CLIMATE CHANGE RISK: AWARENESS, MEASUREMENT, MANAGEMENT AND DISCLOSURE

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EBA & EBF Workshop on Sustainable Finance
Brussels

For discussion

Pressure has increased to mitigate climate risks and adapt to the new expected conditions

Example initiatives from policymakers, regulators, investors, and civil society

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

GLOBAL INVESTOR COALITION ON CLIMATE CHANGE

CDSB

Climate Action 100+ Global Investors Driving Business Transition

CDP DISCLOSURE INSIGHT ACTION

EU HIGH-LEVEL EXPERT GROUP ON SUSTAINABLE FINANCE

BANK OF ENGLAND PRUDENTIAL REGULATION AUTHORITY

"Today, our clients — who are your company's owners — are asking you to demonstrate the leadership and clarity that will drive not only their own investment returns, but also the prosperity and security of their fellow citizens."

– Larry Fink, CEO BlackRock Letter to CEOs[1]

In light of the growing pressures and the increasing recognition of the materiality, how should banks and credit risk teams address climate related risks?

1. https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

For discussion

IACPM and Oliver Wyman launched an industry survey to explore climate risk awareness

IACPM | OLIVER WYMAN

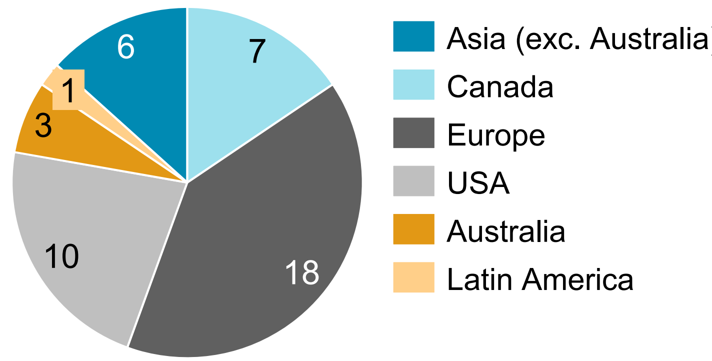
Assessing and Advancing Climate Risk Awareness

Survey description

- Global survey
- 45 financial institutions including 4 development banks
- The survey covers
  - TCFD implementation (e.g. progress, plan, roadblocks)
  - Integration of climate change considerations into credit risk and opportunity assessment (scope, governance, process)

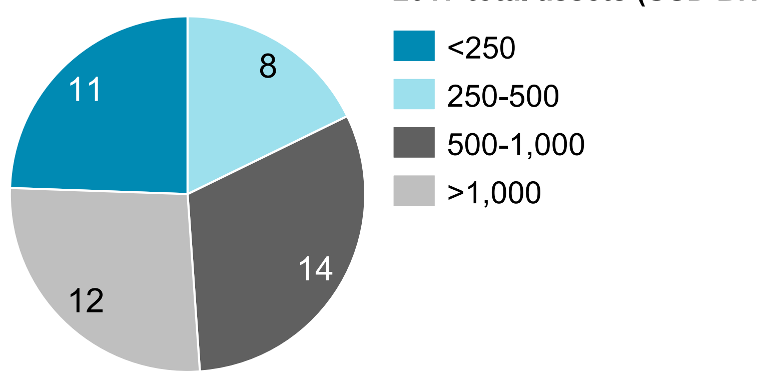
Respondents by geography

Total = 45



Respondents by size

Total = 45

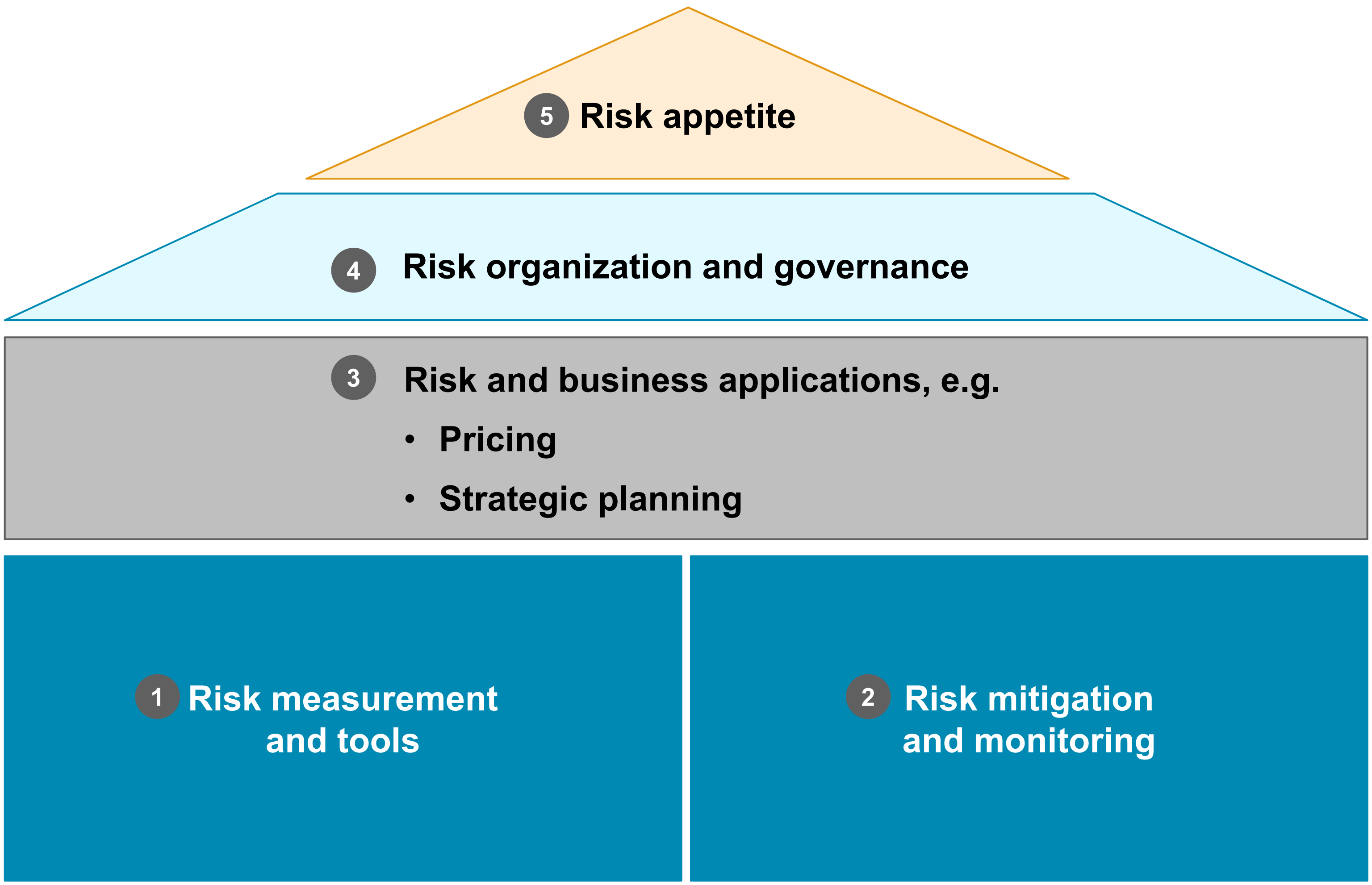


We will leverage the results from the survey throughout this presentation

For discussion

In our view, effective management of climate change risks requires integration across elements of a firm's risk framework

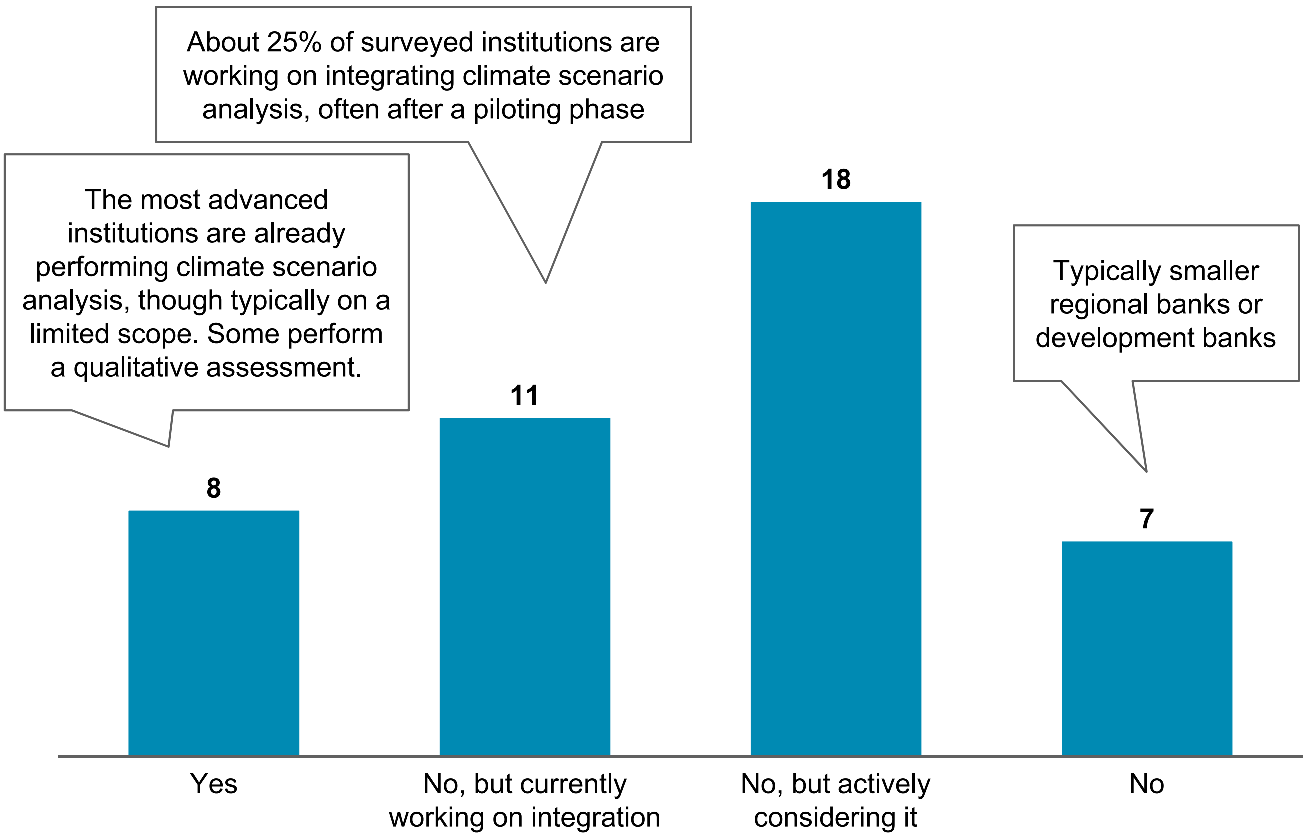
Illustration of risk framework



For discussion

1 Banks should develop capabilities to assess the impact of climate-related scenarios on credit losses

Does your institution perform climate scenario analysis and/or climate stress testing?
# of respondents



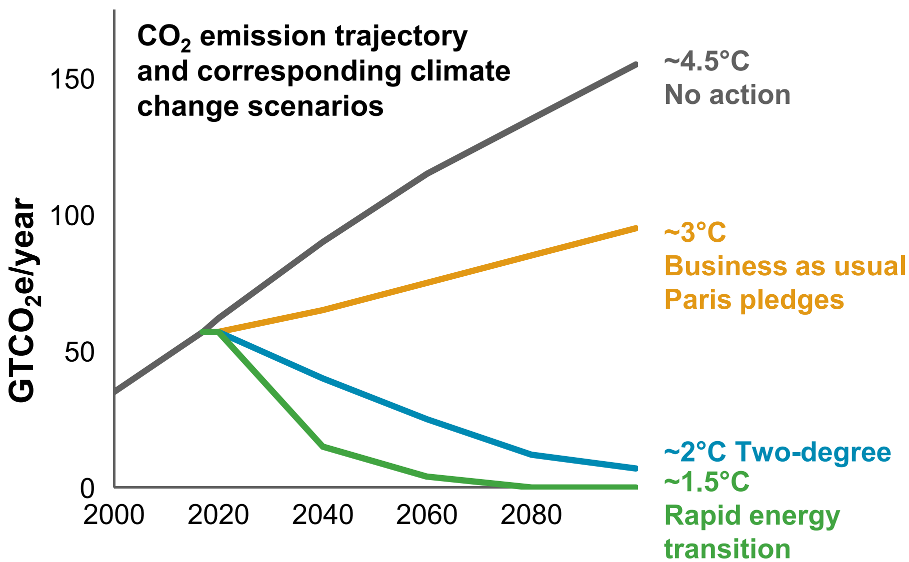
- Institutions are starting to adjust their tools to capture climate risk
- Many institutions are developing capabilities or plan to do so in the near future
- Where performed, climate scenario analysis is not yet fully integrated into portfolio management and strategic planning

Source: Oliver Wyman/IACPM Survey (November 2018)

For discussion

1 We see assessment of long-term temperature based scenarios and event-based scenarios as informative analyses

Temperature-based scenarios



- Holistic scenarios/cross-sector
- Often developed for policy purposes to describe a smooth transition, not a stress scenario
- Requires long-term modeling and assumptions
- Explicitly refers to the TCFD and the 2°C scenario

Event-based scenarios

Triggering event	Type of risk	Key metric	Example exposed sector
Carbon price regulation	Transition (policy)	Carbon price	Oil & Gas
Breakthrough in energy storage	Transition (technology)	Battery capacity	Car manufacturers
Increase in probability/ severity of weather events	Physical	Probability/ severity of weather events	Residential/ Commercial Real Estate

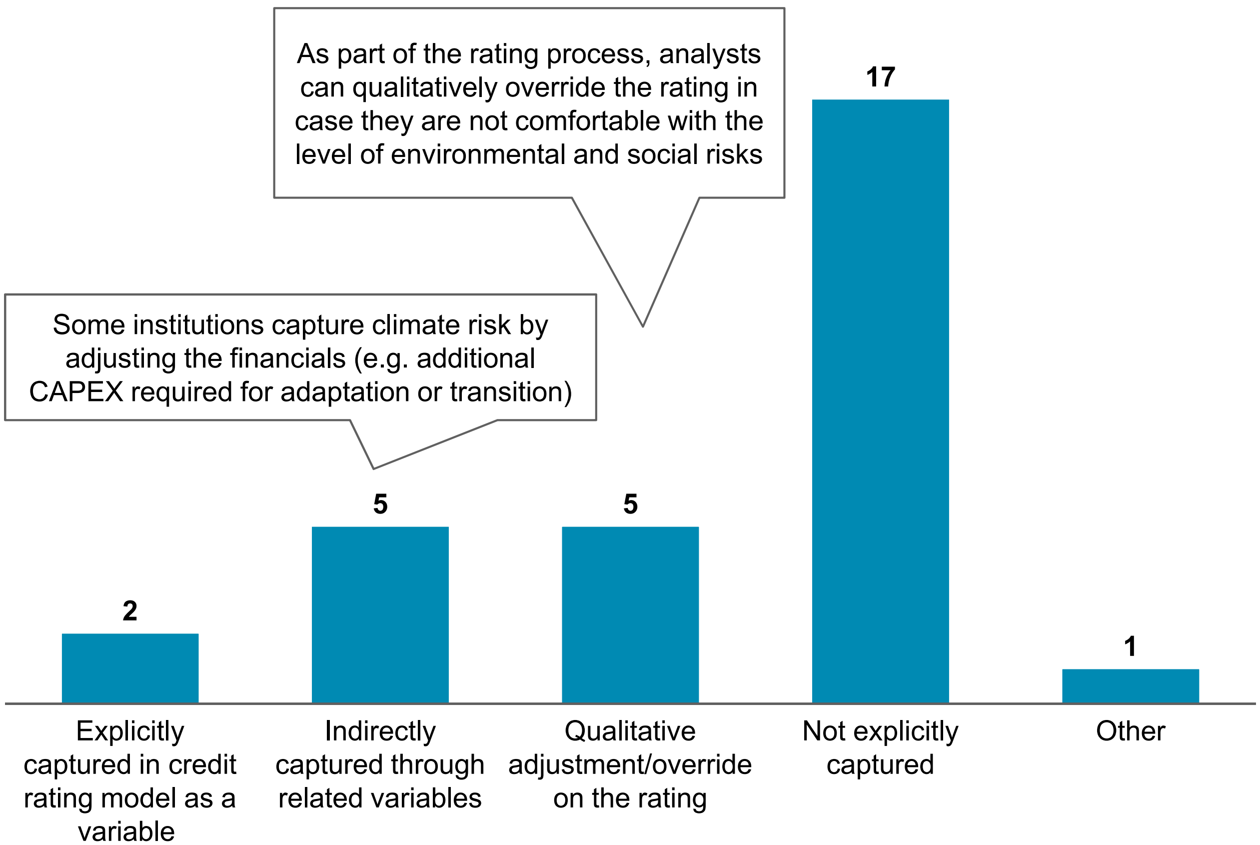
- Scenarios focused on potential impact of one triggering event (e.g. carbon price regulation)
- Focus on understanding current portfolio exposure to the specific event – timing considered as "near-term" for simplification of analysis

The scenarios can be built based on existing climate scenario models

For discussion

1 Existing credit risk tools, credit ratings, credit data, and origination and review processes do not yet effectively incorporate climate risks

How are climate-related risks captured in the credit rating process?
# of respondents



- Some institutions are starting to capture climate-related risks within the credit rating process in an indirect and qualitative manner
- Many institutions have not yet started the journey

Source: Oliver Wyman/IACPM Survey (November 2018)

For discussion

❶ In our view this requires integration of climate risk with traditional financial credit analysis

Climate risk scenarios

Creates linkage between scenarios and key variables

Scenario-adjusted financial statements

Cash Flow Statement

Balance Sheet

Income Statement

Revenue	
	Upstream
	Midstream
	Downstream
	Other
Expenses	
	Upstream
	Midstream
	Downstream
	Other
Pre Tax Income	
	Taxes
Net Income	

Projects scenario-adjusted financial statements for each company

Scenario-adjusted credit risk metrics, rating and probability of default

Credit rating methodology

Type	Metric	Weight	Baseline	Scenario
Scale	Production	20%	Aa	A
Business Profile	Business Profile	20%	Baa	Baa
Profitability	LFCR	25%	Ba	Caa
Leverage	RCF/Debt	25%	Ba	Ca
Financial Policy	Financial Policy	10%	Ba	Ba
Overall			**Ba**	**B1**

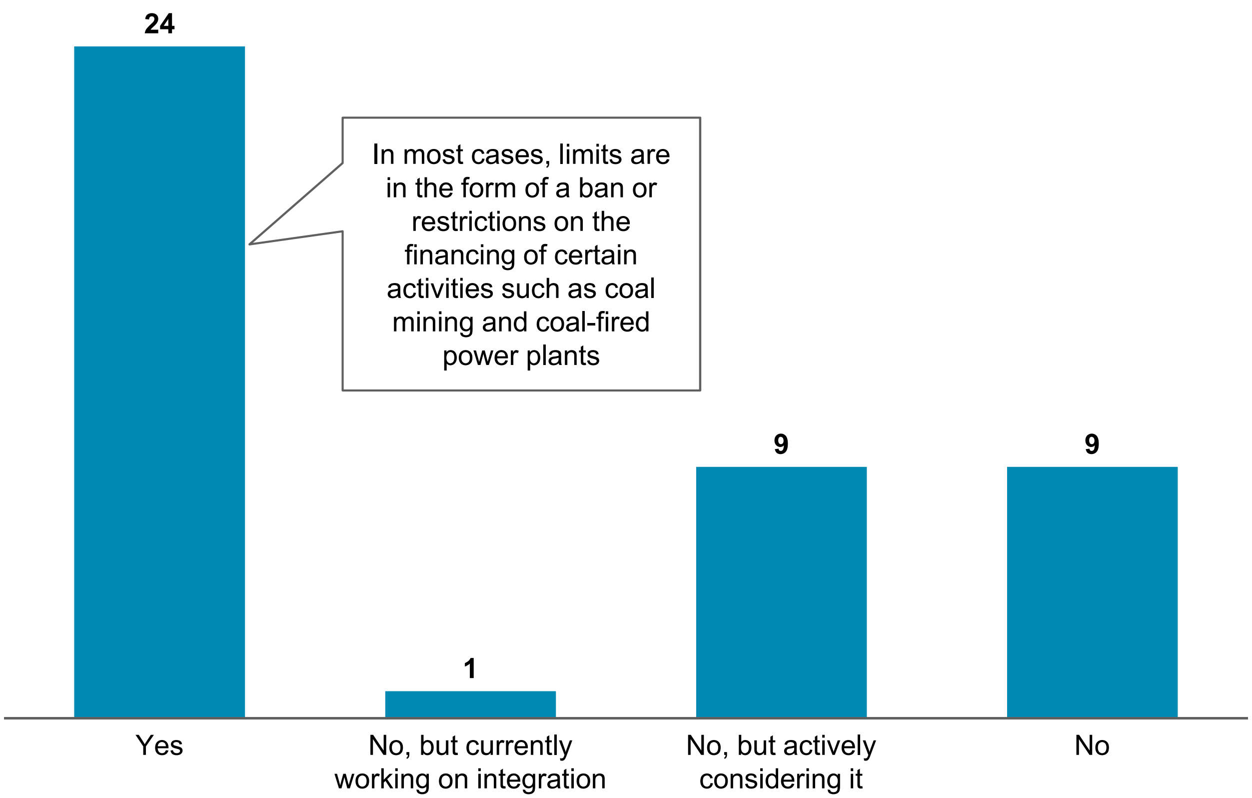
Estimates scenario-adjusted credit rating and probability of default

The next page shows an example of this in the oil and gas upstream sector

For discussion

2 Many banks are including climate considerations into limits and sector exclusion policy – though these are largely for reputational risk management rather than credit risk management

Are climate-related issues explicitly considered when setting and monitoring limits (including exclusion of specific sectors such as coal mining)?
# of respondents



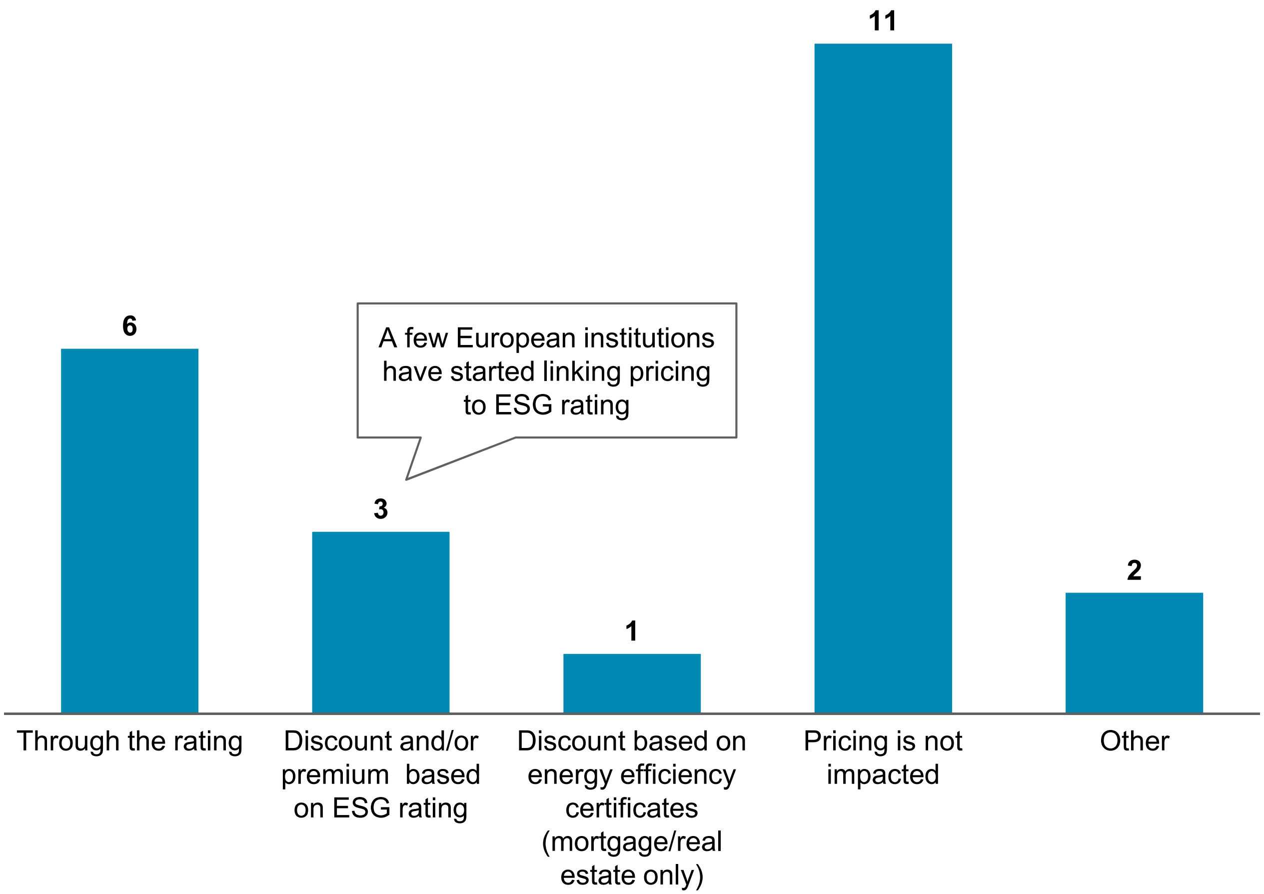
- Many institutions have already set climate-related limits
- These limits are often in the **form of a ban or restrictions on specific sectors**
- Evidence of more advanced climate-related limit systems, e.g. based on total portfolio emissions or climate stressed losses, are limited

Source: Oliver Wyman/IACPM Survey (November 2018)

For discussion

3 Some institutions are beginning to reflect climate risks in loan pricing

How do climate change considerations affect loan pricing? [several responses possible]
# of respondents



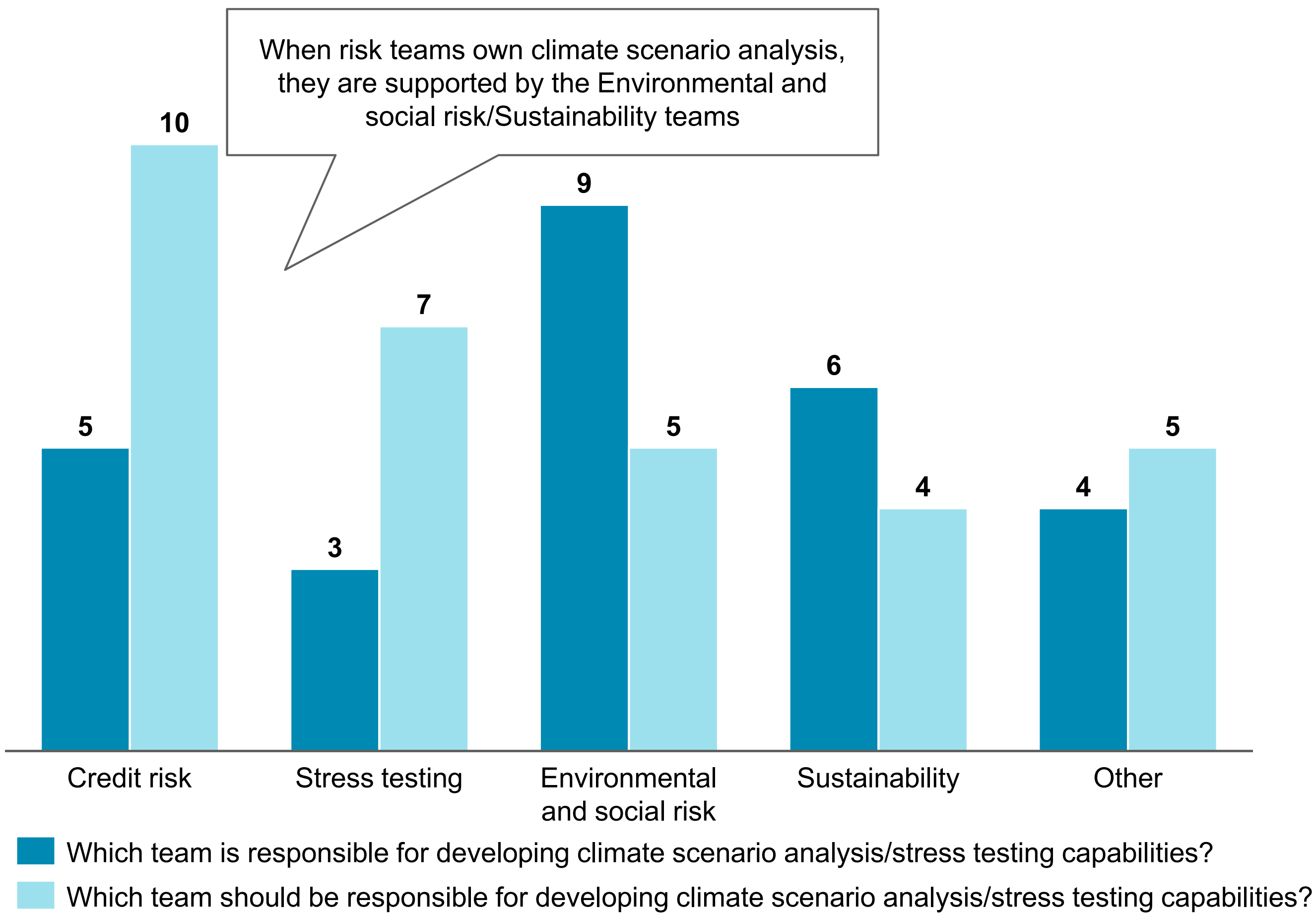
Source: Oliver Wyman/IACPM Survey (November 2018)

- Most institutions **do not adjust pricing** based on considerations related to climate change
- A few institutions have **started linking pricing to ESG rating**
  - – Public examples of sustainability-linked loans include
    - ING/Philips
    - BNP Paribas/Danone
  - – In these examples, the interest rate is directly dependent on the company's sustainability performance and rating

For discussion

4 We see eventual responsibility with credit risk teams as recognition of climate risk as a financial, not just reputational risk

Ownership of climate scenario analysis/stress testing



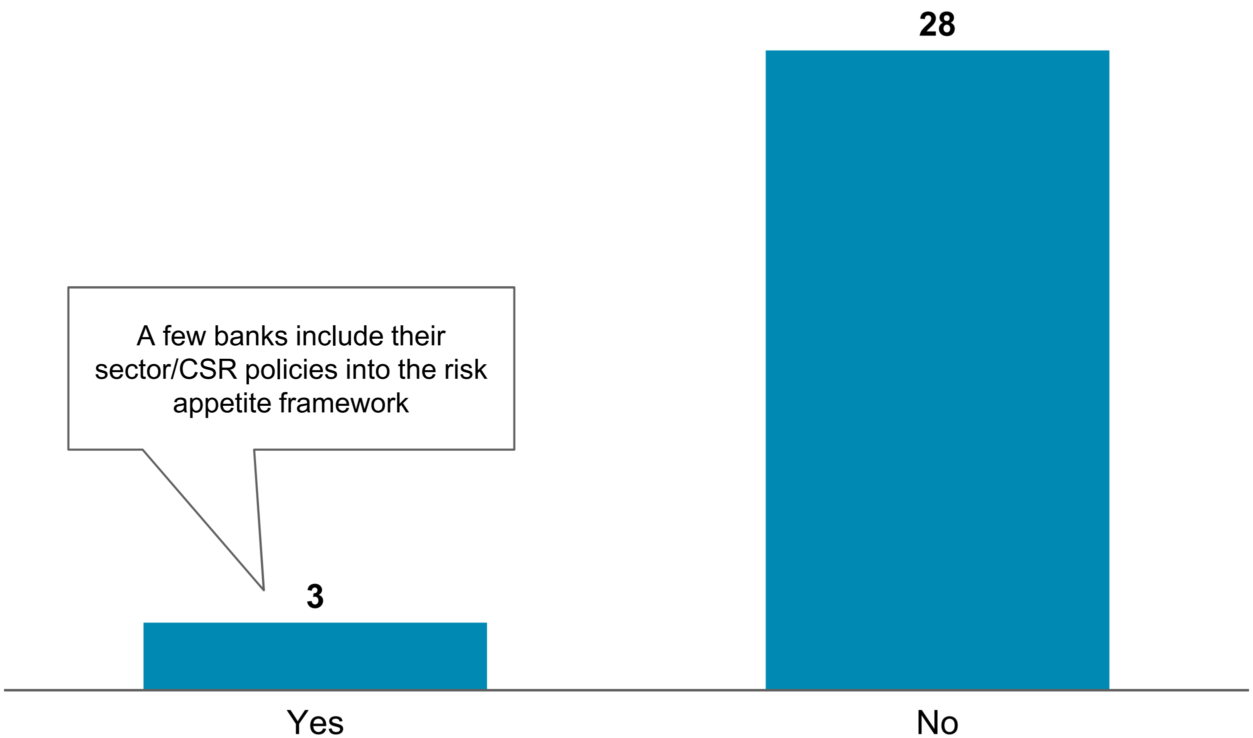
- Currently, initial efforts are driven by **Sustainability/ Environmental and Social risk teams** – often focusing on potential negative impacts of projects and reputational issues
- Some institutions pointed out climate risk management should be **owned by credit risk or stress testing teams** in the future

Source: Oliver Wyman/IACPM Survey (November 2018)

For discussion

5 Banks should incorporate climate risk into risk appetite, consider limits and internal expectations for risk controls

Does your risk appetite statement explicitly cover climate-related risks?
# of respondents



- At this stage, few institutions explicitly incorporate climate risk into their risk appetite statement
- Regulators are starting to look for an articulation of climate risk in line with the risk appetite
  - "*Evidence of how the firm monitors and manages the financial risks from climate change in line with its risk appetite statement*" PRA

Source: Oliver Wyman/IACPM Survey (November 2018)

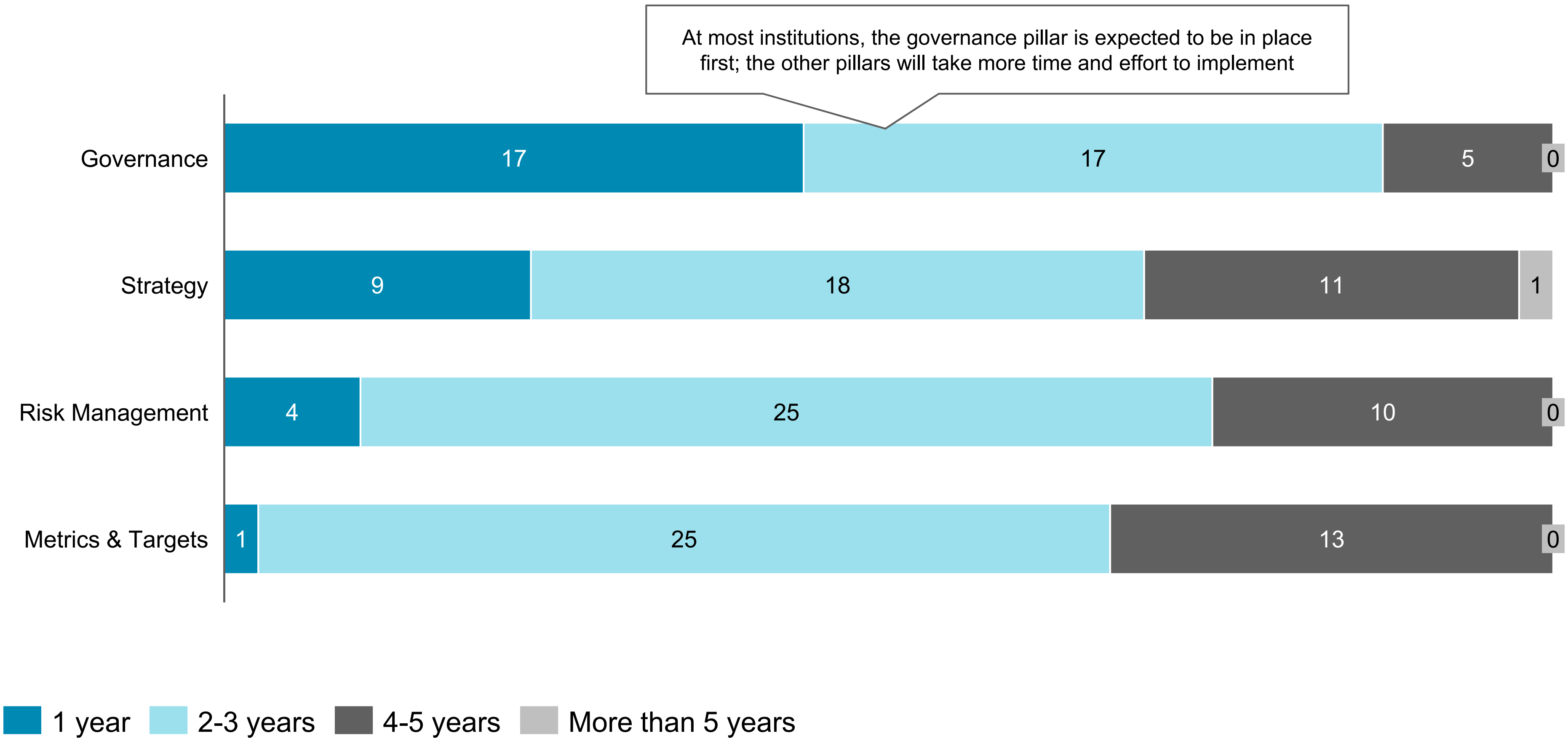
OLIVER WYMAN

Appendix | Supporting materials

For discussion

Financial institutions are also expected to disclose (2/2)
Implementing the TCFD recommendations is a multi-year journey

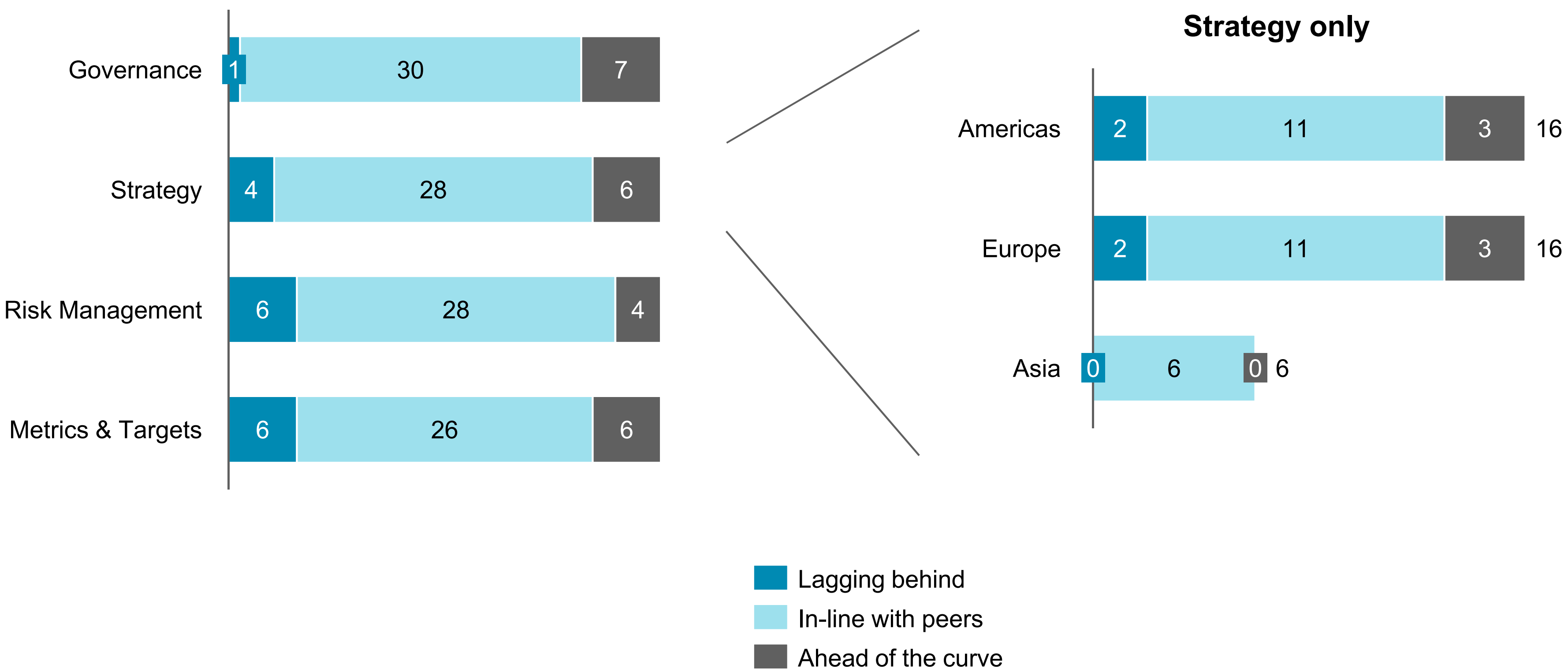
How long do you expect it to take for your company to complete its plans to implement the TCFD recommendations to the extent deemed appropriate (excluding ongoing activities)?
# of respondents, N = 39



Source: Oliver Wyman/IACPM Survey (November 2018)

TCFD implementation peer comparison

Where do you see your institution compared to peers when it comes to implementing the TCFD recommendations? [for each TCFD pillar]
# of respondents, Total = 38



Source: Oliver Wyman/IACPM Survey (November 2018)

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