on emissions reductions, e.g. targeted decarbonisation pathway for portfolio segments (e.g. by geography or sector), including information about any underlying methodologies or definitions   |
|                            | Financial metrics and targets      | Financial metrics and targets used to monitor progress of the TP (e.g. green or transition lending targets), including information about any underlying methodologies or definitions  |
|                            | Other metrics and targets          | Other metrics and targets used to monitor progress of the TP (e.g. portfolio alignment metrics, energy efficiency of residential mortgage portfolios, fossil fuel/clean lending ratios, taxonomy-based metrics, references to client CapEx/OpEx)  |
| <b>Governance</b>          | Board oversight                    | Role of the board in setting climate-related risk appetite and assessing progress in transition planning<br>Information about board climate competencies  |
|                            | Roles and responsibilities         | Information about internal distribution of responsibilities related to the development and implementation of the TP<br>Incorporation of physical and transition risk assessments across the bank's lines of defence<br>Information about the allocation of responsibility for monitoring progress over time |
|                            | Incentives                         | Information about integration of climate change-related risk management and TP objectives into remuneration policies  |
|                            | Internal capacities                | Allocation of resources to training/internal culture  |
|                            | Data systems                       | Policies and procedures to ensure data quality  |
|                            | Assurance                          | External assurance/audit of disclosures, use of external validation of targets  |

**Box 2.1. Understanding the link between scenarios, scenario analysis and transition plans**

A key common feature of transition planning processes is their reliance and anchoring in so-called climate scenarios. Scenarios are defined by the Network for Greening the Financial System (NGFS) as “plausible description[s] of how the future may develop based on a coherent and internally consistent set of assumptions about key driving forces (e.g., rate of technological change, prices) and relationships” (NGFS, 2025). Banks will commonly reference scenarios such as those produced by the Intergovernmental Panel on Climate Change (IPCC), International Energy Agency (IEA), Joint Research Centre (JRC) and the NGFS.

Climate scenarios frequently inform bank transition plans and planning processes in two different ways:

**(1) Scenario analysis as an analytical tool to identify risks and opportunities**

For transition plans to meaningfully contribute to a bank’s resilience, they need to be grounded in a robust understanding of the bank’s exposure to climate change risks and opportunities over the short, medium and long term. Traditional, probabilistic approaches to risk identification and management face significant limitations here, given the many uncertainties involved in assessing the impacts of a transition shaped by deep interdependencies across political, economic and physical systems. Scenario analysis is a critical tool in this context. Defined by the NGFS (2024b) as “a process of examining and evaluating possible future events”, scenario analysis offers banks and other entities a structured approach to assessing their climate-related risks and opportunities under a range of plausible futures.

This analysis is a critical input into a bank’s transition planning process. It helps banks identify which risks they may be exposed to, which business areas are most likely to be vulnerable, and how the external environment could evolve. These insights are essential building blocks that allow a bank to define a transition plan that meaningfully contributes to resilience.

**(2) Scenarios as an input to target-setting and benchmarking**

Distinct from the above, banks may also use scenarios to inform the strategic ambition and targets of the transition plan. For example, they may use so-called ‘goal-seeking’ or ‘normative scenarios’ that are defined around the objective of limiting global warming to below a particular temperature threshold by 2050, and outline possible pathways for achieving this outcome. For example, the IEA’s Net Zero Emissions by 2050 Scenario (NZE) shows a pathway for how the global energy sector could achieve net zero CO<sub>2</sub> emissions by 2050. This is frequently used by banks to set portfolio decarbonisation targets and benchmark progress over time, in particular for their energy sector portfolios.

It is important to note that banks the scenarios banks decide to use as a basis for their scenario analysis may be different from those they use to benchmark the ambition of their transition plan. For example, they may be interested in assessing the risks their portfolio will be subject to under an extreme warming scenario, but set targets in line with a scenario that would have a high likelihood of limiting global warming to 1.5°C.

### 3. Transition plans in supervisory processes

Transition planning processes trigger bank-wide changes designed to enable adequate management of material risks related to climate change. All elements of a transition plan are relevant in this context. Setting strategic direction requires a sophisticated, forward-looking assessment of the business environment. By operationalising the strategy, e.g. through the introduction of new client engagement processes and updates to the product and services offer, banks are taking action to identify and mitigate climate risks. Clear targets enable the measurement of progress over time, while allocation of responsibilities across decision-making structures supports accountability and delivery. As a result, prudential supervisors see the potential of transition planning to supporting risk management (NGFS, 2023a; FSB, 2025; EBA, 2025). Further, consistently integrating bank transition planning into supervisory assessment processes can contribute to banks' medium- and long-term resilience.

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Climate and environmental risks are material to banks and other financial institutions. Evidence suggests that banks currently underestimate these risks, and therefore manage them inadequately. This undermines the safety and soundness of individual institutions with potentially destabilising effects for financial systems. In addition, several features of the Basel prudential framework obscure banks' ability to adequately integrate physical and transition risks of climate change, especially the backward-looking nature of the risk modelling approaches and the short time horizons (of one to three years) of some of the prudential requirements. Key climate change-related datapoints – such as greenhouse gas emissions or geolocation of exposures – are not systematically integrated into risk management frameworks.

While the reforms made to the Basel framework following the Great Financial Crisis have sought to develop a more forward-looking risk approach, especially under Pillar 2 (e.g. with regard to stress testing), these are oriented at assessing banks' resilience to extreme or one-off events, rather than to consistent accentuation of risk factors, such as those that characterise climate change. In fact, most existing climate change models underestimate the risks of climate change, as made evident *inter alia* by the increased realisation that its physical impacts are already materialising in the short term (NGFS, 2025).

Given the financial stability impacts that such a systemic underestimation of risk entails, central banks and prudential authorities have begun to explore new tools, such as climate-related stress tests, to provide a more accurate picture of the transition and physical risk impacts of climate change, as well as the related trade-offs (Demekas and Grippa, 2021; NGFS, 2020; ECB 2022; EBA/ECB, 2024). Such macro-level assessments reinforce the need to develop new micro-approaches to identify the specificity of climate change-related risks and manage them adequately.

### Box 3.1. Emerging regulation on bank transition planning

In recognition of the importance of transition planning practices by financial institutions, some microprudential authorities have already developed or are in the process of developing expectations and requirements related to bank transition plans (NGFS, 2024a).

For example, in the EU a recent update to the Capital Requirements Directive (CRD6) introduced a new requirement for banks to develop a plan for the assessment of risks arising from the process of transition in the short, medium and long term. The details of the requirement are outlined in dedicated guidelines published in 2025 by the EBA: *Guidelines on the management of environmental, social and governance (ESG) risks*. These guidelines specify requirements related to the governance of transition plans, key transition planning processes (e.g. scenario analysis and materiality assessments), the content of the plans, and the processes in place to monitor, review and update the plans. Overall, the guidelines are designed to ensure that institutions comprehensively assess and embed forward-looking environmental/social/governance (ESG) risk considerations in their strategies, policies and risk management processes.

Similarly, in 2023 the Monetary Authority of Singapore launched a consultation paper on proposed guidelines on transition planning for banks (alongside concurrent consultations for insurers and asset managers) (MAS, 2023). The draft guidelines specify that banks should take a multi-year view for the continued sustainability of their business models, engage their customers on the need to adopt mitigation and adaptation strategies, put in place clear, actionable and decision-useful risk appetite statements to guide implementation, continue efforts to address environmental risks beyond climate-related risks, and communicate their transition planning process to stakeholders (e.g. via disclosed transition plans).

Transition plans and planning offer a promising new tool in the prudential toolbox because they have a direct bearing on the bank's risk profile. A transition plan that is grounded in, and provides a forward-looking response to, a comprehensive assessment of the bank's climate change exposures over medium- and long-term time horizons is a critical tool for supporting bank resilience. For example, how a bank integrates climate considerations into financing decisions, collects relevant information about clients and their transition plans, and engages with clients on their transition plans over time will determine its ability to identify and manage a broad range of emerging risks over time. Similarly, the absence of such plans may indicate that banks may not be adequately identifying, analysing and mitigating climate-related physical and transition risks in the near term. Aspects of transition planning therefore support implementation of Basel Pillar 1 capital requirements, where banks may explore different ways of integrating climate change risk factors within their internal risk scoring (e.g. relating to transition and physical risk impacts on probability of default or loss given default, see: Auzepy and Bannier, 2025; BCBS, 2022a). They are also of direct relevance to Pillar 2, which allows banks to further explore additional sources of material risk as part of Internal Capital Adequacy Assessment Processes (ICAAP), and supervisors to review bank approaches with financial stability considerations in mind (BCBS, 2022b).

Pillar 2 of the Basel Framework is intended to enable supervisors to conduct in-depth assessments of the risk profiles and risks management frameworks of banks in a forward-looking and comprehensive manner, taking into account the heterogeneity of bank business models and approaches. Jurisdictions have adopted different approaches to implementing Pillar 2 (Basel Committee on Banking Supervision [BCBS], 2019). Some are more principle-based (as in the case of the UK's Prudential Regulation Authority's [PRA] approach to banking supervision), while others have opted for a more structured and formalised approach (as in the case of European Central Bank [ECB] following the EBA Supervisory Review and Evaluation Process [SREP] Guidelines of 2022). However, in broad terms supervisory reviews generally include assessment of business model risks, the quality of internal governance (including risk control systems), and risks to capital.<sup>1</sup> Supervisors

<sup>1</sup> The fourth pillar of the assessment involves assessments of bank liquidity risks, which we do not explore in this report, given that the understanding of transition risk impacts on liquidity is at a relatively early stage compared with capital risk impacts (de Bandt et al., 2024).

assess these dimensions on the basis of information gathered from a broad range of sources. This includes direct engagements such as meetings with staff and onsite inspections, materials provided confidentially by the banks (e.g. Board or Executive Committee reports), third party reports and audits, public disclosures (e.g. annual reports, Pillar 3 disclosures for banks) and regulatory reports submitted as part of dedicated supervisory processes (e.g. financial reporting [FINREP]/common reporting [COREP]). Inadequacies and shortcomings uncovered in the supervisory review process may have consequences in the form of supervisory direction, fines or additional capital requirements.

Some prudential regulators are already expanding the scope of Pillar 2 assessment to introduce a bespoke process for climate change risk assessment, while others are introducing mandatory transition planning requirements to support supervisory objectives (see Box 3.1 above). However, even in the absence of articulated prudential expectations, transition plans developed by banks are relevant to supervisors who are assessing the adequacy of bank transition risk management (Bank of England, 2025). Information about a bank's transition planning processes shows how a bank is developing, operationalising and implementing a strategy that responds to the physical and transition risks it faces. This enables a more nuanced understanding of whether the bank is likely to remain resilient to evolving climate change-related risks over time.

Where a lot of bank transition planning information is already being made available in the form of disclosed transition plans, banking supervisors will need to meaningfully engage with public disclosures in this context. These are relevant as a standalone source of detailed information about the bank's forward-looking strategy, but also because any inconsistencies found between publicly disclosed transition plans and information received via the other channels outlined above could be a cause for concern (See Box 3.2). Equally, the absence of any evidence of internal transition planning processes may suggest that a bank's internal processes for assessing risk materiality are inadequate.

### Box 3.2. Climate litigation: a growing challenge for banks

Banks are facing growing risks associated with climate-related litigation, both lawsuits directly against the institutions and legal challenges impacting their clients and counterparties. Forthcoming analysis by Smoleńska et al. (2025) of bank disclosures reveals significant variations in how banks identify, assess and mitigate this emerging threat. In particular, bank practices reveal:

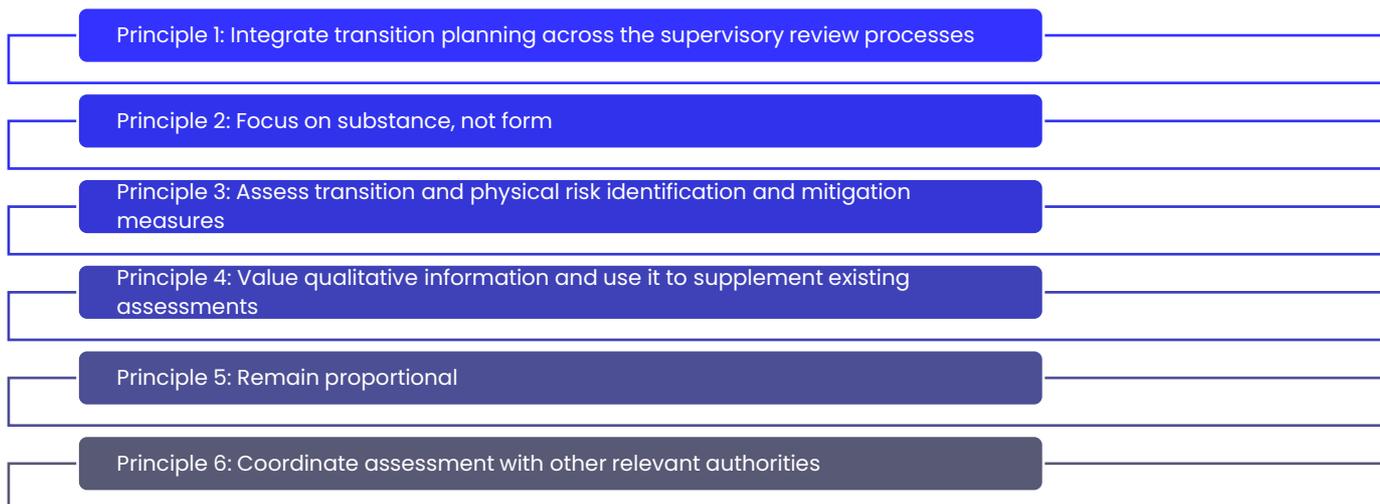
- **Heterogeneity of approaches:** Many banks focus on regulatory compliance and greenwashing, but give less attention to litigation stemming from physical climate risks, transition mismanagement or human rights concerns. There are also inconsistencies in how banks link climate litigation to traditional financial risk categories, such as credit, market and operational risk. This can lead to inadequate capital allocation and risk management practices.
- **Over-reliance on disclaimers:** Banks rely heavily on waivers and disclaimers, particularly through forward-looking statements as a way of mitigating their risks, which suggests a lack of confidence in their own ability to accurately assess and manage climate-related risks.
- **Underestimation of physical risk:** Banks often overlook the potential for litigation arising from physical climate risks, such as 'failure to adapt' cases related to residential mortgages or damages to collateral.

Given the revealed shortcomings in risk management, clearer supervisory guidance is needed. Banks should integrate climate litigation considerations into their internal transition planning processes, develop robust scenario analysis and engagement strategies to address these evolving risks, and consider the impact of litigation on both the bank and its clients.

## Principles for integrating bank transition plans into prudential frameworks

We propose that as banks use the discretion available within Basel Pillar 2 to accommodate growing climate change-related risks over the medium and long term (BCBS, 2022; NGFS, 2020), they should be guided by a series of core principles. These are shown in Figure 3.1.

### Principles for integrating transition planning into prudential oversight



**First, supervisors should use information generated in the context of bank transition planning processes to inform their assessments of resilience of banks' business strategies and risk management.** Given that climate risk is now identified as a material concern from a risk perspective, this information will provide important context that can allow supervisors to strengthen their assessment, in a forward-looking manner, of the adequacy of banks' business models, internal governance and risk management approaches. For example, transition plans developed for regulatory use cases other than prudential still allow supervisors to assess the bank's position in a forward-looking manner, also considering planned future actions and targets, and benchmarking these against scenarios, transition pathways and stated policy ambitions. Rather than being evaluated on a standalone basis, information about transition plans and planning should be used by supervisors to ask more informed and targeted questions in existing reviews of the robustness of banks' risk identification, mitigation and management procedures (see also Figure 3.2 below). Integrating transition plans in supervisory processes requires supervisors to develop dedicated supervisory expectations, internal capacities and relevant methodologies.

**Second, supervisors' approach to transition plans and planning should be substantive and holistic rather than focusing only a singular output (e.g. a standalone, disclosed transition plan).** Transition planning information can be found not only in standalone transition plans, but also across other types of disclosures (e.g. annual financial reports) or confidential supervisory reporting. Supervisors should be equipped to identify forward-looking information relevant to physical and transition risks across sources irrespective of the specific format that the information is disclosed in (e.g. non-financial disclosure, standalone transition plans, or confidential information received in the context of supervision).

**Third, supervisors should use transition planning information to assess the adequacy of banks' risk identification and mitigation measures.** A bank's transition planning process should strengthen its ability to identify and manage both physical and transition risks over time. Supervisory assessments should use transition plan information to assess the adequacy of how banks identify and measure the risks they are facing (the risk identification dimension) and the actions taken to minimise and address climate change-related risks (the risk mitigation dimension). This includes developing approaches for understanding whether banks' inadequate transition planning practices expose them to legal risks, for example when they breach a duty of care to stakeholders, provide misleading

statements to the markets or engage in greenwashing (Di Maio et al., 2023; Smoleńska et al., forthcoming; Art. 74 and 76(2) CRD6). Transition planning information reveals the extent to which banks' stated risk appetite is commensurate with the risk assumed. These decisions may also evolve over time as external circumstances change, raising the importance of internal decision-making structures.

The adequacy of risk management actions should also take into account that the speed and scale of economic transition today is a key determinant for the physical and transition risks that are likely to materialise over the medium and long term. Supervisors should further consider whether banks are taking into account interactions and trade-offs between physical and transition risks and integrating them into risk management. This means that the climate change impacts of a bank's activities are relevant for supervisory assessment, even where these are not immediate drivers of short-term, entity-level climate change-related financial risks (e.g. if the likelihood of sudden policy interventions or asset price adjustments affecting part of the bank's portfolio is slim).

**Fourth, supervisors should use transition plans to supplement existing assessment processes and not underestimate the value of qualitative information.** Information related to transition plans and planning provides a forward-looking view from the perspective of the firm and its senior leadership about the future direction of travel and resilience of the entire organisation. As voluntary and mandatory transition planning practices are evolving, concerns have been raised about their qualitative rather than quantitative nature, with some experts arguing that this creates significant variation, thus undermining comparability (e.g. OECD, 2023; FSB, 2025). However, in their transition planning efforts banks need to make a series of strategic choices (e.g. whether to prioritise divestment from high-emitting entities or sectors, invest in climate solutions, or carry out engagement to support managed phase-outs), which will have a significant impact on planned actions and relevant metrics of progress. Qualitative information contains important context about the assumptions, objectives and perceived trade-offs that underpin the entirety of the plan, as well as forward-looking information about banks sectoral engagement strategies. Qualitative information about aspects such as the underlying strategies or the governance structures put in place to manage change over time therefore offer critical contextual information that supervisors can use to assess the adequacy, robustness and appropriateness of risk identification and mitigation procedures. The value of qualitative information should therefore not be discounted.

**Fifth, integration of transition planning expectations in prudential supervision should be proportional.** Proportionality as a principle serves to ensure that the aims of the policy intervention are achieved with the least burden on entities. Proportionality may be achieved by requiring different levels of sophistication from smaller and large banks, reduced frequency of reporting or less granular requirements. An approach applying proportionality on the basis of firm size may overlook important concentrations of climate change risk arising in the context of specialised business models (e.g. specialised lending related to shipping or agriculture or concentrated exposures in particular geographical locations exposed to chronic climate change impacts). Supervisors should therefore develop mechanisms for particular vulnerabilities, arising as a result of climate change-related concentrations of risk in small institutions too. A further tool could be to introduce 'red flag' approaches, e.g. treating the absence of an adequate materiality assessment of transition risks as the basis for additional dedicated dialogue with banks on climate change risk management. Furthermore, supervisors may adopt a more proactive approach to closing methodological gaps in bank practices, e.g. by engaging in the development of methodological approaches related to transition risk identification and management.

**Finally, integration of transition plans into the microprudential assessment would be supported by closer collaboration between supervisors and other authorities.** For example, environmental agencies could be consulted with regard to the assessment of the credibility of scenarios. Collaboration with meteorological institutes may support supervisors' understanding of physical risks. In addition, where the pace and scope of transition in the banking sector may have broader systemic implications, information emerging in the context of transition planning should support coordination of micro- and macro-prudential assessments (Smoleńska et al., 2025).

### Box 3.3. Quantitative metrics and qualitative information in bank transition plans

Credible transition planning relies on clear metrics and qualitative information that should underpin governance adjustment and implementation. As showcased in a recent OECD report, existing net zero frameworks followed by banks fall short in this regard (OECD, 2023). In particular, they often lack quantifiable metrics (relying on qualitative information instead), have methodological gaps regarding calculation, use inconsistent terminology, do not have provisions for measuring progress, and feature gaps in key areas such as the use of carbon offsets. Nevertheless, as highlighted by the Financial Stability Board (FSB), advances in machine learning and supervisory technologies offer better prospects for supervisors to integrate qualitative information into their assessments (FSB, 2025).

Increasingly concrete climate change risk metrics are being identified, and dedicated disclosure requirements introduced (EBA, 2022; BCBS, 2023). Bank transition planning information can provide information that is relevant to financial stability through different channels, such as firms' strategy-setting and climate-related risk management, and forward-looking information supporting investment decisions and indicators for macro-monitoring of transition risks, both in the financial system and the real economy. Examples of such quantitative information may include:

- Current and expected exposure to climate risks under different scenarios
- Current and expected exposure to assets at risk of being stranded in the short, medium or long term
- Current and expected absolute value/share of revenues derived from emissions-intensive sectors
- Amount and share of income related to business with counterparties operating in emissions-intensive sectors
- Amount and share of counterparties operating in emissions-intensive sectors, with credible transition plans in place
- Concentrated exposures in sectors or geographies vulnerable to climate risks
- Planned real economy CapEx investments in climate mitigation and adaptation
- Current and expected alignment of the portfolio (total or key segments) to climate scenarios
- Percentage of total counterparties with whom institutions actively engages on transition-related challenges

## How to integrate bank transition plans into supervisory assessments

In recent years, we have seen the emergence of multiple methodologies for the assessment of banks' climate targets and transition plans (see e.g. the Assessing Transition Plans Collective [ATP-Col], World Benchmarking Alliance [WBA], Transition Pathway Initiative [TPI], and the Science-Based Targets initiative [SBTi]). These have each been developed with the perspective and questions of specific user groups in mind. Often, they explicitly eschew the question of implications of the transition planning approach for risk management.

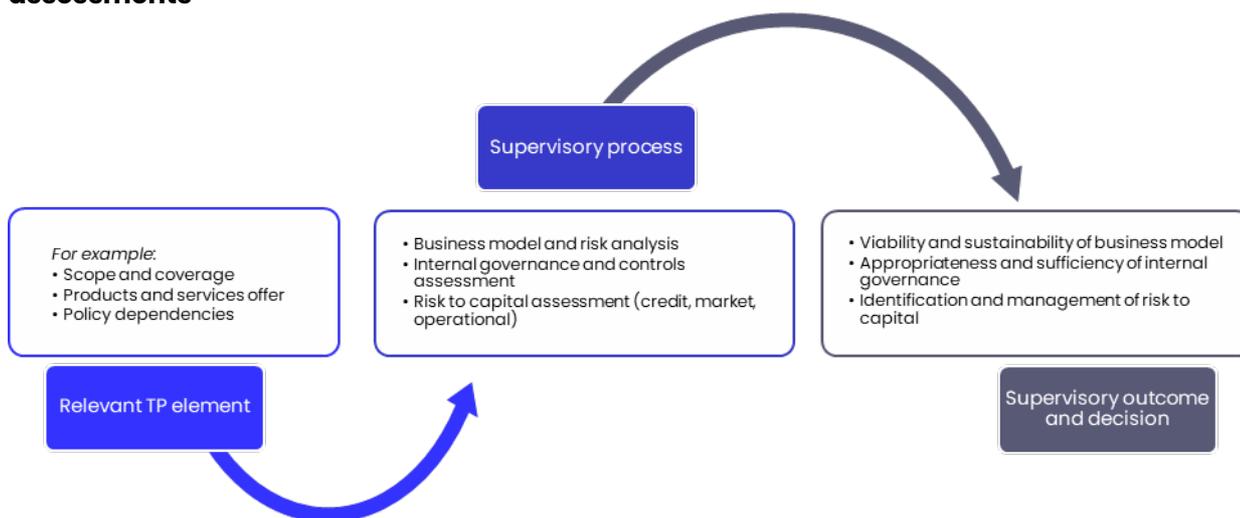
To address this gap, we explore the relevance of transition plans and information about transition planning processes to supervisory assessments under Basel Pillar 2 along the following three dimensions:

- Business model risk
- Internal governance
- Risk to capital.

For each of these dimensions, we propose questions that may be used by supervisors in the context of their supervisory review and related dialogue with banks (provided in the tables below). These are illustrative in nature and not intended to be comprehensive. However, they show how specific information generated through the transition planning process may be integrated into the existing engagements between supervisors and banks, with a view to improving supervisory assessment by enabling the consideration of forward-looking information (see Figure 3.2).

To further support the practical integration of these considerations into supervision (and especially Pillar 2 processes discussed above), we further draw the link between each of these dimensions and the relevant sub-section of the EBA 'SREP Guidelines',<sup>2</sup> as well as the relevant elements of the risk assessment framework set out in the PRA's approach to banking supervision<sup>3</sup> (p. 17). This approach can also be applied in other jurisdictions that have implemented the Basel Framework.

**Figure 3.2. Integration of relevant transition plan elements within Basel Pillar 2 supervisory assessments**



Source: Authors

Where the outcomes of such an expanded supervisory assessment reveal inadequacies in banks' practices, in line with the existing supervisory mandates, authorities should consider using their powers to remedy the shortcomings, including through mandatory requirements (e.g. regarding board management, change of practices, maximum distribution allowance), setting additional capital requirements (Pillar 2 Guidance) or imposing fines.

### Transition planning and bank business risk assessment

Relevant to:

- EBA's SREP Guidelines: Title 4 Business model analysis
- PRA's Risk Assessment Framework: Business risk

Transition plans and internal evidence of transition planning processes contain information about expected changes to a bank's strategy and business model in response to identified physical and transition risks. Overall, using transition plans and planning information can enable supervisors to make a better judgement about the viability, sustainability and resilience of a firm's business model and strategy. Supervisors can leverage transition plan-related information to assess climate-related vulnerabilities of the business model risk, as well as the adequacy of the bank's responses to such vulnerabilities. Furthermore, the deployment of the principles-based approach we have outlined here would allow supervisors to address some of the concerns related to business model risk assessment, such as profitability concerns or key vulnerabilities of the bank, from the perspective of long-term resilience (see EBA, 2022, p. 47).

<sup>2</sup> See EBA (2022) *Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP)* and supervisory stress testing under Directive 2013/36/EU.

<sup>3</sup> See Bank of England (2023) *The Prudential Regulation Authority's Approach to Banking Supervision*.

**Table 3.1. Assessment of business model risk**

| Relevant TP sub-element(s)  | Examples of relevant assessment questions  |
|---|--|
| <b>Foundations: strategic objective and long-term goals, scope, scenarios</b> | How plausible is the bank’s assessment of how the external business environment will change as a result of both physical climate change impacts and impacts from the economy-wide transition towards net zero?<br>How does the bank assess the interaction and trade-offs between transition and physical risks? |
| <b>Foundations: assumptions and dependencies</b>                              | How plausible are the assumptions that the bank makes in the development and design of its strategy?<br>How clear is the bank about the dependencies/external factors that shape its capacity to implement its transition plan and therefore manage risks?   |
| <b>Foundations: business model and value chain</b>                            | What vulnerabilities to the business model result from planned changes (or lack thereof) to sectoral/geographical distribution of financing activities?  |
| <b>Implementation strategy: products and services, financial planning</b>     | What are the risk implications of the strategic changes (or lack thereof) the bank is making to its portfolio of products and services, including any planned changes to activities in particular geographies, business lines, sectors or product lines?   |

**Transition planning and internal governance assessment**

|  |
|--|
| <p>Relevant to:</p> <ul style="list-style-type: none"> <li>- EBA SREP Guidelines: Title 5: Assessing internal governance and institution-wide controls</li> <li>- PRA’s Risk Assessment Framework: Management and governance; Design and effectiveness of the Board and Senior Management; Risk management and controls</li> </ul> |
|--|

Governance, including board oversight and organisational mainstreaming of transition planning, is one of the key components of transition planning. In the case of financial institutions, related disclosures frequently include information about the implications of transition planning’s internal management, governance and control. Disclosed transition plans may also demonstrate the internal governance structures that the bank relies on to inform decision-making over time, in a context where external circumstances are likely to change rapidly. Engaging with transition plan information allows supervisors to better assess a bank’s corporate values and risk culture, the adequacy of its board and management, and its internal governance and controls system in relation to climate change risks.

**Table 3.2. Assessment of appropriateness of internal governance**

|   |  |
|---|--|
| <b>Foundations: scenarios, assumptions and dependencies</b>   | Is the bank’s assessment of its climate-related risk exposure across different time horizons and scenarios adequate? Do its stress tests adequately incorporate considerations of physical and transition risks, and trade-offs between the two? |
| <b>Implementation strategy: business operations, products and services, policies and conditions</b> | Have climate-related considerations been sufficiently integrated into strategic approaches to client relationships, beyond individual lending decisions (e.g. in advisory or underwriting engagements, sectoral policies etc.)?                  |

|  |  |
|--|--|
| <b>Governance:</b> board oversight   | Are the organisational arrangements for the review and approval of the TP, including oversight for changes and updates to the plan over time, adequate?<br><br>Do the management board members have suitable understanding of physical and transition-related challenges (e.g. in light of the bank's business model)?   |
| <b>Governance:</b> incentives  | Has the bank effectively embedded the transition plan and related policies in incentives and remuneration structures across the bank?  |
| <b>Governance:</b> roles and responsibilities, internal capacities   | Have climate-related risk considerations been adequately integrated across the organisation (including via the reallocation of responsibilities, organisational mainstreaming, evolution of risk culture, training and communication)?   |
| <b>Governance:</b> incentives, roles and responsibilities  | Has the bank's transition plan and related policies been effectively communicated to relevant staff across all levels of the institution?  |
| <b>Governance:</b> roles and responsibilities  | Have climate-related considerations been adequately integrated across the internal control functions (e.g. risk management, internal audit)?   |
| <b>Governance and implementation strategy:</b> business operations, financial planning, roles and responsibilities | Has the bank effectively integrated transition planning considerations into its risk management and control frameworks and processes?<br><br>Are its internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP) processes effective and comprehensive regarding climate risks? Have transition and physical risk considerations been integrated consistently across methodologies and grounded in appropriate empirical data sources? |
| <b>Governance:</b> Internal capacities   | How are banks supporting capacity-building among staff, including capacities to assess new and novel technology- or sector-specific risks?   |

### Transition planning and bank risk to capital assessments

Relevant to:

- EBA SREP Guidelines: Title 6: Assessing the risks to capital; Title 7: SREP capital assessment
- PRA's Risk Assessment Framework: Capital

Assessment of risks to capital under Pillar 2 reviews entails supervisory assessment of the exposures and mitigation measures undertaken by the bank. The outcomes of this assessment are consequential where banks' own internal risk management and controls are found inadequate, leading to the risk of significant prudential impact on the bank and/or insufficient level of own funds held by the bank. In such cases the supervisors may require a bank to hold additional capital (under the Pillar 2 Capital Requirement) or instruct it to address specific deficiencies through other measures, that could be qualitative, supervisory measures.

In this section we consider how transition plan information can be relevant for the purpose of identifying and assessing climate-related factors as drivers of three key types of risk – credit, market and operational. While our approach is focused on Pillar 2 assessments of banks, we highlight how specific aspects, such as the internal scoring approaches of model risk more broadly, have a direct bearing on Pillar 1 capital requirements. We explain how transition planning information can help supervisors assess the adequacy of the approaches banks take to manage relevant risk exposures. In the case of credit risk management, we find particularly that any aspects relating to the

interaction between banks and their clients and how the bank integrates information about client transition plans into their own decision-making becomes relevant.

### **Credit risk**

Credit risk relates to the possibility of a loss resulting from a borrower's failure to repay a loan or meet contractual obligations. It encompasses the risk that a counterparty will not settle a financial transaction due to either inability or unwillingness to fulfil their financial commitments. Physical and transition risks can induce a deterioration in borrowers' ability to repay their debts and a depreciation of assets used for collateral. They impact, therefore, on the probability of default (where they may put creditors under additional strain), and loss given default (where value of collateral may be affected, e.g. by floods or regulatory interventions regarding energy efficiency). Basel rules require banks to hold specific capital for the event of unexpected losses resulting from credit risk (under Pillar 1). In addition, ICAAP processes, and related assessments by supervisors under Pillar 2, ensure that banks have additional capital to cover relevant risks, beyond the regulatory minimums.

Supervisory reporting and assessment under Pillar 2 allow supervisors to identify the inherent credit risk over extended time horizons and assess banks' risk management and controls. Where transition planning entails information related to the sectoral/geographical strategies of banks, it should underpin supervisory assessments related to the nature and composition of credit portfolios. Very frequently, banks take a sectoral approach in their transition plan, setting specific targets and defining bespoke strategies in relation to sectoral segments of their portfolio. Given this approach, information about transition planning can also support the identification of concentration risks, especially at the portfolio level (Després and Miller, 2023). At the level of individual counterparties, information on alignment/misalignment of firm transition plans is relevant for the assessment of business and financial risk of the borrower. Integrating information about the transition plans of counterparties supports assessments of credit risk in a forward-looking manner by integrating information about the decarbonisation strategies (phase-out; transition-related investments). Furthermore, granular information about transition CapEx alignment as part of a transition plan may constitute evidence of transition risk being addressed.

**Table 3.3. Assessment of risk to capital (credit risk)**

| <b>Risk to capital</b>  | <b>Relevant TP sub-element(s)</b>  | <b>Suggested assessment question</b>  |
|---|--|---|
| <b>Credit risk identification and measurement (inherent risk)</b> | <b>Implementation strategy:</b><br>business operations, products and services, policies and conditions | Does the bank have the adequate policies and controls in place to identify climate change-related risk exposures of clients that significantly increase the latter's risk of default?<br><br>Does the bank differentiate clients on the basis of their climate change risk exposure?  |
|   | <b>Implementation strategy:</b><br>business operations, policies and conditions                        | Does the bank have effective processes for assessing climate-related risks in the loan origination processes, including potential legal and reputational risks that could arise as a result of working with a particular client?  |
|   | <b>Implementation strategy:</b><br>business operations   | How is the bank integrating insights from client TPs in its scenario analysis and other climate-related risk assessment processes?<br><br>How is the consideration of client TPs integrated into due diligence processes, alongside credit models?<br><br>How are banks integrating client TP assessments in sectoral policies? |

|  |  |  |
|--|--|--|
|  | <p><b>Foundations:</b> scope, coverage, assumptions and dependencies</p> <p><b>Implementation strategy:</b> business operations, products and services</p> | Does the bank’s sectoral approach articulated in the TP match its business activities and therefore allow adequate climate-related risk assessment of its clients?   |
|  | <p><b>Implementation strategy:</b> business operations</p>   | Does the bank differentiate clients and counterparties on the basis of transition and physical risk exposures?   |
|  | <p><b>Implementation strategy:</b> business operations</p>   | Does the bank identify physical risk exposures of the mortgage lending portfolio in a credible way?  |
|  | <p><b>Implementation strategy:</b> business operations</p> <p><b>Governance:</b> roles and responsibilities</p>  | Are approaches to transition risk identification consistent across risk, compliance and business operations?   |
|  | <p><b>Implementation strategy:</b> business operations</p>   | How are clients’ TPs feeding into the bank’s materiality assessment?   |
| <b>Credit risk mitigation (adequacy of controls and risk management)</b> | <p><b>Implementation strategy:</b> business operations, policies and conditions</p>  | Does the bank adequately take into account potential impacts of forward-looking climate-related risks on the value of collaterals and guarantees when assessing its ability to realise collateral or execute guarantees?                     |
|  | <p><b>Implementation strategy:</b> business operations, policies and conditions</p> <p><b>Engagement strategy:</b> client engagement</p>                   | Are climate-related risk assessments adequately integrated in loan origination processes, e.g. by applying specific conditionalities (e.g. related to CapEx) and contractual obligations (e.g. related to the implementation of client TPs)? |
|  | <p><b>Implementation strategy:</b> business operations, products and services</p> <p><b>Governance:</b> roles and responsibilities</p>                     | Does the bank adequately monitor the changes in client exposure to transition risk over time as part of due diligence procedures?  |
|  | <p><b>Foundations:</b> strategic objective, scope and coverage, assumptions and dependencies</p>   | Are climate-related factors adequately integrated into the bank’s overall credit-risk strategy, e.g. by informing existing factors of this strategy such as exposure type, sector, geographic location or concentration limits?              |
|  | <p><b>Implementation strategy:</b> products and services, financial planning</p>   | Does the bank take into account clients’ climate-related risk exposures and transition plans in deciding financial and pricing terms?  |
|  | <p><b>Foundations:</b> coverage</p> <p><b>Implementation strategy:</b> business operations</p>   | How is any sectoral approach articulated in the TP translated into loan origination procedures?  |
|  | <p><b>Foundations:</b> coverage, strategic objective</p> <p><b>Implementation strategy:</b> policies and conditions</p>                                    | Does the bank have sectoral policies in place to address any concentration of exposures in sectors vulnerable to transition or physical risk (e.g. exclusion policies)?  |

|  |  |   |
|--|--|---|
|  |  | Does the bank have sectoral policies in place to address any concentrations of dependencies (e.g. on key decarbonisation technologies)? |
|--|--|---|

**Market risk**

Prudential rules require banks to hold capital against market risk to which they are exposed as a result of stock market prices, interest rates, exchange rates and commodity prices (Campiglio et al., 2023; de Bandt, 2024). In the context of climate change, market risk may materialise as sudden loss in the market value of assets, e.g. due to a sudden change in investors’ perception of profitability of carbon-intensive assets, and can potentially lead to fire sales or ‘stranded assets’. Physical risk factors such as droughts, floods and heat stress have already been shown to impact company valuations (de Bandt et al., 2024). In addition to the market risk capital requirements calculated under Pillar 1, under Pillar 2 banks are expected to evaluate their exposure to risks arising from fluctuations in market variables such as interest rates, exchange rates, equity prices and commodity prices.

**Table 3.4. Assessment of risk to capital (market risk)**

| Risk to capital  | Relevant TP sub-element(s)   | Suggested assessment question   |
|--|--|---|
| <b>Market risk identification and measurement</b>                        | <b>Implementation strategy:</b> business operations<br><b>Governance:</b> roles and responsibilities   | Does the bank adequately monitor market risks it may be exposed to as a result of movements in market prices that arise from the climate transition, e.g. evolving climate policies such as carbon taxes?<br><br>Does the bank have adequate scenario analysis and stress testing processes in place? |
|  | <b>Foundations:</b> scope, coverage, assumptions and dependencies  | How do the bank’s sectoral approach and location of activities take into account market risk (e.g. the risks of stranded assets or ‘runs’)?   |
|  | <b>Foundations:</b> strategic objective and long-term goals, coverage<br><b>Implementation strategy:</b> business operations   | How is the sector and geographic exposure of the bank likely to evolve in coming years as it implements its TP? Does this have implications for its exposure to increased market volatility in sectors that are more likely to be impacted by physical and transition risks in the short term?        |
|  | <b>Foundations:</b> strategic objective and long-term goals, scenarios<br><b>Metrics and targets:</b> greenhouse gas metrics and targets, financial metrics and targets, other metrics and targets | Will implementing the TP lead to significant changes in the bank’s market activities (e.g. due to a rebalancing of the portfolio across sectors or geographies)? If so, what is the potential impact of these changes on the bank’s risk portfolio?   |
| <b>Market risk mitigation (adequacy of controls and risk management)</b> | <b>Governance:</b> board oversight, roles and responsibilities   | Does the bank have a sufficiently strong internal control framework to make sure that exposures to climate-related market risks do not exceed acceptable levels?  |
|  | <b>Foundations:</b> strategic objective and long-term goals; assumptions and dependencies  | Does the bank have a strategy related to sector-specific dependencies? Is it engaging with clients and officials to address identified dependencies?  |

|  |  |  |
|--|--|--|
|  | <b>Engagement strategy:</b> public policy engagement, client engagement                                  |  |
|  | <b>Governance:</b> roles and responsibilities<br><b>Implementation strategy:</b> policies and conditions | Does the bank adopt internal policies intended to test and strengthen resilience to changes in the policy and regulatory environment (e.g. internal carbon price)? |
|  | <b>Implementation strategy:</b> financial planning   | Does the bank adequately integrate climate-related risks into the valuation of financial instruments in its portfolio?   |

### Operational risk

Operational risk is defined as the risk of losses occurring, stemming from inadequate or failed internal processes, people and systems or from external events. Operational risk has acquired greater relevance given the increased complexity and globalisation of the financial system and the recent materialisation of unprecedented and extremely large losses. In the context of climate change and environmental degradation, financial institutions and their operations can be affected through their direct exposure to physical risks (e.g. if a data centre is destroyed by a flood). Operational risk also includes legal risk related to climate change-related litigation, as described in Box 3.2 (Smoleńska et al., 2025).

**Table 3.5. Assessment of risk to capital (operational risk)**

| Risk to capital  | Relevant TP element  | Transition risk identification assessment question  |
|--|--|---|
| <b>Operational risk identification and measurement</b> | <b>Foundations:</b> strategic objectives and long-term goals<br><b>Implementation strategy:</b> business operations<br><b>Governance:</b> roles and responsibilities | Is the bank monitoring and mitigating legal risk it may be exposed to, arising from real or perceived misalignment of the bank with evolving regulatory expectations?   |
|  | <b>Implementation strategy:</b> business operations<br><b>Engagement strategy:</b> client engagement   | Is the bank monitoring legal risks it may be exposed to, arising from evolving understanding of the nature of fiduciary duties in the context of growing climate-related risks?   |
|  | <b>Foundations:</b> assumptions and dependencies<br><b>Governance:</b> roles and responsibilities  | Does the bank test critical assumptions of its TP as part of its operational risk scenario analysis?  |
|  | <b>Implementation strategy:</b> business operations<br><b>Governance:</b> roles and responsibilities   | Does the bank monitor potential physical risks to its own operations and physical assets that may arise as a result of climate change? Does the bank monitor potential risks to the operations and assets of key third party vendors? |

|  |  |  |
|--|--|--|
| <p><b>Operational risk mitigation (adequacy of controls and risk management)</b></p> | <p><b>Foundations:</b> strategic objectives and long-term goals</p> <p><b>Implementation strategy:</b> business operations, policies and conditions</p> <p><b>Engagement strategy:</b> client engagement</p> <p><b>Governance:</b> board ownership, roles and responsibilities</p> | <p>Does the bank have in place robust transition planning practices as a mitigant against legal risks?</p>   |
|  | <p><b>Implementation strategy:</b> business operations, policies and conditions, products and services</p> <p><b>Engagement strategy:</b> client engagement</p>  | <p>Does the bank have appropriate processes and policies in place to manage and mitigate legal risks that could arise from real or perceived greenwashing (both internally, and by key clients)?</p> |

## 4. Recommendations and outlook

This report contributes to the debate on prudential uses of transition plans by situating the role of prudential supervisors in the wider governance landscape of private sector transition plans that has emerged in recent years. It has set out how specific elements of transition plans can be integrated into existing Pillar 2 supervisory assessment procedures and the capital requirements framework. We have aimed to provide a practical and simple approach that can be applied by supervisors.

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As transition planning and plans become more mainstream market practice, they offer a new set of valuable information to support prudential supervisors seeking to ensure the stability of financial systems in the context of deep economic transformation. As a source of forward-looking, entity-level information, transition plans can help overcome some of the existing challenges that supervisors face with regard to assessing the impact of climate change and environmental factors on banks' safety and soundness. Such a forward-looking, resilience-focused approach is all the more necessary in the context of broader instability resulting from geopolitical shifts and the pace of technological change.

Many banks are already disclosing transition plan-relevant information as part of their non-financial reporting, market disclosures and sustainability reports. Regardless of whether or not a jurisdiction has in place dedicated frameworks for the treatment of climate change and environmental factors in prudential supervision, transition plan-related information reveals a bank's risk profile in a forward-looking way. Supervisors therefore have the opportunity, but also the responsibility in accordance with their mandates, to integrate this information into their assessments, including when banks backtrack on commitments or when their internal processes and actions are not aligned with commitments. More broadly, transition plan elements offer supervisors new lenses through which to view the information that banks already provide as part of supervisory processes, such as those relating to client risk assessments.

In order to integrate bank transition plans into Pillar 2 processes, supervisors need to clearly communicate their expectations regarding climate change risk management (Dikau et al., 2024; NGFS, 2024a). While existing approaches to assessing the credibility of transition plans offer a valuable starting point, **there is a need for supervisors to set out the criteria that they will apply when integrating transition planning information into supervisory assessments.** As a starting point, we recommend that supervisors should expect that banks:

- **Adopt a forward-looking approach**, whereby the bank develops a robust assessment of the future business environment and potential uncertainties relating to key risk drivers such as policy, technology, and physical climate change over medium- and long-term time horizons.
- **Ground transition planning in a robust materiality assessment** to assess climate change risk exposure with regard to both transition and physical risk over the medium-term time horizon.
- **Include broad coverage and a broad scope of transition planning** across geographies, sectors and activities to ensure that the banks' risk identification and management practices are adequate and do not leave sizable blind spots and vulnerabilities.
- **Provide clarity around key assumptions and dependencies**, and that the bank is taking adequate action to mitigate and address risks arising from critical dependencies.

- **Ensure internal consistency** across business lines and functions (e.g. between disclosed transition plans, financial statements and supervisory reporting information).
- **Include high-quality supporting evidence**, with pledges and commitments accompanied by specific and detailed examples, especially when they have a bearing on risk identification and mitigation at the client or portfolio level.
- **Rely on science-based targets**, in particular with regard to physical risks and long-term impacts.

As supervisory and bank practices are evolving, supervisors will face new questions and challenges. For example, there may be significant differences between countries in how climate change considerations are integrated into the incentive structure faced by markets. Supervisors will also need to gain a deeper understanding of technological transition pathways in order to engage with banks' strategies. Further questions will arise regarding how the entity-level information embedded in transition plans could inform macroprudential assessments and responses to the systemic build-up of risks arising from the misalignment of current financial flows with an orderly transition (Hiebert and Monnin, 2023; FSB, 2024). Here, a proactive, precautionary approach to risk management oversight may be required with regard to both financial stability and aligning capital flows with the Paris Agreement (Chenet et al., 2021).

Prudential supervisors will need to define a balanced approach that robustly manages and identifies risks while side-stepping potential unintended consequences, such as undermining the flow of private finance to climate-vulnerable countries. We hope that this report can support supervisors in developing their own answers to these new questions, and clarify their expectations with regard to bank transition planning processes that are already consolidating as a market practice.

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