



ESG Risk Survey for Banks

Market Survey



Content

Management summary	03
Introduction	04

Three key messages

01 Full integration of ESG risk drivers are not to be expected before 2023	07
02 To meet the challenges, banks are increasing investment	09
03 Changing regulations, data and personnel are key challenges	10

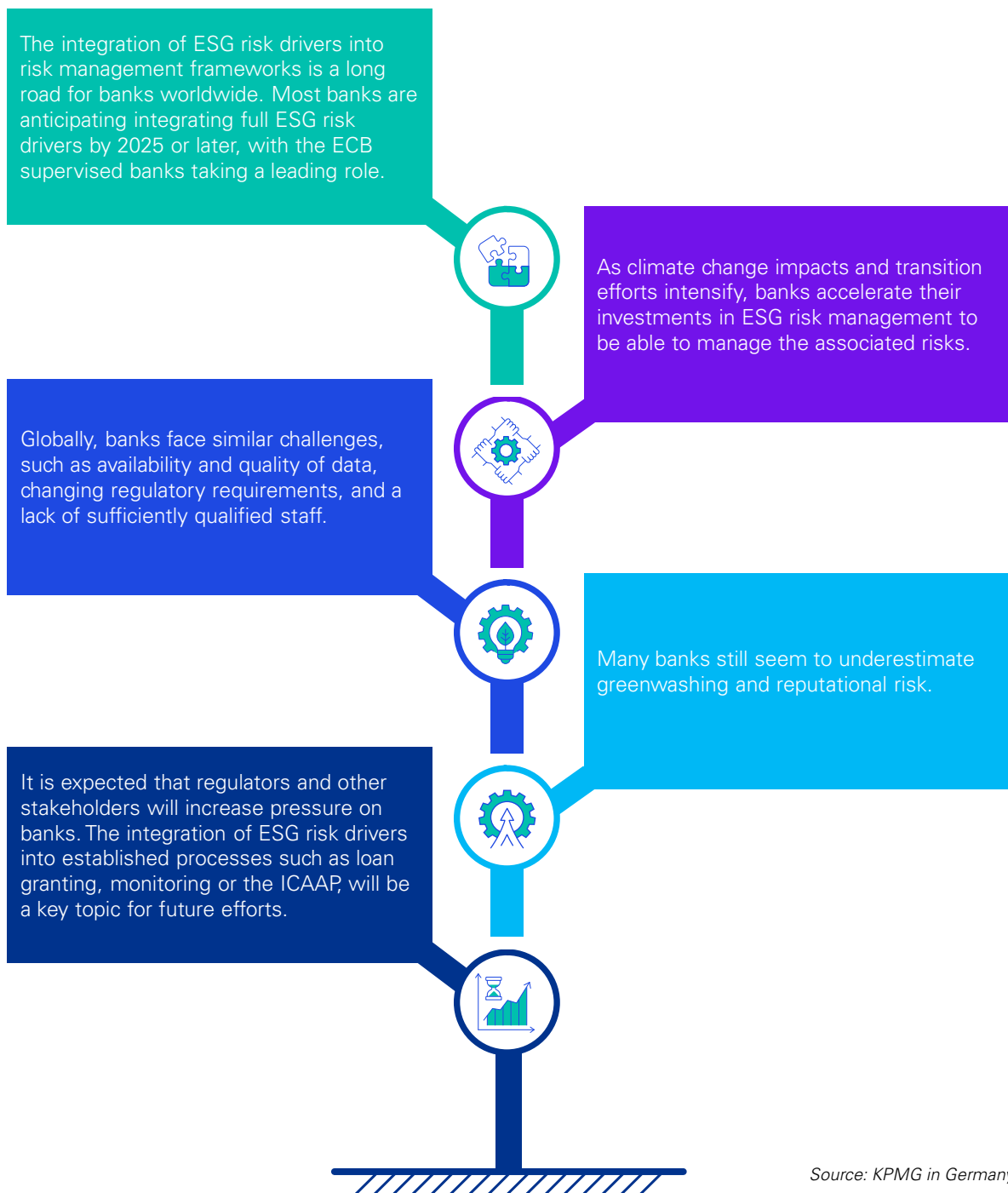
Additional observations in key elements of ESG risk integration

Organization: shifting tasks from projects to line functions	12
Prioritization of ESG risk drivers	13
Stress testing and capital requirements: climate scenario analysis in focus, but ICAAP integration yet to come	19
Credit Risk: prototypes are in place	22
Greenwashing and reputational risk: an underestimated threat?	24

Outlook and next steps	25
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Management Summary

As the need for a transition towards a more sustainable economy grows and regulatory attention around environmental, social and governance (ESG) topics increases, banks around the world are being called upon to consider the risks involved. To gather a comprehensive picture of the current state of ESG-related activities, KPMG has conducted a global survey of 111 banks in over 20 countries.



Source: KPMG in Germany, 2023

Introduction



...by now all key ingredients to make C&E risks an integral part of banks' strategy and risk management are well known. But you – the banks – are in the lead when it comes to translating ambitions into practice by designing and implementing tools to adequately manage these risks."

– Frank Elderson,
Member of the Executive Board of the European Central Bank

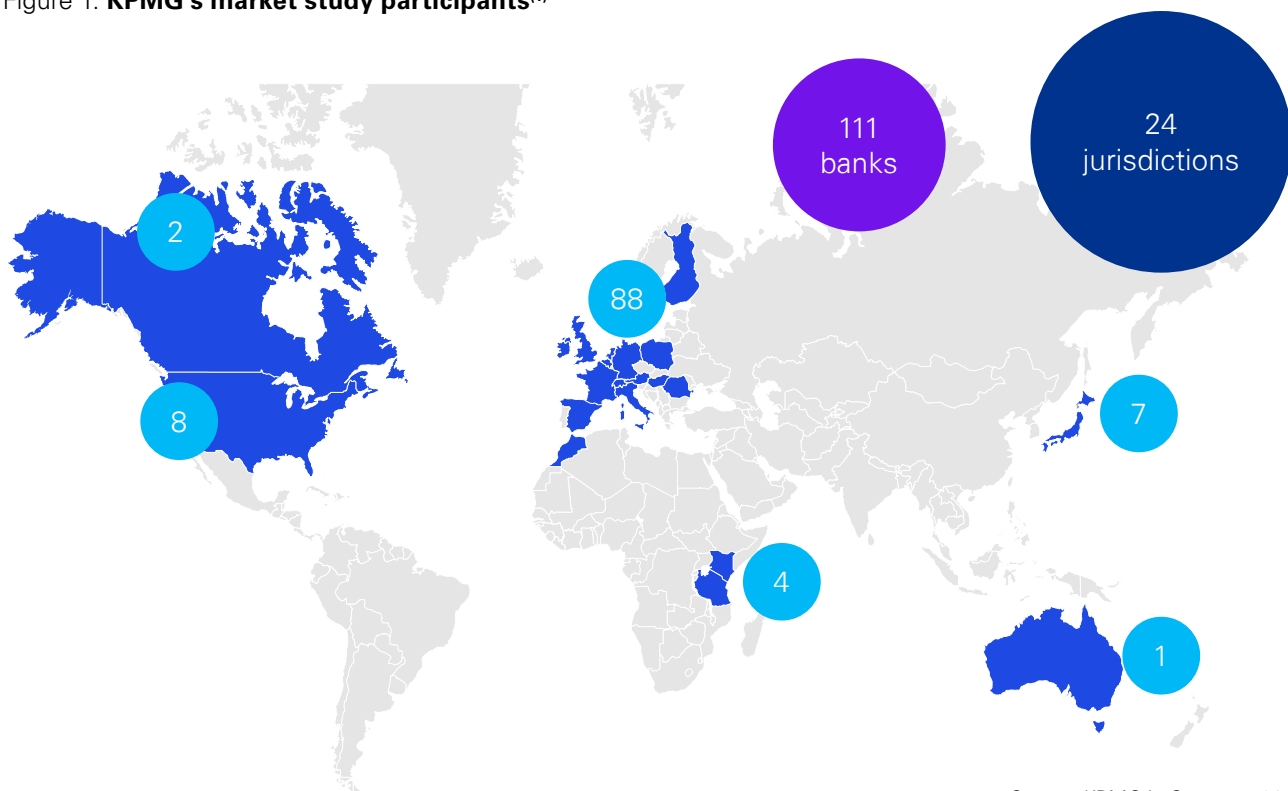
As the demand for green financing and sustainable investments grows, the call for sustainability has long reached the banking world and shaken it up. To remain successful in the long run, financial institutions are working to integrate environmental, social and governance (ESG) risks into their business and risk strategies, as well as into their risk management frameworks.

This is taking place globally against the backdrop of increasingly complex regulatory requirements. In the 12 months since KPMG published the results of their 2022 market survey on ESG risks in banks¹, numerous

supervisory and regulatory authorities have issued guidance on how to manage climate and other ESG risks, as well as granular rules on how to disclose those risks. At the same time, many banks have made tremendous progress in understanding, identifying, quantifying and managing risk associated with climate change and other ESG factors – especially those in markets with a comparably mature regulatory background like the EU and the UK. This means that financial institutions across the globe can learn from good practices currently being implemented by mature peers.

¹ KPMG in Germany, 2023

Figure 1: **KPMG’s market study participants⁽¹⁾**



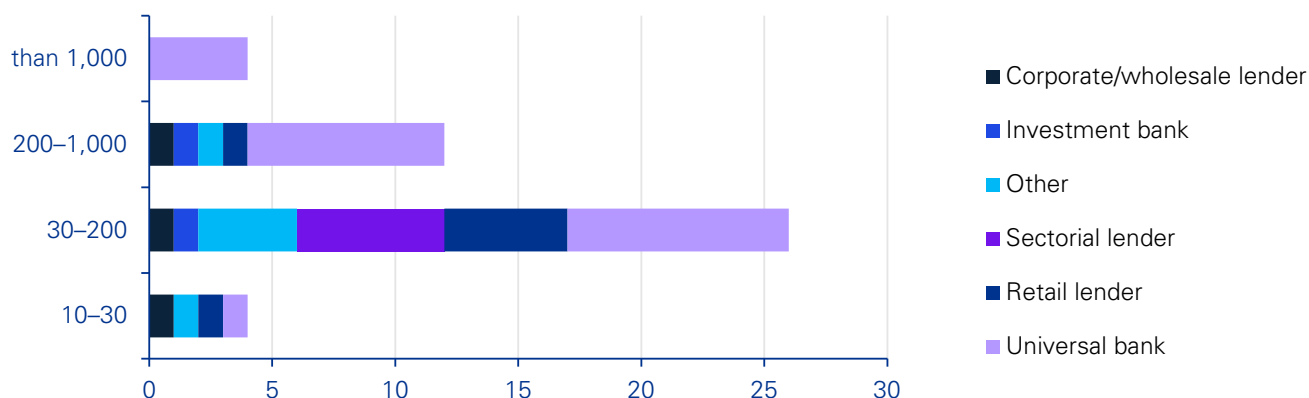
Source: KPMG in Germany, 2023

Note: (1) Please note that rounding differences to the mathematically exact values may occur in the overviews.

In order to help facilitate the necessary dialogue between financial institutions, KPMG has launched a new iteration of the ESG risk in banks market survey this year – this time with a global scope. In total,

111 banks from more than 20 countries have answered questions on their progress on and challenges with taking these new risk drivers into account and meeting stakeholder expectations.

Figure 2: **Sample repartition by primary business model per total assets (BN EUR)**



Source: KPMG in Germany, 2023

The questions cover a wide range of topics related to the incorporation of ESG risk drivers as part of banks’ risk management frameworks, addressing aspects such as business and risk strategy, risk identification, credit risk management, stress testing, data management and reporting. Given their current relevance, reputational risks and greenwashing receive

special attention in the survey. The results presented in this article are enhanced by general trends, specific challenges, and success stories within the banking sector based on the market observations of KPMG experts.



Three key messages

01

Full integration of ESG risk drivers is not to be expected before 2024

Most banks have recognized that integrating sustainability issues into risk management framework is a long journey. The majority of participants in KPMG’s survey expect to fully incorporate ESG risk drivers into key risk management areas by 2025 or later in contrast to most regulators’ expectations.

Notably, some peer groups within the global sample stand out: most European banks supervised by the ECB, for example, exhibit a higher level of ambition

than the global average aiming to fully integrate ESG risks by 2025. Observations by KPMG experts indicate that mature banks successfully manage regulatory changes by allocating and prioritizing the resources necessary to develop processes and methodologies. They actively engage in dialogue with their supervisors to resolve ambiguities in requirements and work with flexible prototypes that are incrementally adapted to industry best practices, for instance, in climate risk stress testing.

Time frame in which very high level of ESG integration (>80%) is expected

Figure 3: Banks expectations on incorporating ESG risk drivers into various risk management framework elements

	Already achieved	Within 2023	Will achieve by 2024 to 2025	After 2025
1. Business environment	3%	2%	54%	41%
2. Business strategy	3%	2%	53%	42%
3. Management body	14%	5%	47%	35%
4. Risk appetite	6%	7%	59%	28%
5. Organisational structure	9%	8%	46%	37%
6. Internal reporting	3%	8%	54%	35%
7. Risk mgmt framework	5%	3%	56%	36%
8. Credit risk management	3%	3%	47%	48%
9. OpRisk management	6%	9%	55%	30%
10. Market risk management	6%	3%	38%	53%
11. Scenario analysis and ST	3%	6%	56%	35%
12. LiqRisk management	7%	2%	39%	52%
13. Disclosure	2%	3%	51%	44%
Mean across all areas	5.15%	4.7%	50.4%	39.7%

Source: KPMG in Germany, 2023



European significant institutions as forerunners in ESG risk integration

Although significant progress has been made in meeting the ECB's expectations, banks have become more cautious in forecasting "very high levels" of compliance in all areas of ESG risk management compared to KPMG's 2022 market survey – i.e., they have become more conservative after one year of implementation work and continuous dialogue with

the ECB. As a result, a large proportion of those participants does not expect to fully meet the ECB's 13 expectations by 2024. Both smaller EU banks and those in other less regulated markets can learn from this by designing implementation roadmaps that are flexible enough to "hit moving targets" in ESG risk regulation.

Time frame in which very high level of ESG integration (>80%) is expected

Figure 4: Incorporating ESG risk drivers into various risk management framework elements – time frame expectations of ECB-supervised banks

	2022 Achieved by end 2022	2023 Already achieved	2022 Will achieve by 2025	2023 Will achieve by 2025
1. Business environment	45%	2%	97%	70%
2. Business strategy	21%	2%	100%	67%
3. Management body	61%	20%	100%	70%
4. Risk appetite	42%	2%	100%	80%
5. Organisational structure	64%	15%	100%	80%
6. Internal reporting	24%	2%	88%	74%
7. Risk management framework	27%	7%	94%	74%
8. Credit risk management	30%	7%	91%	65%
9. OpRisk management	28%	7%	97%	74%
10. Market risk management	21%	11%	91%	65%
11. Scenario analysis and ST	36%	4%	94%	76%
12. LiqRisk management	18%	13%	94%	65%
13. Disclosure	34%	4%	94%	63%

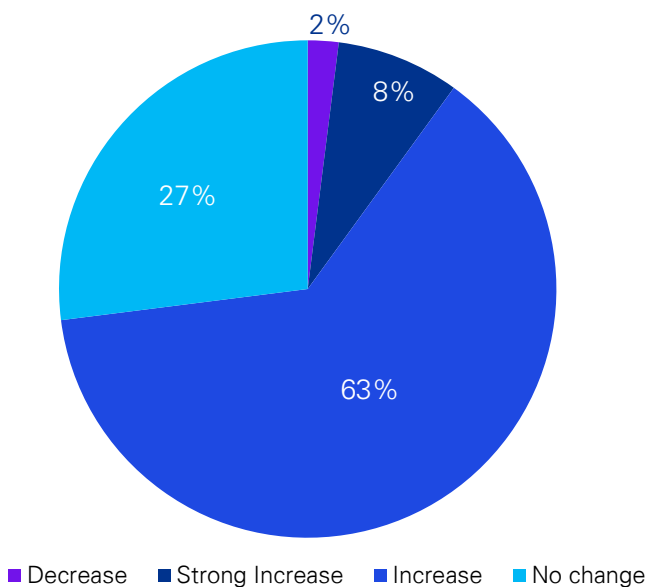
Source: KPMG in Germany, 2023

02

To meet the challenges, banks are increasing investment

Banks around the world seem determined to embark on a long-term journey into ESG risk management. This is reflected in significant and increasing investment budgets across markets, particularly among the large banks in KPMG's survey sample, all of which believe that their budgets need to be increased.

Figure 5: **Changes in ESG budget 2023 compared to 2022⁵**



Source: KPMG in Germany, 2023

On the one hand, this increase reflects the progressively better understanding of the importance of sustainability for the financial sector and the related implementation efforts. On the other hand, it is also reinforced by continuous and growing regulatory and supervisory pressure. As regulations grow in markets where regulatory standards have been less stringent, even more financial institutions anticipate increasing spending on ESG data, methods and processes. With this investment often comes the expectation that adopting new standards and risk management methods leads to a competitive advantage in an environment with increasing demand for sustainable finance solutions. The ever-increasing signs of the impact of climate change and transition efforts across the globe also clearly show the importance of managing the associated risks.

⁵ Only financial institutions with ESG budget considered

03

Changing regulation, data and personnel are key challenges

The majority of respondents – regardless of size, business model or jurisdiction – agree on the main challenges in integrating ESG risks into risk management: the availability and quality of data, changing regulatory requirements, and the lack of sufficiently qualified staff. These findings reflect the complexity and multi-faceted nature of the task of building an effective ESG risk management system.

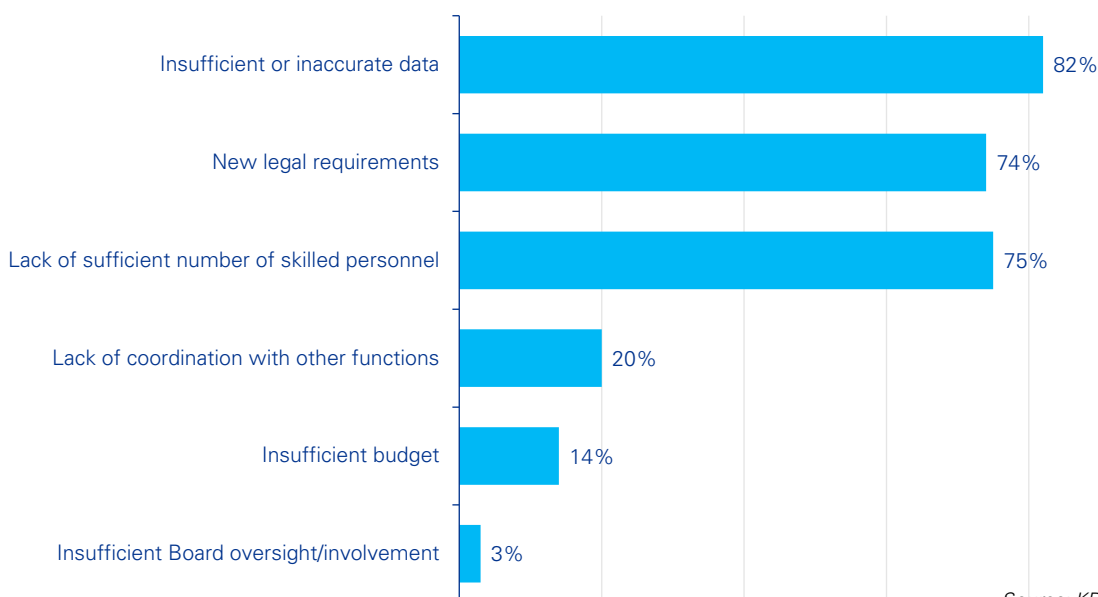
Solving the data challenge is critical for banks. Progressive banks have adopted flexible target operating models (TOMs) for ESG data. This includes first defining data sources (e.g., external providers vs. customer interface) and data quality hierarchies for key areas such as greenhouse gas emissions and physical climate risks. This requires working closely with data providers and building internal capacity for data analysis and preparation. Among the global sample of KPMG’s market survey, banks that have joined climate alliances such as the United Nation Environment Programme Finance Initiative (UNEP FI) are typically among the most mature in this regard and rate data

challenges as less pressing. Hence, their ESG data frameworks, often disclosed as part of sustainability reports, can serve as good practice examples for less mature financial institutions.

Both regulatory and data challenges are currently exacerbated by new ESG risk disclosure standards, such as the European Banking Authority (EBA)’s Pillar III disclosure interpretation or the upcoming Corporate Sustainability Reporting Directive (CSRD) requirements. As mentioned above, in dealing with changing regulatory standards, active supervisory dialogue and flexible technical solutions have proven to be success factors for leading banks.

Similarly, the personnel challenge requires a proactive approach: especially since a large number of banks are competing for a comparatively small talent pool, successful firms have been early on the hiring market, enabled by a transparent TOM and ambition level of what the organization of ESG risk management should look like.

Figure 6: **The biggest challenges identified by the survey’s participants?**



Source: KPMG in Germany, 2023

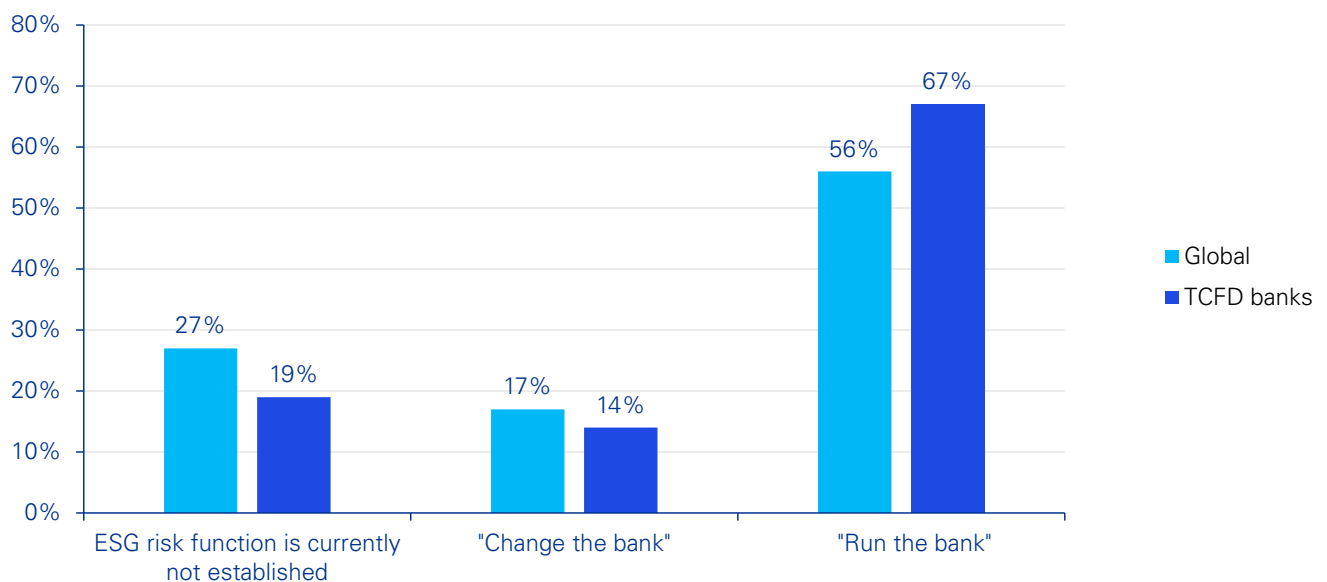


Additional observations in key elements of ESG risk integration

Organization: shifting tasks from projects to line functions

Many financial institutions have made significant progress in transferring ESG risk related tasks from task forces or projects to line functions – thereby anchoring ESG risk management in the risk organization.

Figure 7: **ESG risk organization in projects (“change the bank”) vs. in line functions (“run the bank”)**



Source: KPMG in Germany, 2023

Across markets, banks have realized that sound ESG risk organization and governance across all lines of defense, defense is a key enabler for further implementation – especially regarding roles and responsibilities in the 2nd line. However, allocating ESG risk management in line functions is often a challenge: sufficiently skilled personnel is scarce (cf. figure 7) and the overarching nature of ESG risks requires strategic organizational design to be

successful in the long term. Certain groups of banks among participants of KPMG’s survey, e.g., those subscribed to Task Force on Climate-Related Financial Disclosures (TCFD) or those directly supervised by the ECB, have been comparatively successful. They have established transparent organizational models early on and have been tapping the hiring market first – enforcing a clear vision of their target operating model for ESG risks.

Prioritization of ESG risk drivers

Globally, most financial institutions are maintaining a strong focus on climate risk as the most important among ESG drivers. This reflects both well-founded public interest as well as regulatory focus in some jurisdictions like the EU. In both transition and physical climate risk, mature banks, especially in the EU and UK, have made tremendous progress in terms of identifying transmission channels and quantifying their financial impact on key portfolios, e.g., using scenario analysis.

At the same time, understanding and quantifying other environmental risks, such as biodiversity risks, remains a challenge for most financial institutions – although focus on these drivers has picked up within the past 12 months, especially among banks supervised by the ECB. Still, more than 70% of participants in KPMG’s survey indicate that biodiversity risks have not yet been assessed qualitatively or quantitatively.

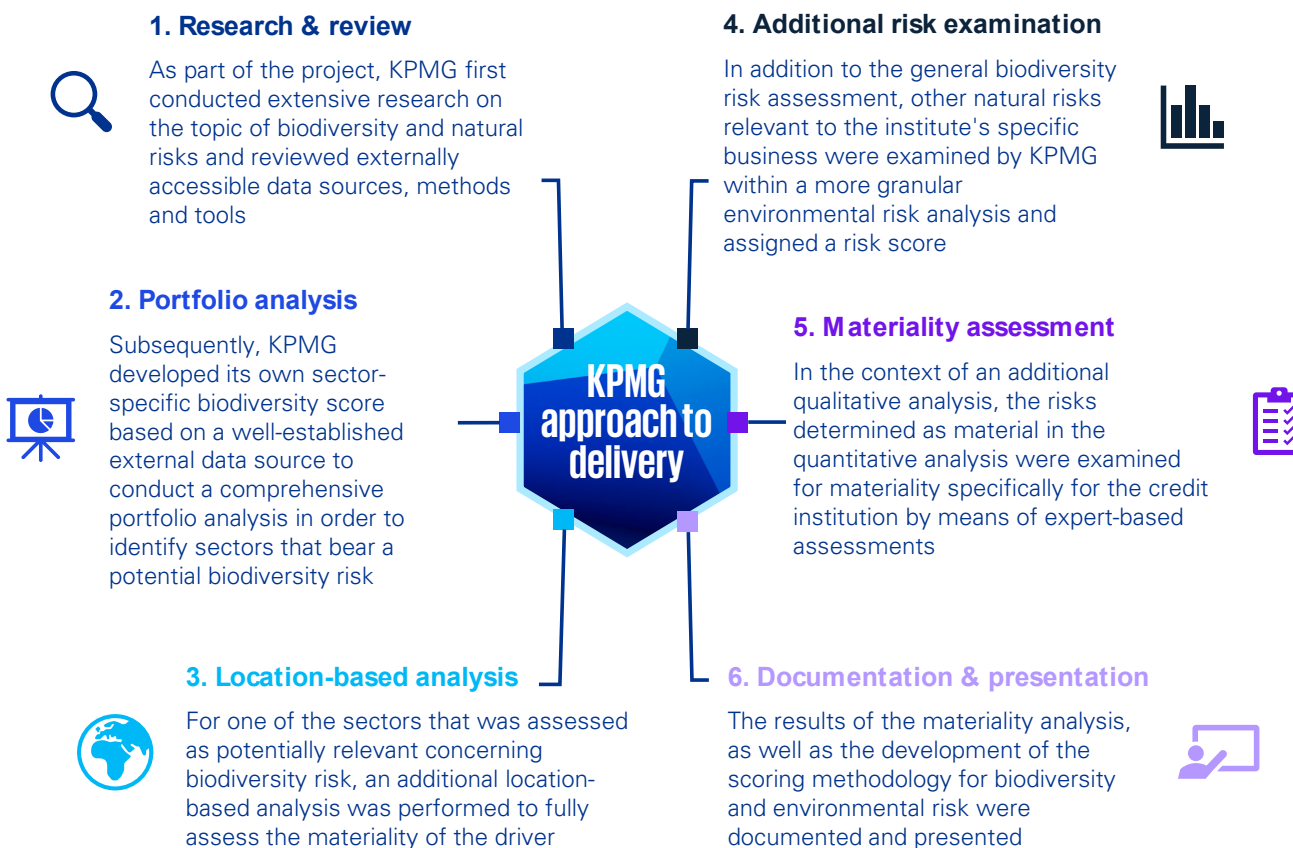
Spotlight: biodiversity risk



The World Economic Forum’s Global Risks Report (GRR) 2020 ranks biodiversity loss as the second most important and third most likely risk for the next decade. An analysis by the ECB also found that almost 75% of all bank lending in the euro area is to companies that are highly dependent on at least one ecosystem service. At the same time, financing companies with negative impacts on biodiversity not only poses a threat to the bank’s business model but can also cause significant damage to its image. The integration of biodiversity risks as part of ESG risks into existing risk management processes of banks is therefore inevitable and is increasingly demanded by regulators.

As a first step, some banks have already conducted materiality assessments to analyze and evaluate their individual sensitivity to biodiversity risk drivers. ENCORE has established itself as a popular database for analyzing sectors in terms of their dependence and impact on nature. In order to analyze indirect risks arising from supplier relationships in addition to the direct risks from ENCORE, KPMG has developed a tool that combines the ENCORE database with EXIOBASE.

Figure 8: **KPMG case study on the analysis and assessment of biodiversity and other environmental risks**



Source: KPMG in Germany, 2023

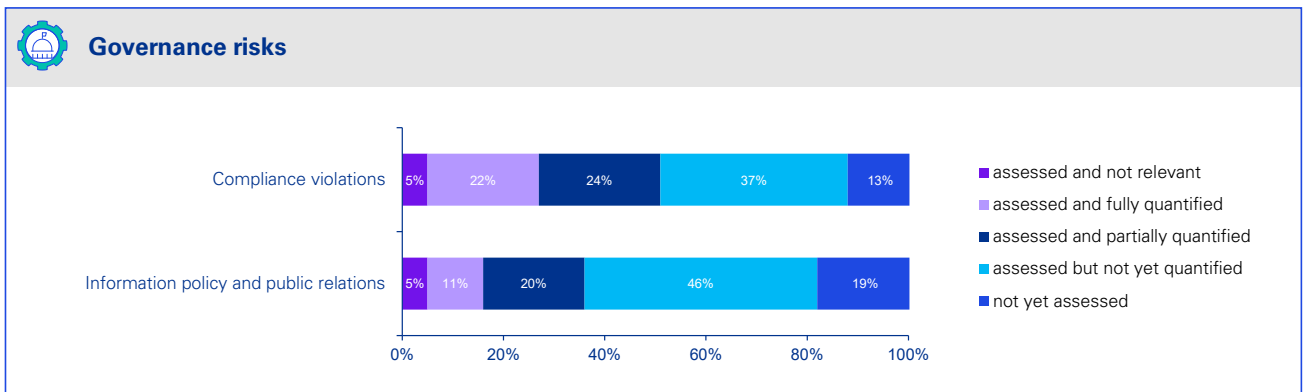
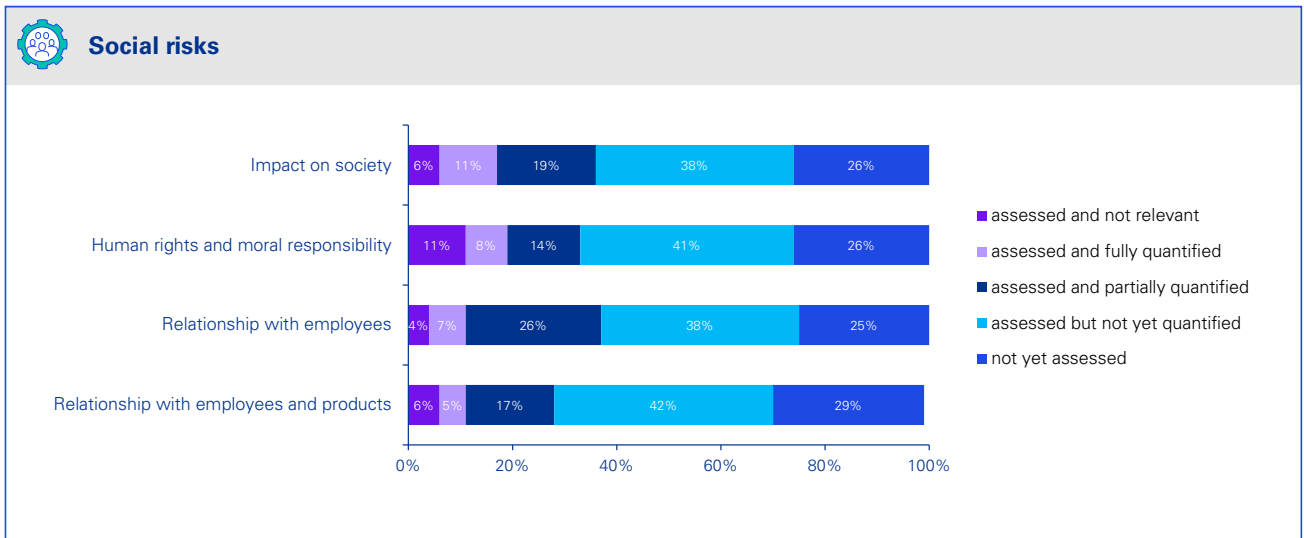
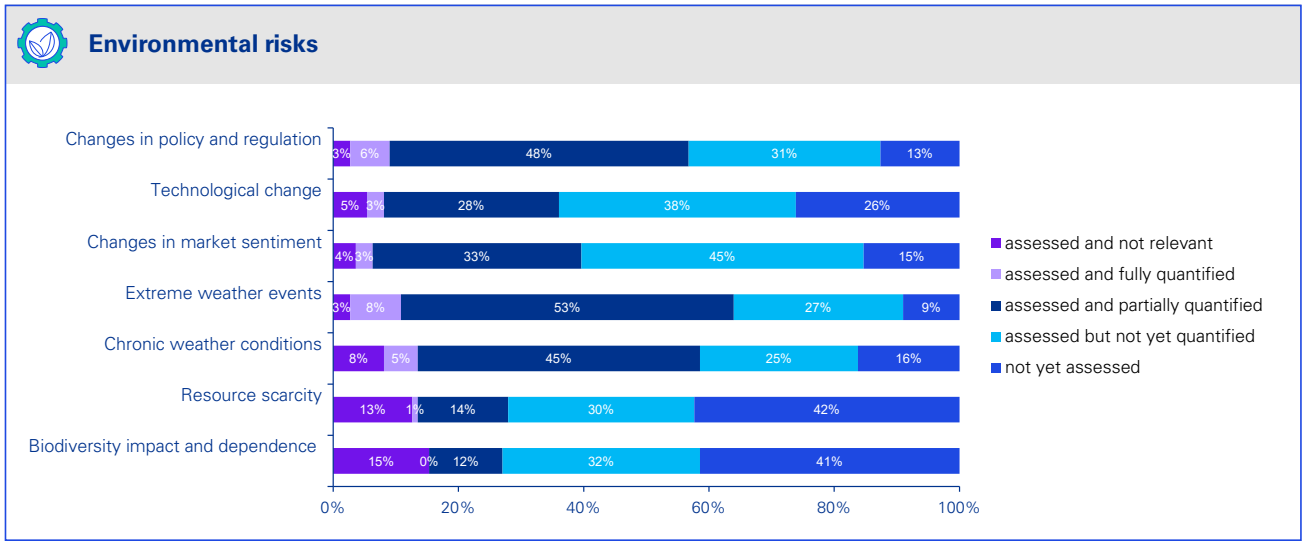
 **Client request**

- KPMG was engaged to support a German credit institution in the integration of biodiversity and other environmental risks into the ESG risk driver assessment process.
- In addition to climate risks, the client also identified biodiversity and other natural risks as important drivers of ESG risks.
- A materiality assessment will be used to analyse the materiality of such risks to the institution.
- Through both quantitative and qualitative analyses, an overarching biodiversity and environmental risk analysis should be conducted, taking into account the specific business strategy of the client.

Social risk drivers appear to be the least understood or systematically assessed by banks globally. This shows that the path to comprehensive ESG risk management frameworks for financial institutions in all markets is far from being complete. The same is true of most governance risk drivers to a similar extent; only a few banks have started to quantify the impact of these drivers on their portfolio and risk profile.

Once again, this uneven picture among risk drivers indicates the lack of high-quality data and standardized quantification methods (e.g., in the form of stress testing) suitable for banks with complex portfolios. However, certain groups of banks have been able to gradually increase their capability across all key E-, S- and G-drivers. Typically, banks engaged in alliances such as UNEP FI or TCFD are ahead of their peers when it comes to comprehensively assessing materiality across ESG drivers.

Figure 9: **Prioritization of risk drivers within ESG**



Source: KPMG in Germany, 2023

Spotlight: risk materiality assessment



The established risk types can be affected by ESG risk drivers through various economic transmission channels. The integration of ESG risks into banks' risk landscape and assessment of their potential financial impact thus require a holistic approach.

ESG risk materiality assessment begins by developing a shortlist of potentially relevant ESG risk drivers based on the longlist and the client's business model. The identified relevant ESG risk drivers can potentially

influence the established risk types in a wide range and via complex transmission channels. Potential transmission channels are thus defined and analyzed in the next step. Based on the identified relevant transmission channels, banks' exposure towards the chosen ESG risk drivers is assessed using qualitative and quantitative methods, e.g., portfolio segmentation, scenario analysis.

Figure 10: **KPMG approach: ESG risk materiality assessment**

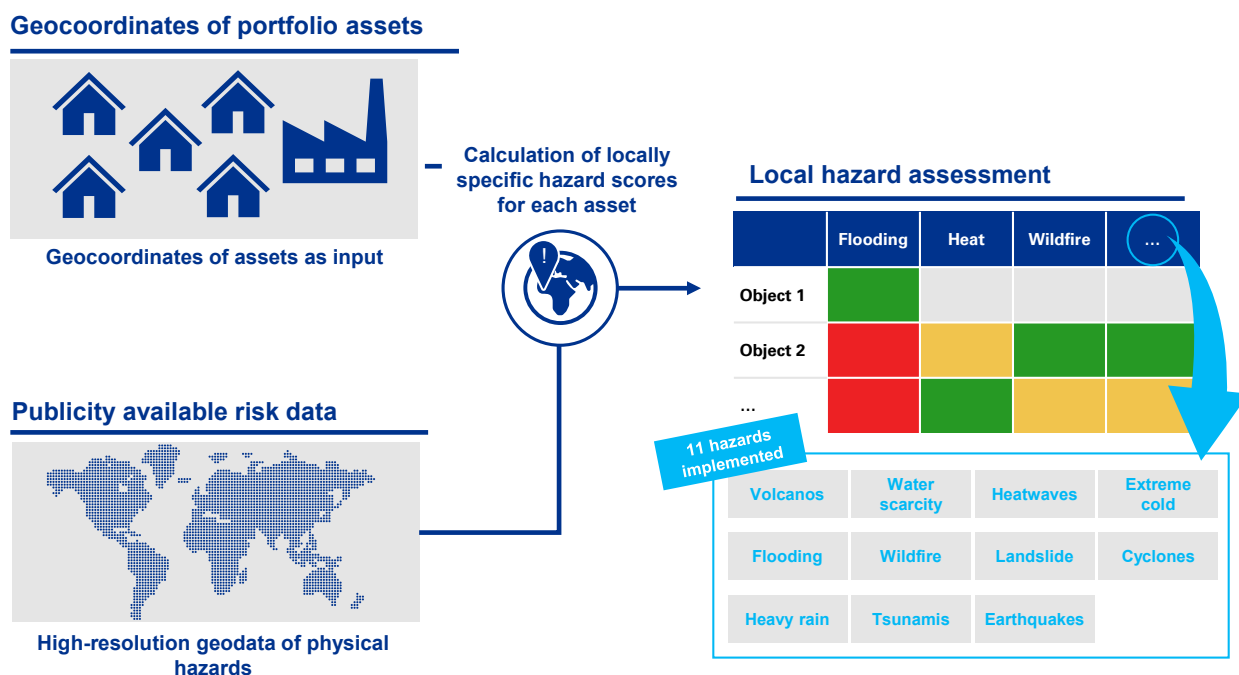


Source: KPMG in Germany, 2023

As an integral part of banks' ESG risk management framework, ESG risk materiality assessment helps evaluate the long-term impact of ESG on a bank's risk profile and scale other relevant processes within the bank's risk management cycle, such as scope of stress tests and scenario analyses or integrating of ESG into model landscape. A fundamental analysis is therefore crucial to success. In running such an

analysis with our clients, KPMG uses a suite of proven methods, blueprints and prototypes to accelerate the project work. For example, the natural hazard indicator tool offers a qualitative model to score real estate and corporate portfolio exposure based on up to 11 physical climate risks – e.g., to be used in the ESG risk materiality assessment.

Figure 11: **Select KPMG tools: flood and wildfire risk prototypes & hazard indicator tool**



Source: KPMG in Germany, 2023

Spotlight: stress testing



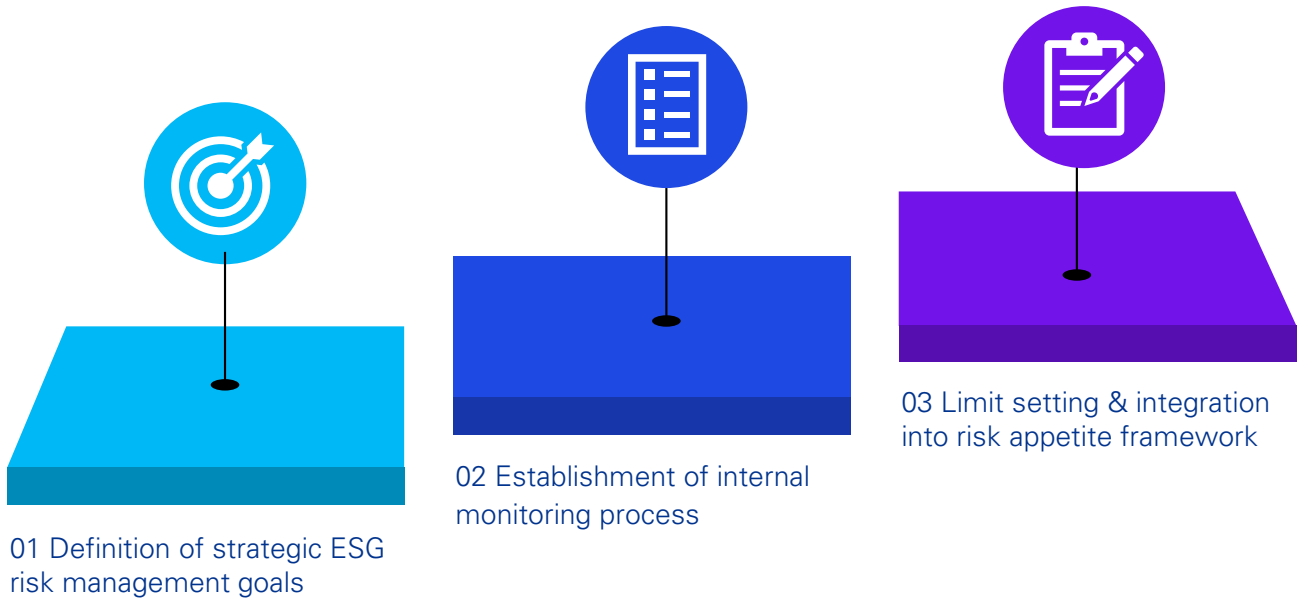
KPMG has observed different levels of ESG risk integration into risk appetite frameworks among banks, which is primarily determined by perceived materiality of the related risks. In practice, the integration is typically more advanced for banks' real estate and corporate loan portfolios, whereas for retail and consumer loan portfolios it is less developed.

Mature clients follow a three-step approach to integrating ESG key risk indicators (KRIs) into their risk appetite frameworks. It begins with the top-level definition of ESG risk strategic goals based on a materiality assessment of existing risk taxonomy. The alignment of the goals with those set out in the business strategy and – where existing – with the bank's climate and environmental strategy, as well as with key performance indicators (KPIs), is crucial to develop an impactful limit framework. As a next step, banks typically prioritize and select the most relevant KRIs based on their risk profiles, followed by the establishment of a transparent reporting process for monitoring and interpreting the development of indicators.

Continuous iterations within the process result in a step-by-step allocation of target and limit values to the selected indicators, forming an initial limit framework within the internal Risk Appetite Framework (RAF).

Together with our clients, we work to incorporate ESG risks into their RAF, using proven tools and methods that take into account external data sources and bringing years of experience with banks' risk management frameworks, as well as ESG risk industry insights.

Figure 12: **KPMG approach: integration of ESG KRIs into risk appetite framework**



Source: KPMG in Germany, 2023



Stress testing and capital requirements: climate scenario analysis in focus, but ICAAP integration yet to come

Many established financial institutions around the world have started to conduct ESG risk stress tests and scenario analyses, often starting with a focus on climate risk and its financial impact on credit risk. Although a standardized source of appropriate climate scenarios has not yet been established, scenarios

from the NGFS or regulators are currently considered to be pioneering. However, many banks have recognized that particularly severe and disruptive scenarios or those based on idiosyncratic vulnerabilities often need to be developed internally.

Spotlight: stress testing

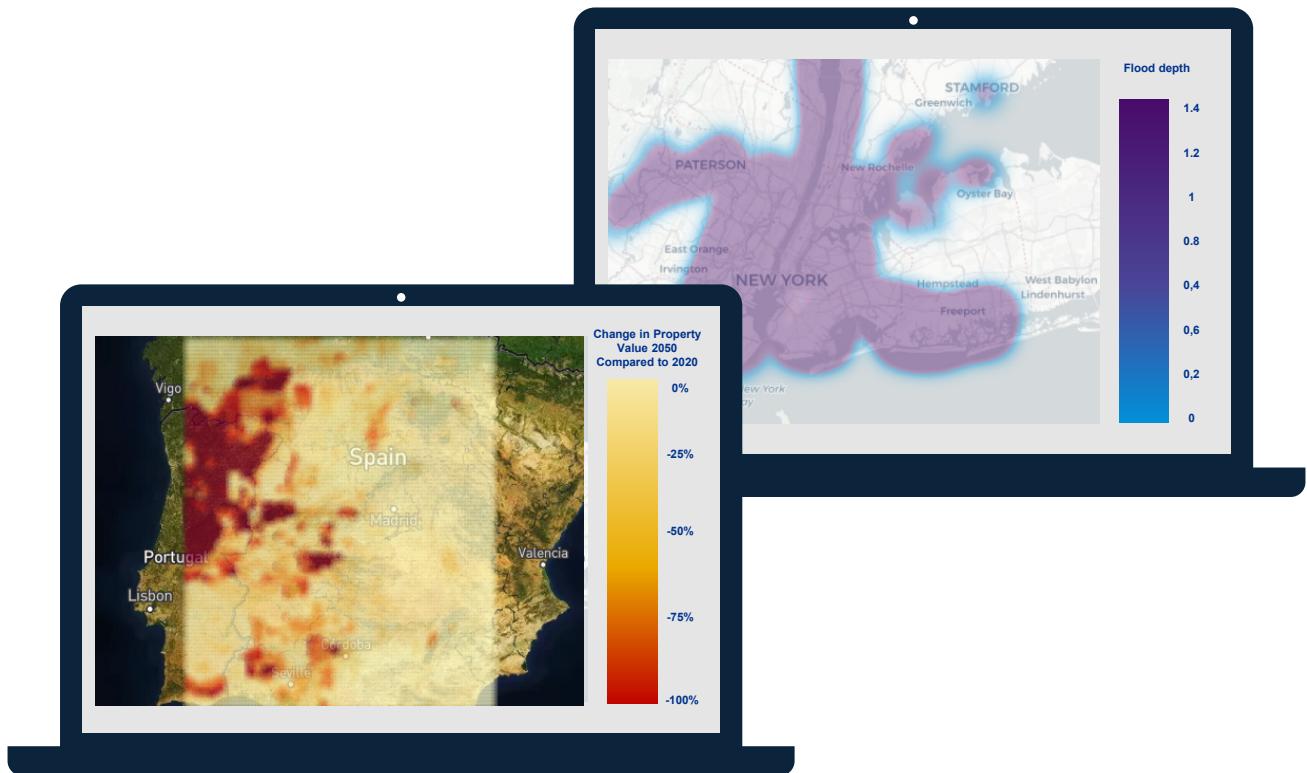


In order to assess the impact of the ESG risks identified in the risk driver analysis on a bank's earnings and risk situation, it is necessary to conceptualize specific scenarios (based on ESG risk drivers, value drivers and bank-specific vulnerabilities). These designed scenarios must reflect both the long-term horizon for strategic and economic change, as well as all relevant physical and transitory risks. For particularly material risk drivers, quantitative scenario stress testing and sensitivity analyses can be performed. Furthermore, inverse ESG stress tests and the subsequent dovetailing of ICAAP and risk inventory are suitable.

KPMG has worked with numerous banks on the climate stress test, including assistance with stress test preparation and execution, with a particular focus on methodology implementation.

For example, the wildfire and flood risk prototypes can help assess the financial impact of flood risk or wildfire risk in real estate or corporate portfolios under different climate scenarios. It's an advanced methodology for quantifying climate-related flood risk or wildfire at the asset level. Projection of regional concentrations allows for an identification of sites at risk and quantification of the extent of risk at those sites.

Figure 13: **In-house development of prototypes for quantifying wildfire and flood risks**



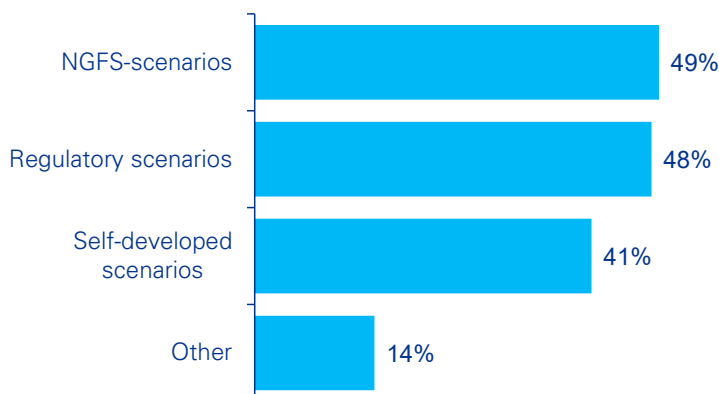
Source: KPMG in Germany, 2023

Implementing the results of these exercises is the next key step for mature financial institutions – such as considering the impact of ESG risks on capital requirements. According to KPMG’s market survey, more than 50% of banks have already considered this issue in the form of capital buffers – only a few of which, however, have actually implemented such buffers to date. Among the global sample of banks,

specialized lenders, e.g., banks focusing on real estate lending have made the most progress in this area. This, in turn, means that banks with broader business models can learn from them – by prioritizing key portfolios, implementing pilot stress tests, and embedding the results in the overall bank steering framework.

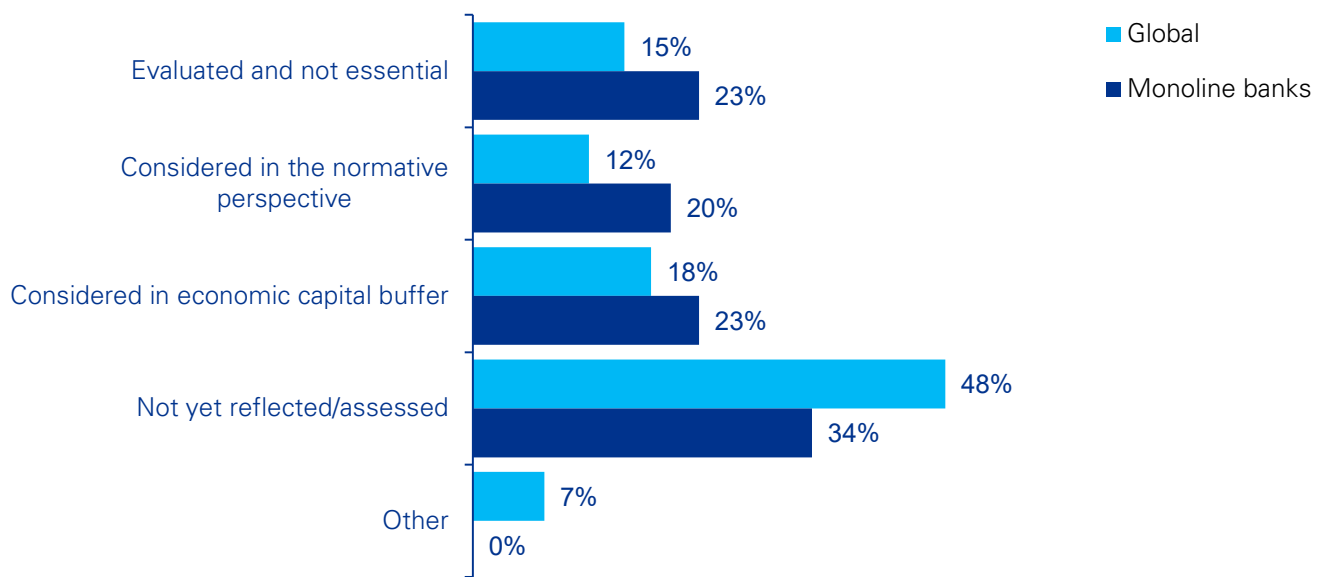
Figure 14 and 15: **Different types of scenarios implemented for stress tests and translation of ESG risks into budgetary planning**

What **kind of scenarios** are your **ESG stress tests** based on?



Source: KPMG in Germany, 2023

Are **ESG risks reflected** in your institution's **capital requirements**?



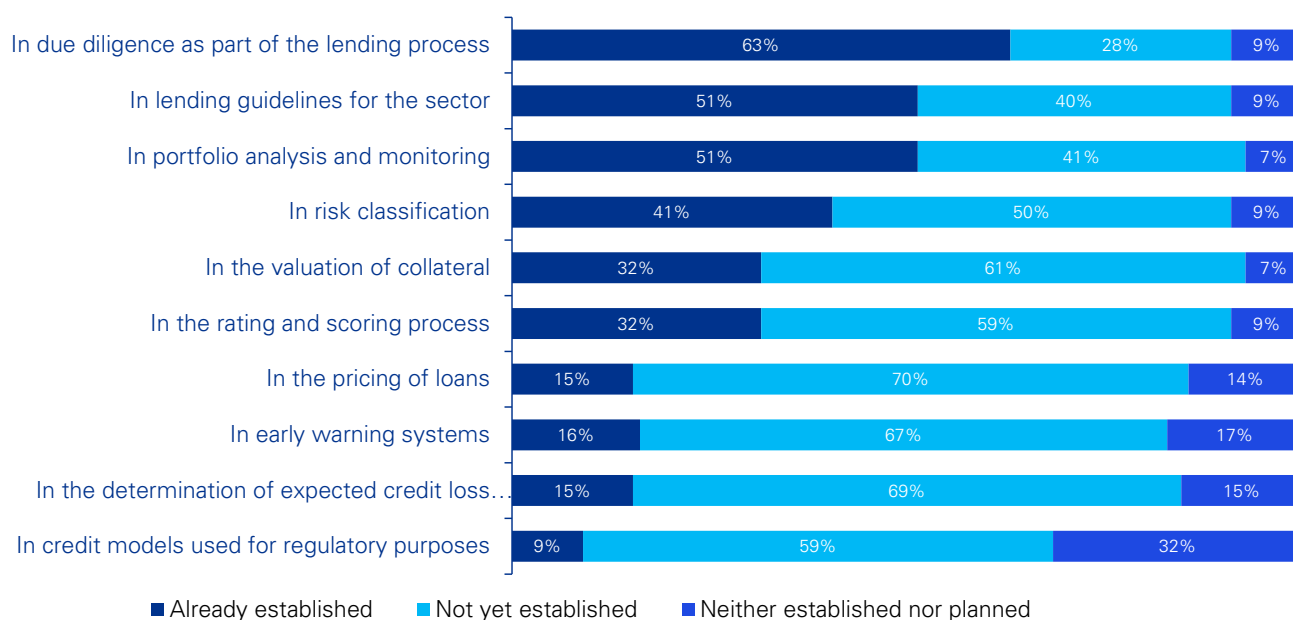
Source: KPMG in Germany, 2023



Credit risk: prototypes are in place

Most banks globally, especially those with a significant loan book, have invested extensively in understanding and measuring the impact of ESG drivers on credit risk.

Figure 16: **Consideration of ESG aspects in credit risk management**



Source: KPMG in Germany, 2023

KPMG experts perceive progress across the various aspects of credit risk management. This progress is especially pronounced in the areas of ESG risk scoring as part of the lending process, in establishing initial ESG-related lending guidelines including exclusion

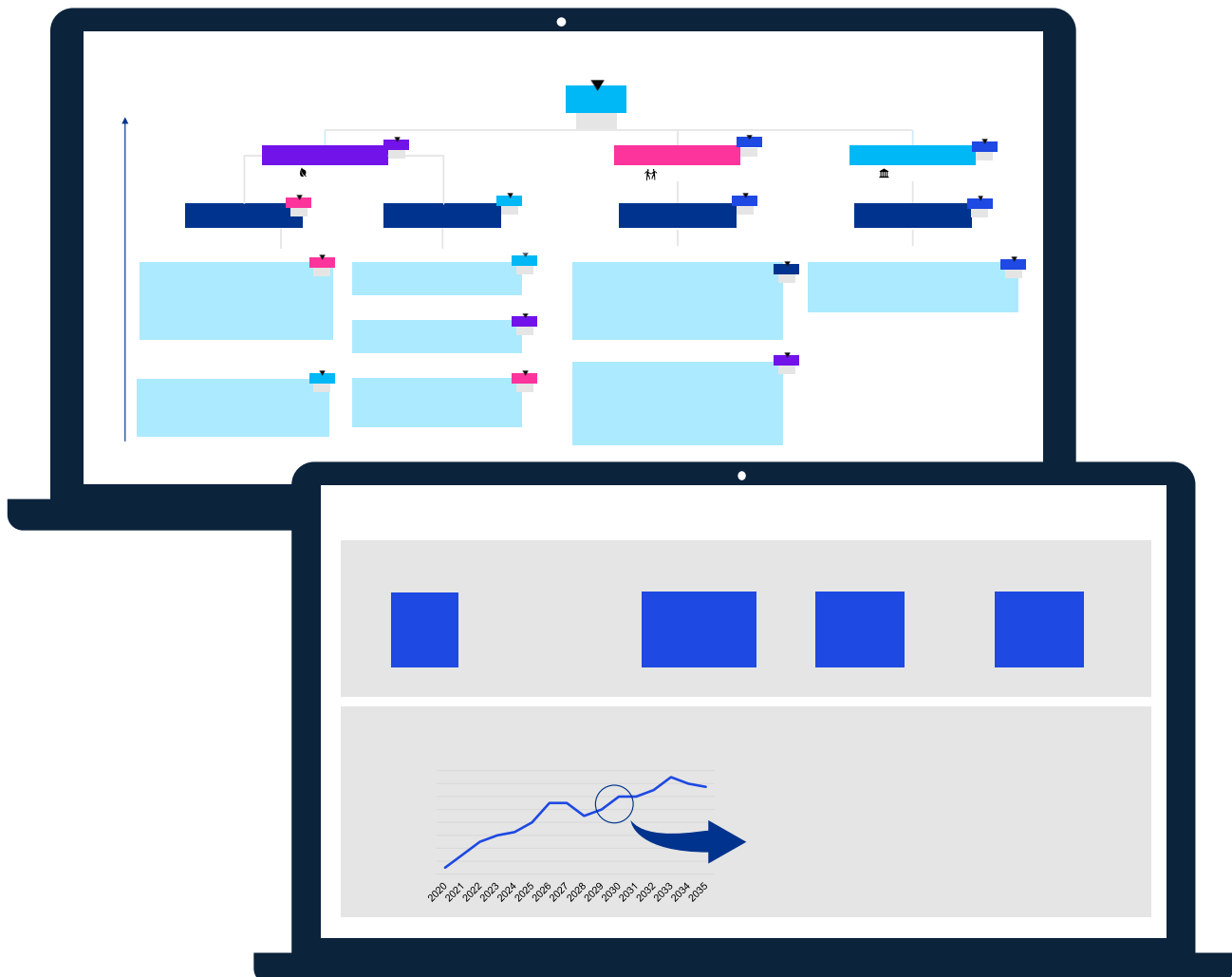
criteria and sometimes more quantitative metrics. It is also pronounced when establishing first credit risk model prototypes to evaluate, for example, stressed PDs under adverse climate scenarios.



ESG risk scores/ratings have gained importance in the past 12–18 months and have been developed by banks themselves or with the help of service providers or purchased from external data and scoring providers. In addition to solutions from corresponding providers, in-house development can also be a strategically good solution for banks.

KPMG has developed approaches and solutions for ESG scorings of various industries or business models for various financial institutions. These approaches range from corporate to real estate and vary depending on firms' complexity, size of the segment, and banks' orientation.

Figure 17: **Excerpts from case studies (ESG scoring models)**



Source: KPMG in Germany, 2023

On the other hand, banks agree almost universally that other aspects, like including ESG risks in pricing frameworks and reflecting them in Pillar 1 credit risk models is still to be established. This, according to leading risk managers, again mirrors the fact that reliable data and data history are difficult to attain for most ESG drivers.

Greenwashing and reputational risk: an underestimated threat?

Only 40% of global financial institutions have procedures in place to identify, prevent and manage greenwashing risks. More than 80% of all banks do not have a clear definition of greenwashing based on specific cases or thresholds.

Addressing greenwashing risks still does not seem to be a priority for many banks, which is surprising given the public attention and sensational negative case studies in recent years. Many banks have recognized the need for action and are establishing clear definitions and quantitative metrics for managing greenwashing risks – banks that have joined programs such as UNEP FI and very large financial institutions are among those at the forefront. These progressive banks are engaging with greenwashing frameworks and expanding existing reputational risk frameworks to accurately reflect ESG factors.

[„Wenn der grüne Anstrich bröckelt“:](#)
[Jetzt Greenwashing-Whitepaper herunterladen](#)





Outlook and next steps

KPMG experts perceive a significantly increased understanding of ESG risk drivers among banks – regarding both their impact on business models and risk profiles, as well as the effort and investment necessary to reflect them accurately within risk management frameworks. At the same time, however, they expect pressure from regulators and other stakeholders to grow. This is perceived both in mature markets like the EU or UK and in markets with emerging regulation like the US, Canada and Switzerland. In the former, the ECB – almost three years after first issuing expectations on banks’ risk management – is now issuing detailed feedback on banks’ integration of ESG drivers into established processes, such as loan granting, monitoring and ICAAP. In the latter, the journey is only just beginning.

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