



Climate-related and environmental risks

Understanding supervisory and regulatory expectations and how banks can build and maintain a more sustainable future

SSM beyond COVID-19 series

October 2021

kpmg.com/ecb

Contents

Introduction	03
Investors, regulators and supervisors call for action to tackle ESG risks	04
Embedding ESG: Banks are responding but face significant challenges	07
ESG beyond COVID-19: Key challenges for banks	10
— Integrating ESG into risk management frameworks	
— Preparing for the 2022 ECB climate risk stress test	
What can banks do now?	16
Summary	18
How KPMG can help	19

Introduction

Over the past 18 months, COVID-19 has changed the lives of billions of people across the world and caused significant economic and social disruption. The pandemic has also driven an increased focus on the importance of long-term stability, accelerating the Environmental, Social, and Governance (ESG) agenda, and triggering improvements in the way ESG risk is governed and managed. There is unprecedented momentum to embed ESG into banking and to ensure that the whole financial sector plays a key role in driving the transition to a sustainable economy.

Banks now view sustainability as a priority, not an option. Market participants are particularly aware of the risks and opportunities that the transition to a low-carbon economy entails and are making efforts to deal with the related risks. Many banks are already moving towards greener finance with CEOs across the globe announcing important sustainability commitments.¹

Among supervisors, the pandemic has drawn attention to banks' resilience to shocks. Authorities and policy makers have become more vocal about the need for ESG integration by firms and they are concerned about banks' preparedness for ESG risks. There is increasing pressure for banks to address these concerns and expectations.

In short, many banks are moving fast to thoroughly assess supervisory expectations, to close gaps and to embed ESG into their business models and strategies. Multiple initiatives are underway, but there is much to be done to address ESG-related challenges and seize opportunities. The time to act is now.

In this report we review banks' response to ESG risks and reflect on the key long-term challenges they face. We focus on the implementation of the ECB's supervisory expectations on climate-related and environmental risks, and especially on the integration of ESG into banks' strategies and frameworks, and the upcoming 2022 ECB climate risk stress test.

78%

Companies planning to incorporate ESG into executive incentive plans.

75%

Financial Services responders that identified climate-related risks with the potential to have strategic or financial business impact.

85%

Financial organizations believe their Board and management need some or considerable improvement in ability to deal with climate risk.

50%

Financial organizations that have not appointed a climate change expert to the Board.

95%

Financial Services responders to CDP survey have board-level oversight of climate-related issues.

85%

Financial organizations believe their Board and management understand climate-related risks quite well, but could do better.

¹ Goldman Sachs' CEO announced the company would spend US\$750 billion on sustainable finance over the next decade. In addition, the Vice-Chairman of Bank of America has pledged US\$300 billion to sustainable investments.

Investors, regulators and supervisors call for action to tackle ESG risks

As highlighted in [our recent article](#), the growing global urgency of climate change and other ESG risks means that banks face increasing regulatory requirements and supervisory expectations in this area. There are many milestones coming up in the years ahead (see Figure 1).

Figure 1: Major regulatory and supervisory ESG-related milestones 2018 - 2025

2018 — 2019		2020		2021		2022 — 2025	
<p>Mar 18 EC Sustainable Finance Action Plan</p> <p>Sept 18 TCFD status report published</p> <p>Oct 18 Energy transition risk stress test for the financial system of the Netherlands - results published</p>	<p>Mar 19 CFRF established</p> <p>Apr 19 NGFS Call for Action on climate risk</p> <p>Apr 19 PRA supervisory statement on climate-related financial risks</p> <p>Sep 19 UN Principles for Responsible Banking</p> <p>Dec 19 EBA Action Plan on Sustainable Finance</p> <p>Dec 19 BaFin guidance Notice on dealing with sustainability risks</p>	<p>Feb 20 BCBS establishes TFCR</p> <p>Apr 20 BCBS/TFCR stocktake report</p> <p>Jun 20 CFRF industry guide</p> <p>Jul 20 Taxonomy Regulation into force</p> <p>Jul 20 ACPR climate pilot exercise starts</p> <p>Oct 20 Bank of Spain - Stress Testing of climate-related risks announcement</p>	<p>Oct 20 Bank of Spain – Climate related risks expectations</p> <p>Nov 20 EBA launches consultation to incorporate ESG risks</p> <p>Nov 20 ECB publishes final guide on climate-related and environmental risks</p> <p>Dec 20 The Federal Reserve joins NGFS</p>	<p>Jan 21 ECB launches climate risk centre</p> <p>Feb 21 Banks required to report their alignment with ECB supervisory expectations</p> <p>Mar 21 EBA consultation on draft technical standards on Pillar 3 disclosures of ESG risks</p> <p>Mar 21 Sustainable Finance Disclosures Regulation in effect</p> <p>Mar 21 EBA Opinion on the disclosure requirement on environmentally sustainable activities in accordance with the Taxonomy Regulation</p> <p>May 21-22 EBA Action Plan - develop dedicated climate risk stress tests for banks</p> <p>May 21 Banks required to send to the ECB their roadmap to implement supervisory expectations</p> <p>Jun 21 Application date of the guidelines on loan origination and monitoring</p>	<p>Sep 21 CBES first submissions</p> <p>Oct 21 CBES first submissions due</p> <p>Oct 21 Publication of CFRF Series 2 guides</p> <p>Oct 21 UK gov. published Greening Finance - Roadmap to Sustainable Investing - includes new Sustainability Disclosure Requirements</p> <p>Oct 21 Methodology published on the 2022 climate risk stress test</p> <p>Oct 21 FS-TCFD Guidance on Metrics, Targets, and Transition Plans</p> <p>Oct 21 - Nov 21 COP26</p> <p>Dec 21 PRA SS3/19 firms to embed approach to climate risk</p> <p>End of 21 SDR discussion papers on sustainable investment labelling and product level Green Taxonomy alignment</p>	<p>End of 21 – 22 FS-TCFD Guidance on Metrics, Targets, and Transition Plans</p> <p>22 onwards PRA assessment of alignment with SS3/19 as part of supervisory cycle</p> <p>Jan 22 Taxonomy disclosures required</p> <p>Mar 22 2022 ECB climate risk stress test starts</p> <p>During 22 ECB to assess banks’ integration of climate risks</p> <p>1st Half - 22 CBES results</p> <p>1st Half - 22 First on-site inspections related to environmental risks</p> <p>Q1 22 Consultation on first 2 environmental objectives under UK Green Taxonomy</p>	<p>1st Half - 22 Deadline for all listed issuers and large asset owners to disclose in line with TCFD</p> <p>By end of 22 Primary legislation for SDR</p> <p>22 & 23 Additional disclosures under SDR for asset managers and owners, investment firms, banks, insurers and certain listed issuers</p> <p>Jan 23 Taxonomy disclosure of remaining four environmental objectives</p> <p>Q1 23 Consultation on remaining 4 objectives under UK Green Taxonomy</p> <p>By Jun 25 EBA Discussion Paper and Report on classification and prudential treatment of assets (sustainability criteria)</p>

Despite the difficulty in addressing ESG risks – most notably, the lack of reliable and consistent data – many banks have long since begun to incorporate ESG factors into their risk processes and strategic planning. Now, banks' ability to measure and manage climate and ESG risks is about to be tested.

Alongside the needs of regulators and supervisors, investors are demanding increased transparency on companies' sustainability plans and the management of ESG risks. Companies of all types, and the financial institutions that support them, are increasingly expected to disclose the impact of their activities on the environment and society at large, along with their exposure to material ESG risks.

In response, companies are making clear commitments to ESG performance targets, such as net zero carbon emissions by 2050, and are starting to assess their operations against commonly agreed ESG frameworks such as the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB) and the UN Sustainable Development Goals (UN SDGs).

As discussed in a recent KPMG [report](#) and summarised in Figure 2, banks are responding to these trends by overhauling their governance and risk frameworks. Banks have increased their board-level and senior management involvement in ESG. They are becoming more aware of the risks that ESG factors (especially climate change) pose to them and their clients, and are adapting their strategies accordingly.

Set against that, key capabilities such as scenario analysis are still evolving. Furthermore, many banks are yet to fully quantify climate impacts on their strategies. And while a significant number of banks have set net zero targets for 2050 that include financed emissions, it is unclear how these emissions will be measured or reduced.

This means that, despite the progress of recent years, banks must take further action to integrate ESG risks into their existing frameworks and processes and prepare for stress test exercises. They now need to revise almost all the components of their strategic planning and risk management to include ESG risks and opportunities. These actions will have significant long-term implications for banks' structures and policies, so adopting an appropriate approach is crucial to success.

“

Banks are becoming more aware of the risks that ESG factors (especially climate change) pose to them and their clients, and are adapting their strategies accordingly.

”



“

Some banks have effectively raised the bar, and those lagging behind should take inspiration from them and follow suit.

”

Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, 2021.

Figure 2: Key observations from KPMG benchmarking survey on how banks are progressing against the TCFD recommendations



This figure includes key observations from KPMG professionals' benchmarking of climate disclosures performed across 25 major banks. The banks selected span across the UK and Europe, Australia, Canada and the US.

Source: KPMG International Standards Group, 2021

Embedding ESG - Banks are responding but face significant challenges

In November 2020, the ECB published a set of supervisory expectations on how banks should manage and disclose climate-related risks under current prudential rules. To better understand how banks are implementing the ECB's supervisory expectations, KPMG professionals performed a benchmarking survey of 27 European banks in May 2021. The survey assesses banks' current degree of fulfilment of ECB expectations, as well as the largest gaps and challenges in the management of sustainability risks.

Benchmarking insights

A total of **27 banks** from **7 countries** have participated in the survey, ranging from small and medium-sized banks to some of the key players in the international banking industry mostly active within Europe.



Key questions

- How do banks perceive their institutions' fulfilment of the ECB's expectations?
- How does the banking sector as a whole position itself in this respect?
- In which ways do banks incorporate ESG factors into their business and risk management activities?
- When do banks expect to broadly meet the supervisory expectations?
- What are the main gaps and challenges in this respect?

Summary of findings

- All the sampled banks are actively considering ESG, especially climate-related and environmental risks.
- Climate-related and environmental risks are receiving the most attention and social risks the least.
- Overall, the sampled banks do not yet meet the ECB's expectations. Most see a need for better data and clearer supervisory guidance.

Status quo - fulfillment level of ECB expectations

All banks are actively considering ESG, especially climate-related and environmental risks:

Environmental risks - and climate in particular - are receiving the most attention, and social risks the least.

This is largely explained by the historic focus on governance risks (e.g. via corporate governance codes) and the recent growth of environmental risk awareness arising from changing laws, regulations and public opinion.

Banks are not yet fully meeting the ECB's expectations:

Most banks in the sample only fulfill ECB expectations partially or less. Expectations related to risk management represent the most critical areas for improvement.

In terms of ESG risk impact, banks are typically most focused on credit risks. This suggests a gradual approach to integrating ESG into risk management frameworks, starting with what usually represents banks' greatest potential risk.

Implementation challenges

High-quality, comparable ESG data is the key challenge:

The biggest issue for banks is the difficulty of acquiring and using high-quality, comparable ESG-related data. This is particularly important for stress testing and external reporting.

The majority of the banks have established partnerships with external ESG data providers, or plan to do so. This may help them to develop adequate KPIs.

Implementation priorities, approach, and planning

Banks are not yet planning integration into business activities:

Many banks have deferred the integration of ESG factors into their business activities until 2022. Developing ESG metrics and reorganizing business models around sustainability poses significant challenges and will require a lot of effort.

Banks are waiting for more concrete supervisory guidance:

Banks are waiting for greater clarity from supervisory bodies. Regulation still lacks consensus on definitions and methodologies.

Business continuity is the current focus:

For 2021, banks seem to prioritize scenario analysis and stress testing. Looking further ahead, banks aim to integrate ESG factors along the entire operative framework. This includes considering ESG-related issues in business goals and defining responsibilities within operative entities.

Banks' self-appraisals reveal a number of key findings...

- The great majority of participating banks are meeting supervisory expectations partially or not at all. Just a few see expectations as "strongly fulfilled" and one as "completely fulfilled".
- Risk management represents the most critical area. For example, expectations for "scenario analysis and stress testing" and "market risk management" are mostly unfulfilled.
- Banks seem to be more advanced on credit risk management expectations.
- Regarding external disclosure, all respondents to the ECB's Questionnaire Part A assess themselves as non-compliant with ECB expectations.
- Banks showing relatively high or low exposure to carbon-intensive sectors score comparatively well. This suggests a risk-based approach, i.e. banks facing the greatest potential risks started incorporating ESG earlier, while those with relatively limited risk believe less effort is required.

...With mixed views regarding priorities for action...

- Half of the banks prioritize defining proper risk governance and integrating ESG considerations into the three lines of defence.
- Another group of banks clearly prioritize incorporating ESG risks into their business goals.
- Developing risk indicators and incorporating them into risk appetites seem to be less urgent, but some banks rank them as their first or second priority.
- On average, internal reporting receives lowest priority among the five options.

...And an expectation that the ECB's requirements will only be met in 2022 – if then

- Most banks will not completely address the ECB's expectations for business models and strategy before 2022. In addition to the problems of incomplete and inconsistent data, other challenges are seen as environmental risks (suggesting a current focus on climate), insufficient management awareness and technical infrastructure.
- Looking towards 2022, activities focus on risk identification, materiality assessments, establishing data needs and collection strategies.
- Activities relating to data and quantitative risk modelling are planned for 2022 onwards. The exception is scenario analysis and stress testing, which is already receiving widespread attention and investment due to the upcoming 2022 ECB climate risk stress test.
- Banks plan to fulfil the ECB's expectations relating to the classical types of risk (credit, operational, market and liquidity risk) from 2022 onwards.

Results show that understanding the implications of climate-related factors for classical risk types is extremely complex. The difficulty of measuring such risks is amplified by current methodologies not being fit-for-purpose. Developing suitable approaches will take time.

“

The impact of COVID-19 makes it clear that banks must act to get prepared for shocks. Embedding ESG into their strategies is a priority for banks, if they hope to remain ahead of public and regulatory expectations.

”



ESG beyond COVID-19: key challenges for banks

Looking beyond COVID-19, we see two major ESG-related challenges for SSM banks:

- 1 Integrating ESG into risk management frameworks
- 2 Preparing for the 2022 ECB climate risk stress test

1. Integrating ESG into risk management frameworks

ESG risks have complex interlinkages across conventional risk types and can affect all of banks' existing financial and non-financial risks. For that reason, ESG risk management must run across the business, regardless of each bank's structure. This requires taking a holistic view of all ESG factors, as well as amending all risk management methods and processes.

The starting point for this process is sound risk governance and an adequate risk strategy. That in turn should enable the successful integration of ESG factors into banks' risk management cycles. To embed ESG across the whole organization, it is also key to enhance the roles and responsibilities of existing units across all three lines of defence.

Some key questions for banks to consider are:

- Is the Board ready to adequately assess and oversee ESG factors and to build them into strategy?
- Have the key ESG-related risks and issues that are material to the business been identified and assessed?
- Has the bank adjusted its risk management structures and policies according to the identified risks?
- Is the bank clearly reporting the materiality of ESG factors into its strategy?

Where these questions remain unanswered, we recommend that banks develop procedures and tools to identify, assess and follow up on ESG-related risks arising from their activities.

Banks should act in four key areas:

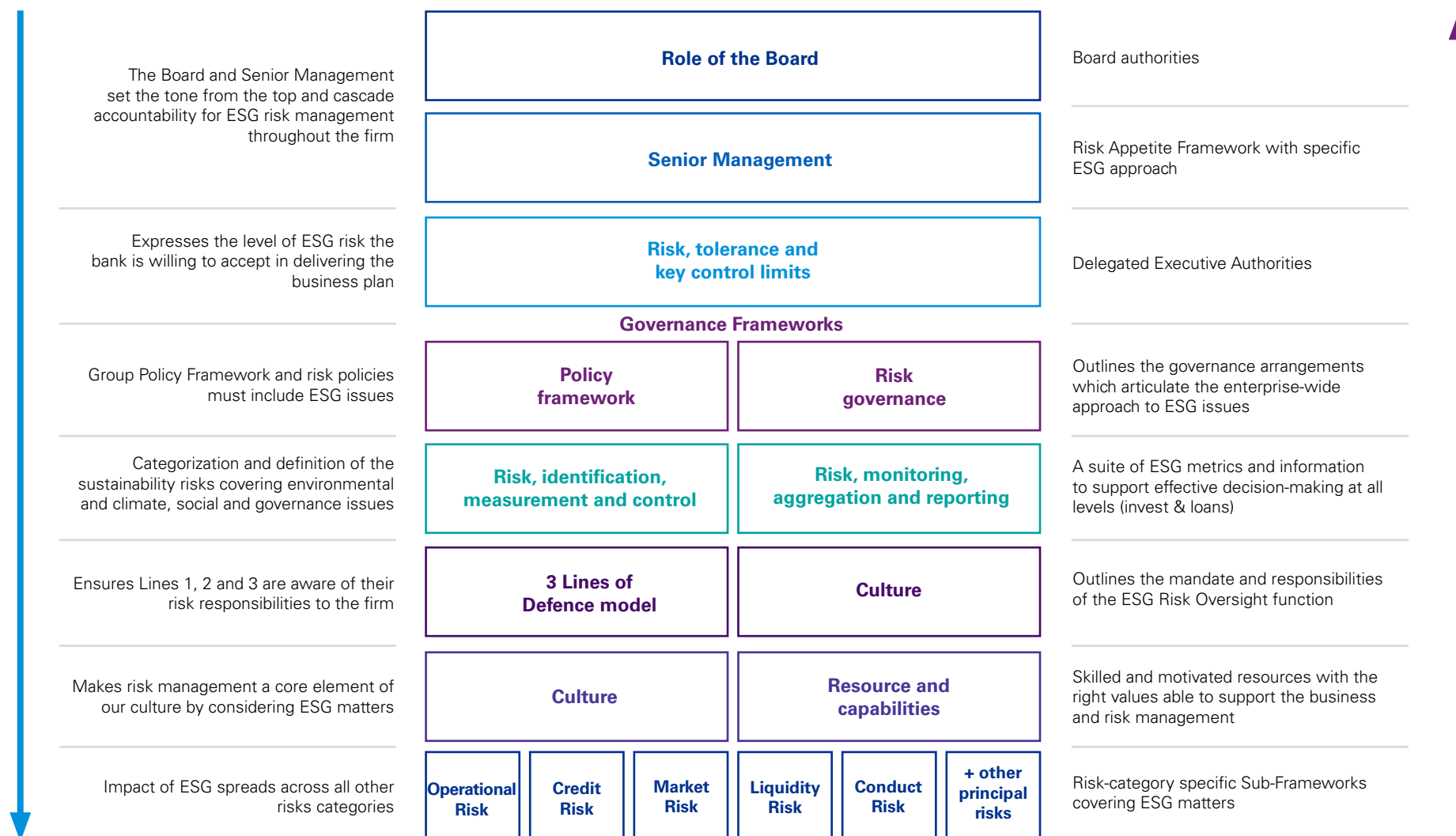
1. Governance
2. Risk identification/inventory and integration
3. Risk assessment
4. Reporting and disclosures

Addressing ESG considerations across in these four key areas should enable a successful incorporation of ESG risks into banks' structures, frameworks, and processes.

Figure 3: Implementing ESG factors in banks' risk management framework

Accountability for ensuring ESG risks are managed consistently with the risk framework approved by the Board

Confirmation of the effectiveness of the risk framework and underlying ESG risks and control



Source: KPMG International, 2021

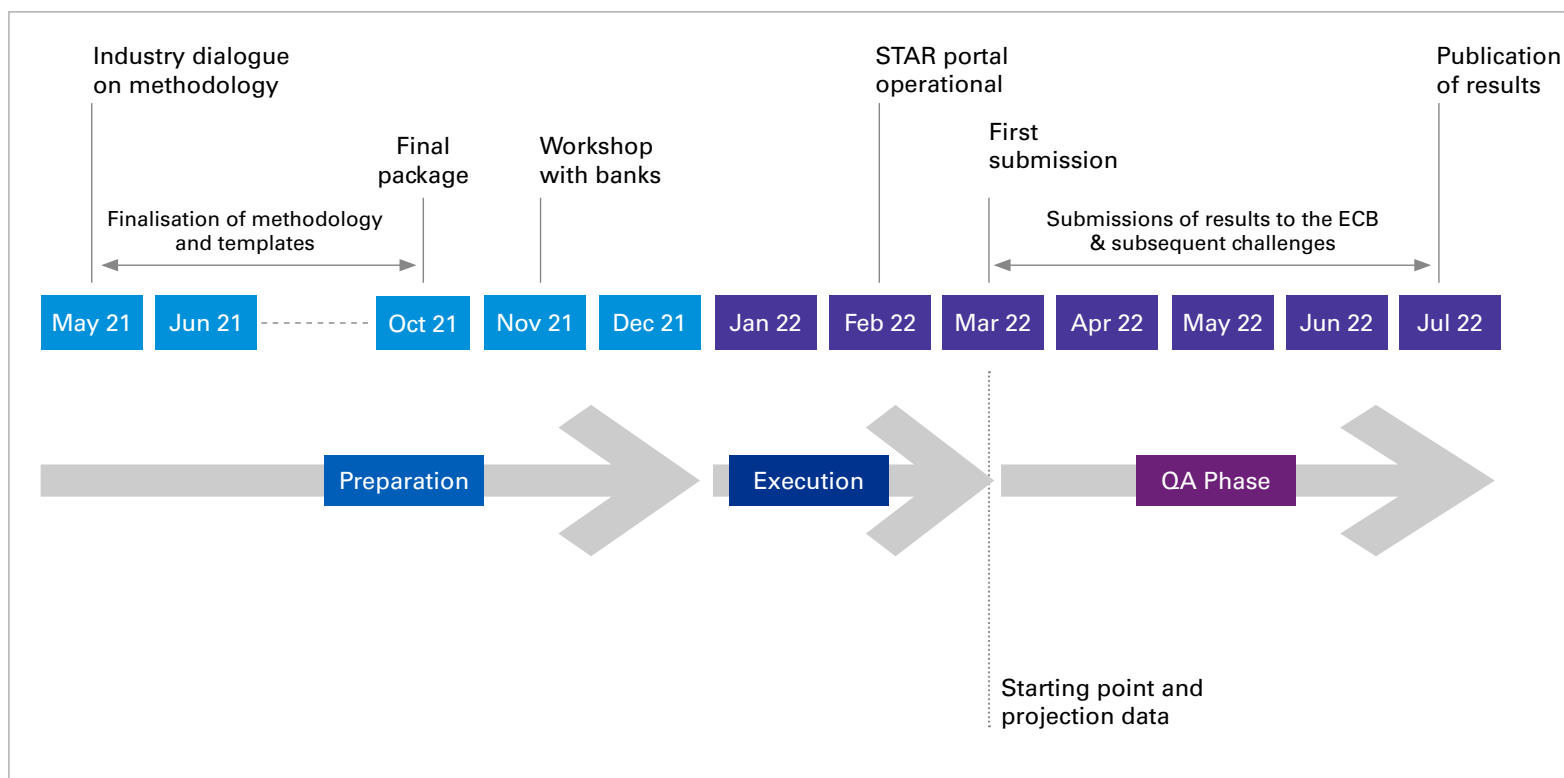
2. Preparing for the 2022 ECB climate risk stress test

The ECB has announced a dedicated climate risk stress test for 2022. The stress test is mandatory for all Significant Institutions (SIs) and it will include the biggest sample of participating banks so far.

The ECB has initiated a dialogue with banks to share information on the stress test methodology. So far, the ECB seems to be keeping methods simple but projections pose significant challenges, such as the requirement of more granular stress parameters. Additionally, all banks will be asked to submit extensive starting point data, including NACE codes, counterparty emissions, energy certifications of real estate collateral and internal model-based credit risk parameters.

The ECB published the methodology for the exercise in October 2021 (see Figure 4). This will give banks limited time to prepare before making their submissions, due in March 2022. Getting a head start on preparation will therefore be crucial.

Figure 4: 2022 ECB climate risk stress test timeline



Source: ECB Banking Supervision, 2021

How can banks prepare?

Banks undergoing the ECB climate risk stress test will need to take preparatory action in multiple areas. We recommend that banks:

- Perform a gap analysis to understand the data needed for a starting point, modelling and projections.
- Perform a qualitative assessment of the status quo.
- Review templates and verify data availability, based on sample system extracts.
- Allocate responsibilities and set up a project to properly manage stress test preparations.
- Expand scenario translation tools, allowing sector-specific modelling of changing probabilities of default (PDs) to be used as a basis for simulating transition risks.
- Analyse an initial sample of material loan exposures, to better understand how physical and transition risks could impact asset valuations and customer creditworthiness.



The ECB's methodology is expected to create significant challenges for banks. The first step to prepare should be to identify and fill data gaps...

Key challenges		KPMG's view on how to prepare
Real Estate (RE) Collateral Location and energy standard	<ul style="list-style-type: none"> Commercial Real Estate (CRE) and mortgage NUTS 3 level location Energy standard (EPC) 	<ul style="list-style-type: none"> Derive NUTS 3 level from postcode of location via standardised mapping (typically available from EUROSTAT). If not available from the collateral dataset, approximate EPC may be derived e.g. from vintage
Exposures per NACE sector (Corporate Loans, Bonds and Equity)	NACE sector and country allocation for <ul style="list-style-type: none"> Corporate and SME loans FVtPL bonds and equities 	<ul style="list-style-type: none"> Identify correct items from internal counterparty information database Test mapping of NACE and country information to relevant loan and market risk positions to reveal potential gaps
Interest, Fees and Commissions per NACE Sector and Country	<ul style="list-style-type: none"> Counterparty level information for non-financial corporates Map counterparty 2-digit NACE code and country information	<ul style="list-style-type: none"> Potentially leverage on methodologies developed for EBA Stress Test to assess Net-interest-income (NII) starting year with counterparty NACE allocation Develop methodology to be able to report fees, commission income and carrying amount by NACE and country
Financed emissions (Top counterparties per NACE)	Top 15 counterparties for 22 NACE sectors (total ~ 330) <ul style="list-style-type: none"> Scope 1 / 2 / 3 emissions 3-year revenues 	<ul style="list-style-type: none"> Check status and timeline of internal carbon accounting projects Analyse availability from current external providers (e.g. capital IQ for revenues /further/new data providers, if not sufficient) Develop proxy approach for scope 3 emissions where data is not directly available Estimations for Scope 1 and 2 emissions and revenues in case data proven not to be available

...And will help them to update relevant processes and tools:

Key challenges		KPMG's view on how to prepare
NACE Level Scenario Expansion* (PD, LGD)	<ul style="list-style-type: none"> Short-term, long-term and drought / heat-wave projections Derive NACE level PD / LGD shifts from scenario parameters 	<ul style="list-style-type: none"> Enhance existing or develop new macroeconomic satellite models to reflect NACE level value add If possible verify results with company-level cash flow analysis based on risk drivers (e.g. for energy sector, oil and gas industry)
Balance sheet projection For projection	<ul style="list-style-type: none"> Dynamic balance sheet for long-term projections (BS size, NACE sectors, EPC labels) 	<ul style="list-style-type: none"> The transition path between the reporting years 2021, 2030, 2040 and 2050 is not simulated by the ECB - banks are free to choose a target asset allocation in line with communicated strategy and bank's business environment
NACE level simulation of Impairments For projection	<ul style="list-style-type: none"> Increased granularity of positions compared to EBA 2021 Stress Test (NACE sectors, countries, CRR asset class) 	<ul style="list-style-type: none"> Banks using counterparty level simulation will mainly have to enhance (stressed) parameter mapping and aggregation / output Aggregated position calculation logic (template line level) might need full revision and logic may need to be different for transition and physical scenarios
NACE level MR shocks For projection	<ul style="list-style-type: none"> Shocks are defined at NACE and rating grade level Risk factors typically not aligned with NACE codes 	<ul style="list-style-type: none"> Evaluate if NACE level shocks and mappings can be performed inside the front-office or risk systems Otherwise evaluate approximate simulation based on sensitivities outside these regular systems
Projection Operational risk / reputational risk For projection	<ul style="list-style-type: none"> Operational and reputational risks examined via a qualitative questionnaire 	<ul style="list-style-type: none"> Define or plan actions to mitigate conduct and physical risks derived from climate-related and environmental events

...Which should enable banks to enhance their methodology...

Key challenges		KPMG's view on how to prepare
Template feeder tools	<ul style="list-style-type: none"> – Changed templates compared to EBA Stress Test – New breakdowns increase complexity 	<ul style="list-style-type: none"> – Start early to adjust existing tools to the template structure / granularity – Make use efficient automated data aggregation tools
Impairment simulation engine For projection	<ul style="list-style-type: none"> – Typically substantial evolution of engine required – New data feeds and mappings 	<ul style="list-style-type: none"> – Conceptual design for adjustments (new data feeds, mappings, logic) needed – Allow enough time for implementation and proper testing
Market risk scenario feeder and mapper For projection	<ul style="list-style-type: none"> – Front office systems typically do not provide NACE information – Spread curves not aligned with NACE allocations 	<ul style="list-style-type: none"> – If simulation of instantaneous NACE sector specific shocks is to be implemented in front office / risk systems, implementation will have to start early (NACE allocation, NACE level shifts)
Data extraction, mapping and reconciliation	<ul style="list-style-type: none"> – Ensure quality of new data extracts and disclosures – Only sub-positions shown in templates (e.g. 80%, ≤5 countries) 	<ul style="list-style-type: none"> – Need to define data quality processes and reconciliation strategies for new sub-positions shown in the stress test templates – Implement and test new queries and mapping and reconciliation procedures at an early stage

Banks are preparing but time is scarce

The start of the stress test is just a few months away, but many banks still have unanswered questions. The ECB has just published its methodology for the exercise which does not leave much time for preparation.

Industry perspective: key observations

- Banks are mostly still planning for the 2022 ECB climate risk stress test, and are defining project governance, roles and responsibilities. This typically includes a PMO and a range of subject matter expertise. Every part of each bank will be involved, requiring significant coordination.
- Typically, responsibility is shared between the CFO and CRO functions.
- A key challenge is the availability and quality of data. A number of banks have set up an overarching workstream to manage stress test data. Since clients need to be approached on certain areas (e.g. scope 1-2-3 emissions), data will be unavailable for some significant risks. Banks conducting similar exercises in other jurisdictions saw client response rates of 20-40%.
- Many banks have already developed climate stress tests for internal use. However, there are significant features of the ECB climate risk stress test - such as the time period of projections - which will require fundamentally different approaches and calculations.
- Banks' stakeholders are interested in understanding their climate risk exposures, generating significant interest in ECB climate risk stress test calculations. Banks are investing considerable time and effort to ensure appropriate implementation, calculations, and deliverables for the ECB climate risk stress test.



What can banks do now?

Short-term

In the short-term banks should consider taking the following steps, if they are not doing so already. Fundamental change is now an imperative.

Strategy and governance

- Develop a climate strategy and use it as a basis to integrate ESG across the organization.
- Establish clear roles and responsibilities to manage ESG risks across the three lines of defense.
- Create a culture of ESG awareness by embedding ESG elements into the bank's mission, objectives, and core values.
- Assess the impact of ESG factors on product design, pricing, and sales decisions.

Data

- Review current data availability and reliability and assess potential needs.
- Collect ESG data that will drive reporting and help to identify data gaps in the organization.
- Consolidate data requirements for initial supervisory exercises and disclosure.

Risk identification and assessment

- Perform a risk taxonomy definition and integrate ESG risk drivers in materiality assessment.
- Integrate the assessment of climate risk into the lending process.
- Develop an initial set of quantitative risk KPIs – especially for credit risk – and integrate them into the Risk Assessment System.

Stress testing

- Develop initial capabilities for climate scenario analysis and stress testing, focusing on credit risk impact.

Reporting and disclosures

- Target disclosures in line with the supervisory and regulatory requirements.
- Implement an initial reporting framework focused on stress testing and credit risk.

The proposed actions may vary according to the concrete business model and should be assessed on a case-by-case basis.

Medium-term

In the medium-term, we suggest that banks should take a range of actions to clarify their view of risk across the globe.

Strategy and governance

- Consider ESG factors when setting objectives at various levels of the business, aligned with the bank's overall strategy.
- Enhance terms of reference of current board risk committees to oversee ESG issues.
- Iterate and update roles and responsibilities on ESG issues for each function across the bank.

Classical types of risk

- Incorporate climate risks into risk rating evaluations and capital allocation processes.
- Update prototype for a quantitative credit risk model.
- Extend the qualitative assessment to further risk types including E, S and G risk drivers.

Stress testing

- Improve methods for internal stress testing.

Long-term

In the long-term, sustainability and resilience need to be at the heart of the C-suite agenda. Banks should consider building a long-term framework to meet intensifying expectations in a post-COVID-19 world.

Strategy and governance

- Review and assess the effectiveness of Risk Frameworks and underlying ESG risk control.

Risk inventory

- Analyze all relevant climate-related and environmental risk drivers, together with a corresponding materiality assessment (qualitative and quantitative analysis).

Classical types of risk

- Develop quantification methods for further risk types prototyped.
- Develop a quantitative approach for credit risk extended to the remaining loan book, including collateral valuation.

Stress testing

- Extend scenario analysis to further risk types, leveraging prototype quantification methods.

Risk assessment

- Improve and extend the set of quantitative risk KPIs to further risk types.

Reporting and disclosures

- Update reporting format based on the progress achieved.



Summary

Despite the instability which COVID-19 has brought to global capital markets, ESG has only climbed the banking agenda since the start of the pandemic. As they look beyond COVID-19, banks face growing expectations in this area - not only from supervisors and regulators, but also from investors and clients who are increasingly focused on the topic. The vital importance of sustainability to the economy, the environment and society as a whole means that integrating ESG into banking infrastructures is likely to be a key priority for the years ahead. Managing ESG risks will be an integral part of this journey.

Many banks have already made significant efforts to begin incorporating ESG into existing frameworks. But they face significant challenges, such as the availability of comparable, granular data and reliable methodologies - as well as the need to address a wide variety of supervisory, regulatory and market expectations within a short period of time.

Looking ahead, the adoption of a holistic approach with effective governance and appropriate risk identification can help banks to increase their ESG capabilities while continuing to manage the impact of the pandemic. In the longer term, assessing the effectiveness of the strategy in place should allow banks to identify ESG opportunities as well as risks, allowing them to support the transition to a more sustainable economy.



How KPMG can help

KPMG, the global organization of independent firms brings together subject matter specialists and can help you on your ESG journey.

- KPMG IMPACT's network includes over 700 climate change and sustainability professionals working within more than 60 KPMG firms worldwide. Our network combines specialist sustainability expertise with in-depth understanding of the business landscape in the industry.
- KPMG professionals work shoulder-to-shoulder with clients across the spectrum of risk management and stress testing to identify risks and develop strategies to address them.
- KPMG firms can support banks to establish a holistic ESG risk management, given our expertise in analysing the regulatory and economic risk management process (strategy, inventory, risk measurement, control, and reporting). KPMG professionals can help you identify the climate risks that are material for your company and provide recommendations on how to develop resilience.
- KPMG professionals can help you to understand your company's exposure to the effects of climate change and to the likely regulatory and economic impacts of the shift to a low-carbon economy. We can identify the areas of your business, as well as the countries where your operations are located, which are - or will be - most affected by climate change strategy for operations and product portfolios taking into consideration the different scenarios that could pan out in the future.
- KPMG professionals have developed a variety of tools to help banks embed ESG risks and perform climate stress test simulations for the 2022 ECB climate risk stress test exercise and beyond.
- KPMG's ECB Office and European network enable a holistic European view and can provide insights to support SSM banks in their ESG journey.

Abbreviations

ACPR	French Prudential Supervision and Resolution Authority	FSB	Financial Stability Board
BaFin	The Federal Financial Supervisory Authority	FVtPL	Fair value through profit or loss
BCBS	Basel Committee on Banking Supervision	GRI	Global Reporting Initiative
BoE	Bank of England	LGD	Loss Given Default
CFRF	Climate Financial Risk Forum	NACE	The Statistical classification of economic activities in the European Community
COP26	The 2021 United Nations Climate Change Conference	NGFS	Network for Greening the Financial System
CRE	Commercial Real Estate	PD	Probability of Default
EBA	European Banking Authority	PRA	Prudential Regulation Authority
EC	European Commission	RE	Real Estate
ECB	European Central Bank	SASB	Sustainability Accounting Standards Board
EPC	Energy Performance Certificate	SI	Significant Institutions
ESG	Environmental, Social and Governance	SREP	Supervisory Review and Evaluation Process
EU	European Union	TCFD	Task Force on Climate-Related Financial Disclosures
FCA	Financial Conduct Authority		



Contacts

To discuss the issues raised in this report, please contact:

Karim Haji

EMA Head of Financial Services and Partner,
KPMG in the UK

T: +44 7795 666763

E: karim.haji@kpmg.co.uk

Francisco Uriá Fernandez

EMA Head of Banking & Capital
Markets and Partner,
KPMG in Spain

T: +34 9145 13067

E: furia@kpmg.es

Henning Dankenbring

Head of KPMG ECB Office,
EMA Region and Partner,
KPMG in Germany

T: +49 69 9587 3535

E: hdankenbring@kpmg.com

Markus Quick

Partner
KPMG in Germany

T: +49 69 9587 4687

E: markusquick@kpmg.com

Pablo Vaño Frances

Partner
KPMG in Spain

T: +34 9145 63400

E: pvano@kpmg.es

Robert Smith

Partner
KPMG in the UK

T: +44 7717 808316

E: robert.smith@kpmg.co.uk

John Kjorstadt

Associate Director, KPMG IMPACT
KPMG in the UK

T: +44 7500 072136

E: john.kjorstad@kpmg.co.uk

Ana Sofia Melo

Senior Manager, KPMG ECB Office
KPMG in Germany

T: +49 69 9587 4961

E: anasofiamelo@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/ecb



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2021 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

KPMG refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity. KPMG International Limited is a private English company limited by guarantee and does not provide services to clients. For more detail about our structure please visit home.kpmg/governance.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

Throughout this document, "we", "KPMG", "us" and "our" refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity.