



EUROPEAN CENTRAL BANK

BANKING SUPERVISION

Walking the talk: banks gearing up to manage climate and environmental risk

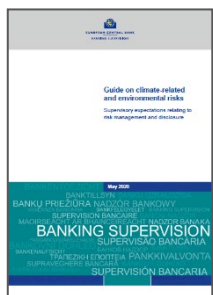
ECB Industry Outreach



3 February 2023

SSM Climate Risk Project Management Team

The 2022 supervisory exercises provided complimentary views on the readiness of banks



Risk management

- 1. Business environment
- 2. Business strategy
- 3. Management body
- 4. Risk appetite framework
- 5. Organizational structure
- 6. Internal reporting
- 7. Risk management framework
- 8. Credit risk management
- 9. Operational risk management
- 10. Market risk management
- 11. Stress testing
- 12. Liquidity risk management

Disclosures

- 13. Disclosures

Horizontal
supervisory
exercises

Targeted
supervisory
exercises

Thematic Review on C&E risk

Dedicated on-sites (TBC)

Targeted review on CRE

Climate Risk Stress Test

Gap analysis on C&E risk disclosures

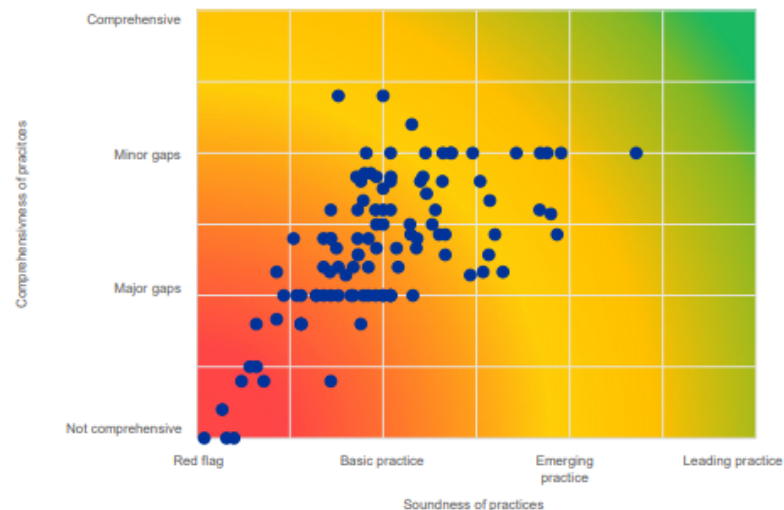
State of climate risk management in the banking sector in 2022 – overall results (1/2)

Results of the review

- Virtually all banks are now **out of the starting blocks** to identify and manage their C&E risks
- **Significant increase compared to last year**, as in 2021 half of the banks made no or little meaningful progress
- Over **85% of banks now have at least basic practices** in place for at least half of the expectations
- With a **group of banks paving the way**, having emerging practices and leading practices in a considerable number of areas

Soundness and comprehensiveness of institutions' practices to manage C&E risks

(average level of soundness (horizontal axis) and comprehensiveness of practices (vertical axis) for 107 significant institutions)



Source: Supervisory assessment of 107 significant institutions' responses to the 2022 thematic review.
Notes: Each dot represents a single significant institution, taking the weighted average of all applicable assessment modules. The scope of the thematic review varies by institution, as not all institutions were included in all assessment modules (see Chapter 2.2 for more details).

State of climate risk management in the banking sector in 2022 – overall results (2/2)

Results of the review

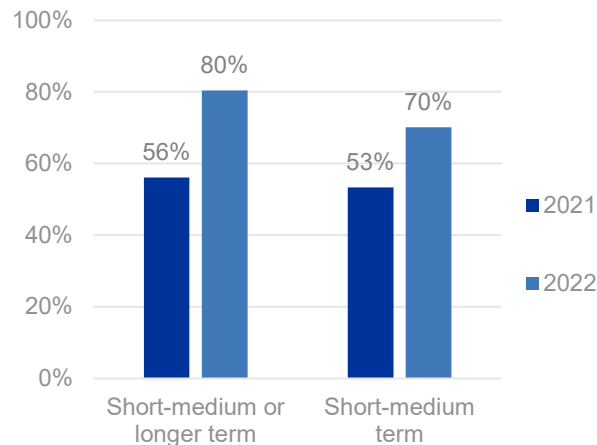
Banks broadly acknowledge **material impact of C&E risks** within their business planning horizon...

- More than 80% of banks deems to be materially exposed to the risks, with 70% seeing material risk within next 3 to 5 years
- Banks that deploy a variety of assessment approaches appear to have a better gauge of the risks

... but are likely to **significantly underestimate** their **breadth and magnitude**.

- Blind spots in identification of risks in key sectors, geographies and risk drivers were identified in 96% of institutions
- Moreover, the review showed that 85% of banks do not have a single practice that comprehensively covers all C&E risk drivers that are material or likely to be material.

Percentage of banks that deem to be materially exposed to C&E risks at least for one risk type



Good practices demonstrate that swift progress is possible

Business strategy

Transition planning

Key performance indicators

Transition products

Client engagement

Client transition plans

Governance and risk appetite

Management body

Remuneration policies

Second line of defense

Third line of defense

Key risk indicators

Data governance and data collection

Internal risk reporting

Materiality assessment

Identification of risk drivers

Identification of exposures

Determination of materiality

Risk management

Due diligence and data collection

Controversial client activities

Credit risk classifications

Market risk classifications

Operational risk classifications

Collateral valuations

Loan pricing

Capital adequacy assessments

Environmental risk exclusions

Environmental risk due diligence

Biodiversity foot printing

Observations on strategy

Results of the review

Many banks start to **understand how climate risks** might impact their business model and set out **initial strategic responses**...

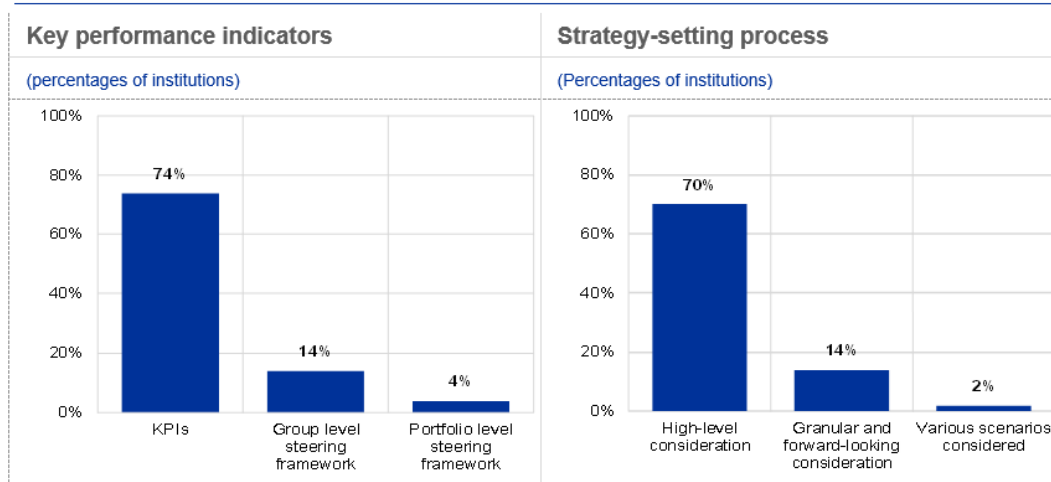
- Most banks started to determine the impact of climate-related risks on their business strategy and
- 74% of banks established an initial set of KPIs for their strategic response.

... but **their strategies do not yet make their business model resilient** to these risks

- 86% of banks still lack steering capabilities to implement their strategic response and KPIs.
- Only a small group of leading banks employ forward-looking tools to determine the impact of these risks on their business strategy.

Chart 14

Climate-related risk practices in business strategy



Note: Sample of 107 institutions that were within the scope of the 2022 thematic review on climate-related and environmental risks.

Example of good practice: transition planning (1/2)

1. Materiality assessment

- Banks typically assess materiality of their exposure to transition risks. Set **targets for areas of material risk**.

2. Strategic targets and risk appetite

- KPIs** reflecting **short, medium and long term** targets **cascaded down** to individual business lines.
- Targets typically reflected in **KRIs**.

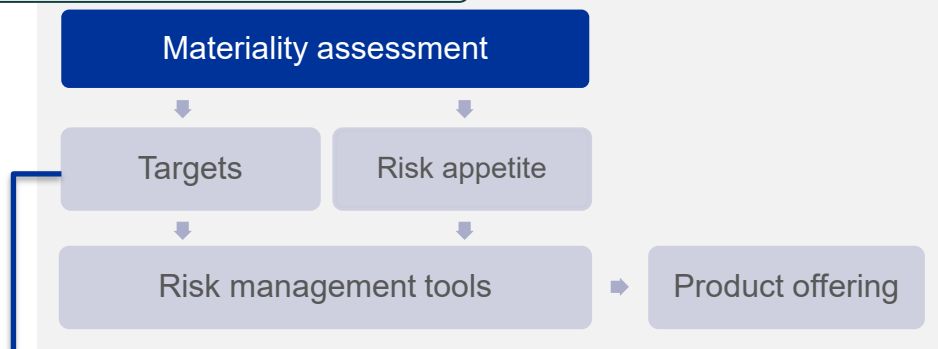
3. Risk management tools

- Targets and attention thresholds integrated into banks' **monitoring and escalation arrangements**.
- Counterparty-specific actions** for clients that are not aligned with banks' portfolio trajectory, taking into account client transition plan.

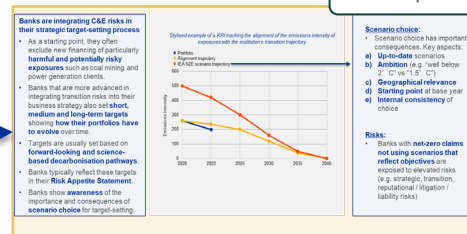
4. Product offering

- Adjusted product offering** for clients with elevated transition risks.

Transition planning risk management cycle



Good practice 3.1.2

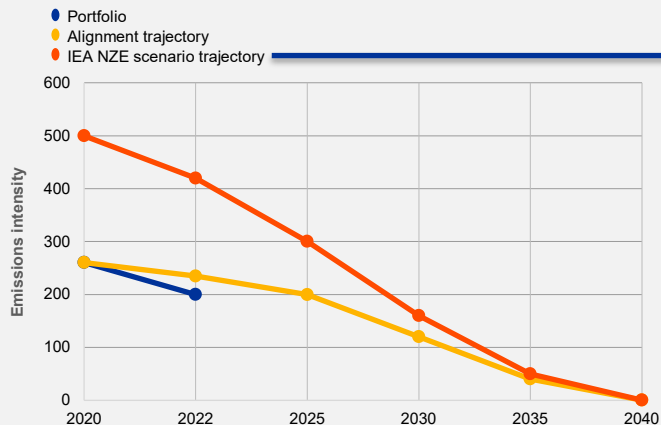


Example of good practice: transition planning (2/2)

Banks are integrating C&E risks in their strategic target-setting process

- As a starting point, they often exclude new financing of particularly **harmful and potentially risky exposures** such as coal mining and power generation clients.
- Banks that are more advanced in integrating transition risks into their business strategy also set **short, medium and long-term targets** showing **how their portfolios have to evolve** over time.
- Targets are usually set based on **forward-looking and science-based decarbonisation pathways**.
- Banks **align their Risk Appetite Statement** with the targets.
- Banks show **awareness** of the importance and consequences of **scenario choice** for target-setting.

Stylised example of a KRI tracking the alignment of the emissions intensity of exposures with the institution's transition trajectory



Scenario choice:

- Scenario choice has important consequences. Key aspects:
 - Up-to-date** scenarios
 - Ambition** (e.g. “well below 2° C” vs “1.5° C”)
 - Geographical relevance**
 - Starting point** at base year
 - Internal consistency** of choice

Risks:

- Banks with **net-zero claims not using scenarios that reflect objectives** are exposed to elevated risks (e.g. strategic, transition, reputational / litigation / liability risks)

Observations on governance and risk appetite

Results of the review

Banks have **improved their organisational structure** and gained **awareness of data gaps**...

- Almost all banks have assigned responsibilities to management board, while half of banks also determined collective suitability of the board.
- 90% of banks have assigned responsibilities to 1st and 2nd lines of defence; less than 40% also did so for the third line of defence.

... but are still in the **early stages of tackling climate-related risks** in a granular, bank-wide and comprehensive manner

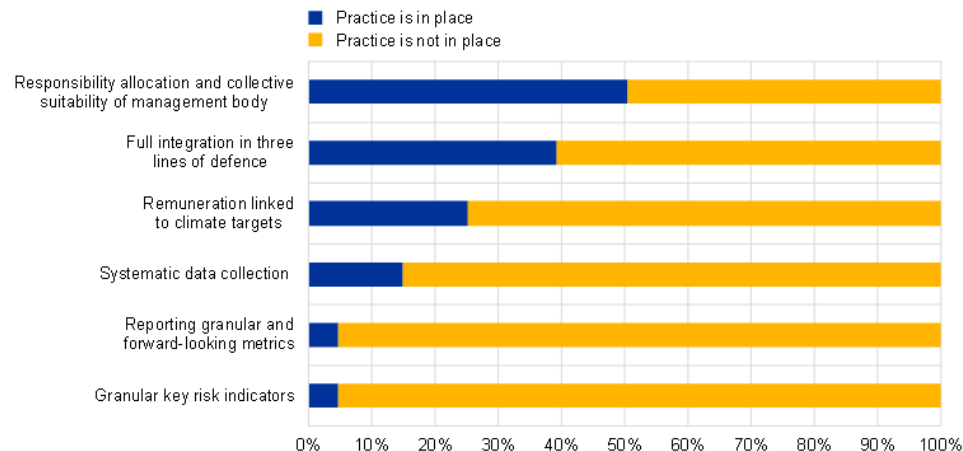
- ~15% of banks systematically collect data needed.
- Even fewer internally report granular and forward-looking information and set granular KRIs.

Chart 15

A structured, integrated and granular governance of climate-related risks

Selected criteria for a structured, integrated and granular governance of climate-related risks

(percentages of institutions that have practices in place)



Note: Sample of 107 institutions that were within the scope of the 2022 thematic review on climate-related and environmental risks.

Example of good practice: data governance (1/2)

Banks are devising **approaches to developing C&E reporting frameworks**. Three main components:

1. Data gap analysis

- Consider disclosure requirements, risk management needs, business objectives and commitments

2. Data collection strategy

- Variety of internal and external sources
- Collect client/asset-level data via questionnaires (see next slide)
- Hierarchies of data sources: actual client data + verified external data. Proxies as interim solution
- Assess third-party providers (e.g. data quality)

3. Data management and reporting framework

- Frequently a centralised IT platform encompassing all sustainability-related data

Table 21

Stylised and simplified example of a C&E-related data catalogue

Data type	Description (metric and methodology)	Data level	Collection deadline	Gap	Action (in case of gap)	External sourcing?	Responsible workstream
Scope 1, 2 & 3 financed emissions	Metric: CO2 tonnes. Methodology: client emissions	Client	DD-Month-202X	Yes	Roll out client questionnaire; supplement with PCAF data	Partially (name of provider)	Name of workstream
Total financed emissions	data and data on sectoral average emissions	Client	DD-Month-202X	Yes			
Building construction year	Year construction finalised	Instrument	DD-Month-202X	No	N/A	N/A	Name of workstream
Building floor	Floor level	Instrument	DD-Month-202X	Yes	Roll out client questionnaire	No	Name of workstream
Building EPC	EPC label of building	Instrument	DD-Month-202X	Yes	Roll out client questionnaire; supplement with external data	Partially (name of provider)	Name of workstream

Example of good practice: data governance (2/2)

Examples

Banks are using **questionnaires to collect client and asset-specific data.**

Purpose

- Client questionnaire to collect the client and asset-specific data needed to assess relevant transition and physical risk drivers

Scope

- Small and large banks use questionnaires to collect data from a wide scope of customers (incl. SMEs)

Process

- Typically embedded in due diligence and client engagement procedures

Type of data	Data	Description	Targeted risk driver
Quantitative data	Current and projected total GHG emissions	An estimate of the total current and projected GHG emissions of financed assets broken down by Scope 1, 2 and 3 emissions (e.g. tCO2 or tCO2e/t produced product)	Transition risk (e.g. policies and regulations)
	Fossil fuel dependency	Production, processing, distribution, storage, or combustion of fossil fuels (percentage of revenues/production volumes)	Transition risk (e.g. policies and regulations)
	Geographical location data	Granular data on the geographical location of financed assets and/or main client activities (e.g. postal codes)	Physical risk (e.g. flooding)
	Energy consumption intensity	An estimate of the energy consumption of clients (e.g. gigawatt hours – GWh), including a split of the share of (non-)renewable sources	Transition risk (e.g. policies and regulations)
	Energy performance certificate	EPC for both residential and commercial real estate	Transition risk (e.g. market sentiment or regulation)
Qualitative data	Adverse media check	Is debtor involved in controversies related to climate change and/or environmental degradation?	Reputational and liability risk
	Assessment of impact of C&E regulations	Does the debtor assess the impact of upcoming regulations related to climate change and environmental degradation?	Transition risk (e.g. policies and regulation)
	Production, use or disposal of chemicals	Does the debtor produce, use or dispose of chemicals?	Transition risk (e.g. consumer preferences)
	Time-bound emission reduction plans	Does the client have time-bound plans in place to align its GHG emissions with, for example, the Paris Agreement objectives?	Transition risk (e.g. policies and regulations)

Observations on (credit) risk management

Results of the review

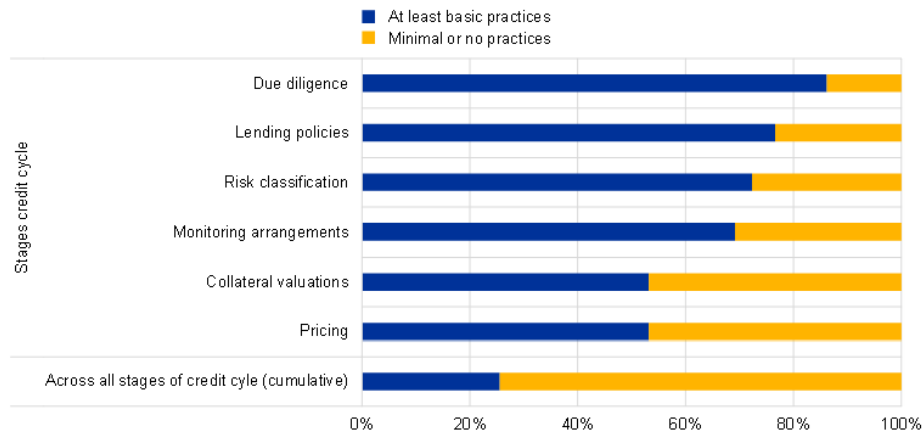
Roughly 25% of banks have put in place **at least basic climate risk practices across all stages** of the credit risk cycle

- The majority of institutions have integrated risks into **due diligence** and **lending policies**, albeit it a generalised approach in most cases
- Many banks are using qualitative information to construct proxies to identify and evaluate **risk classification** and **monitoring**
- In the subsequent stages of the credit management cycle, the level of climate-related risk integration is more limited
 - Roughly half of banks are considering it in the process of **collateral valuations** and **loan pricing**
 - Only a small subset of institutions is using sufficiently **granular data**, such as client and asset-level data

Chart 18

Climate-related risk practices across the credit risk management cycle

(percentages of institutions that have in place at least basic climate-related risk practices across various stages of the credit risk management cycle)



Note: Sample of 94 institutions that were within the scope of the credit risk assessment module of the 2022 thematic review on climate-related and environmental risks.

Example of good practice: risk classification

Banks are integrating **C&E risks into classification systems** in at least two ways:

1. Stand-alone scorecard

- A classification system that for example follows a traffic light system (e.g. red / amber / green)
- Based on C&E client data collected by due diligence questionnaires (see slide 18).
- Typically factored into discussions on lending and/or credit committee decisions

2. Integration into PD-rating systems

- As part of PD-rating system concrete criteria are set triggering a downgrade override of client's PD rating
- These criteria can be informed by a climate scorecard (see above) or specific C&E-related developments related to reputational risks or the business environment more broadly

Table 27

Stylised example of transition risk scorecard for corporate clients

Component	Sub-component	Client-level inputs for scorecard
Client awareness metric	Governance	<ul style="list-style-type: none"> • Governance reporting in line with the TCFD standard • Environmental risk rating by external, independent third party
	Strategy	<ul style="list-style-type: none"> • Strategy disclosure in line with the TCFD standard • Strategy in line with a 1.5 degrees Paris Agreement scenario • Net-zero emission targets
	Risk management	<ul style="list-style-type: none"> • The integration of climate-related risks in client's risk management in line with TCFD
	Metrics and targets	<ul style="list-style-type: none"> • Disclosure of Scope 1, 2 and 3 GHG emissions • Disclosure of targets to reduce risks stemming from climate change
Carbon transition metric	Current carbon profile	<ul style="list-style-type: none"> • Exposure to hydrocarbon value chain • Level of GHG emissions
	Medium-term sensitivity to transition risk	<ul style="list-style-type: none"> • Client's sensitivity to technology, market and policy changes related to climate change, including in the context of its competitive positioning within its market
	Medium-term adaptive capacity	<ul style="list-style-type: none"> • Client's ability to mitigate transition risk exposure in the medium term, specifically by assessing the degree to which transition risk exposure is reflected in robust CAPEX plans

Observations on C&E risk disclosures*



Disclosures content: 45% of the banks' disclosures were assessed as insufficient from both the content and substantiation perspectives. Few banks disclose meaningful information on financed emissions, alignment metrics or energy performance certificates



Transparency: 1/3 of institutions do not yet transparently disclose that they are materially exposed to C&E risks in line with their internal materiality assessments

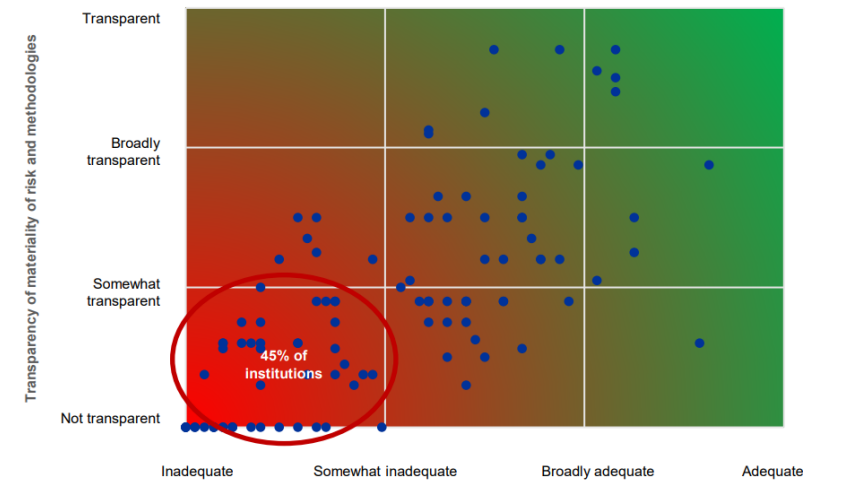


Substantiation: Institutions insufficiently substantiate their C&E risks figures, metrics and targets that they choose to disclose, raising concerns on associated reputation and litigation risk.

Chart 2

The state of climate-related and environmental risk disclosures in the banking sector in terms of content and transparency

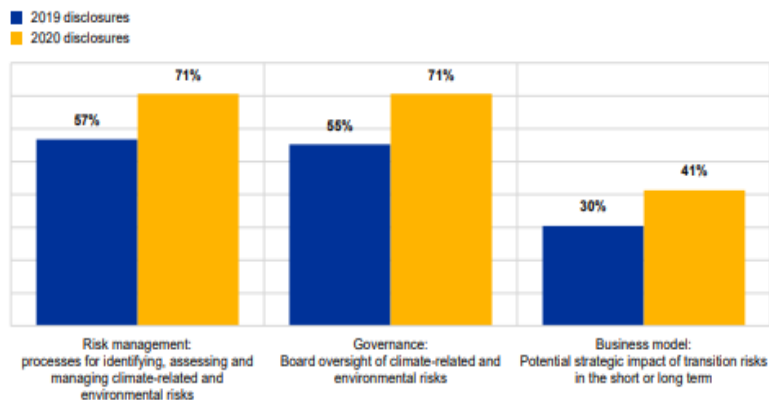
(y-axis: the level of alignment of 109 institutions' disclosures with the supervisory expectations set out in the ECB Guide on transparency and substantiation; x-axis: the level of adequacy of 109 institutions' disclosures as regards the expectation set out in the ECB Guide on the content of disclosures)



Examples of practices and trends observed

Overall, the gap analysis shows that institutions have made progress

Overview of the progress made by institutions on describing selected indicators in their public disclosures



Source: Supervisory assessment based on institutions' disclosures with a reference date of end-2019 (2019 disclosures) and end-2020 or later when available (2020 disclosures).

Examples of good practices identified in banks' disclosures

- **Alignment paths:** An increasing number of banks are joining Net Zero alliances such as GFANZ. Few of these banks already disclose alignment of select portfolios referring a net zero scenario such as IEA NZE2050
- **External assurance:** some disclosures explicitly mention which climate-related and environmental information formed part of the external assurance process. Other disclosures explicitly exclude specific types of information or expressly limit the extent of the assurance provided for specific elements of information.
- **Risk management:** One institution disclosed its procedure for the management and continuous monitoring of the environmental and social risks associated with the financing of corporate client activities and facilities.