



**Development of tools and mechanisms for the integration of environmental,  
social and governance (ESG) factors into the EU banking prudential framework  
and into banks' business strategies and investment policies**

**INTERIM STUDY**

**December 2020**

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## **EUROPEAN COMMISSION**

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RESOURCES (Finance – IT)

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## Table of Contents

1. Purpose and structure of the Interim Study .....	4
1.1. Background of this Interim Study .....	4
1.2. Structure of the Interim Study .....	5
2. Context and objectives of the Study .....	7
2.1. Context of the Study .....	7
2.2. Purpose and objectives of the Study .....	8
3. Overview of Study methodology and approach .....	10
3.1. Data collection tools and techniques .....	10
3.2. Definition of stakeholder perimeter groups .....	10
3.3. Total coverage of the Interim Study .....	11
4. Modalities of integrating ESG risks into EU banks' risk management processes .....	13
4.1 Overview of focus areas for research .....	13
4.2 Stocktake of current ESG practices .....	15
4.2.1 First key takeaways .....	15
4.2.2 ESG risk definition & identification .....	18
4.2.3 ESG risk governance & strategy .....	35
4.2.4 ESG risk management processes & tools .....	41
4.2.5 ESG risk reporting & disclosure .....	71
4.3 First overview of the possible arrangements, processes, mechanisms and strategies to map, assess and manage ESG risks .....	81
5 Modalities of integrating ESG risks into EU prudential supervision .....	87
5.1 Overview of focus areas for research .....	87
5.2 Stocktake of current ESG practices .....	89
5.2.1 First key takeaways .....	89
5.2.2 ESG risk definition & identification .....	92
5.2.3 ESG governance & strategy .....	103
5.2.4 Supervisors' assessment of ESG risk .....	106
5.2.5 ESG requirements, guidelines & engagement initiatives .....	120
5.3 First overview of the tools and mechanisms for the integration of ESG risks into the EU prudential supervision .....	130
6. Modalities of integrating ESG objectives into EU banks' business strategies and investment policies .....	135
6.1 Overview of focus areas for research .....	135
6.2 Stocktake of current ESG practices .....	137
6.2.1 First key takeaways .....	137
6.2.2 ESG financial products, services and markets .....	140
6.2.3 ESG strategy & governance .....	153

6.2.4	ESG measurement, monitoring & disclosure .....	159
6.2.5	ESG portfolio steering & business as usual processes .....	169
6.3	A first overview of the impediments to the development of a well-functioning EU market for green finance and instruments and strategies to promote the scaling-up of green finance .....	175
6.3.1	A first overview of the impediments to the development of a well-functioning EU market for green finance and for responsible investment .....	175
6.3.2	A first overview of the appropriate instruments and strategies to promote the scaling-up of green finance and of the market for sustainable financial products and to enhance the ability of banks to understand how ESG objectives can translate into financial opportunities .....	180
Annex I. List of abbreviations .....		185
Annex II. List of stakeholders .....		187
Annex III. Bibliography .....		192

## 1. Purpose and structure of the Interim Study

### 1.1. Background of this Interim Study

This document represents the Draft Interim Study prepared by BlackRock Financial Markets Advisory (BlackRock FMA) on the development of tools and mechanisms for the integration of environmental, social and governance (ESG) factors into the EU banking prudential framework and into banks' business strategies and investment policies, as per Tender Specifications N° FISMA/2019/024/D<sup>1</sup> (the Tender Specifications) on behalf of the European Commission (the Commission).

In line with the Commission's Tender Specifications, the Interim Study focuses primarily on the stocktake exercise of current practices by banks and supervisors and is based on a preliminary analysis of the data collected so far as highlighted below. The Interim Study should cover all elements addressed in chapter 2.2.2 of the Tender Specifications, including "the comprehensive results of the stocktake exercise on the way banks currently deal with ESG risks", "practices for the integration of ESG risks into prudential supervision", as well as the "comprehensive results of the stocktake exercise on the current banks' strategies to integrate sustainability factors".<sup>2</sup>

Moreover, the Interim Study should provide "a first overview of possible arrangements, processes, mechanisms and strategies to be implemented by EU banks to map, assess and manage ESG risks, mechanisms for the integration of ESG risks (with particular focus on environmental risks) into EU prudential supervision", as well as "impediments to the development of a well-functioning EU market for green finance and for responsible investment as well as of the appropriate instruments and strategies to promote the scaling-up of green finance". As such, the Interim Study provides preliminary areas, as highlighted by the Study participants, that could be focus areas for identifying key principles, and that will be further analysed and expanded upon during the remainder of the Study.

Considering the timeline set forth in the Tender Specifications, the assignment was structured in four phases. This timeline is illustrative and, given the dynamics surrounding the topic, has to remain flexible, in particular, so that further data can be collected on an ongoing basis where relevant:

- **Phase I – Preparation Phase:** The objective of this completed phase was to define and align on the key parameters related to designing and conducting the Study. This includes scope definition, external stakeholder identification and selection, methodology, and timeline.
- **Phase II – Data Collection Phase:** The objective of this phase is to conduct a comprehensive stocktake exercise for each of the objectives. While this phase is nearly completed, additional information collected at later stages during the Analysis Phase will still be taken into account.
- **Phase III – Analysis Phase:** The objective of this phase is to analyse data and synthesise findings into study format. This phase is ongoing.
- **Phase IV – Final Study Completion Phase:** The objective of the last phase is to deliver the findings of the Study in its final form. This phase will be completed with the handover of the Final Study.

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<sup>1</sup> Tender available at: <https://etendering.ted.europa.eu/cft/cft-documents.html?cftId=5201>.

<sup>2</sup> Tender Specifications, section 2.6.1, page 14.

While this Interim Study covers all elements stated in chapter 2.2.2 of the Tender Specifications, it should be noted that this is an interim report, submitted within the first seven months of the 12-month duration of the contract. In particular, as stated above, the analysis phase remains ongoing. Therefore, this document is a work in progress document, which is subject to change and reflects the progress of the work as at submission date, and it is shared with the Commission for their feedback. As highlighted above, and in line with the Tender Specifications, the Interim Study focuses on a stocktake of current practices by banks and supervisors. A workshop was held with the Commission and representatives of different stakeholder groups with the aim of “discussing the results of the data collected through desk research, focus groups, interviews and case studies, and gather additional input for the stocktake exercise for each of the three specific objectives”.<sup>3</sup>

In accordance with the Tender Specifications, upon receipt of the Interim Study, the Commission had a period of 30 days to provide feedback.<sup>4</sup>

According to the Tender Specifications, feedback provided on the Interim Study by the Commission, and during the workshop, will be taken into consideration in the Draft Final Study that should be submitted to the Commission no later than 1 February 2021, as well as in the Final Study, which will be this document in its definitive form and that should be submitted to the Commission no later than 1 April 2021.

## **1.2. Structure of the Interim Study**

The Interim Study is structured in six sections:

- **Section 1** describes purpose and structure of the Interim Study
- **Section 2** provides the context, purpose and objectives of the Study
- **Section 3** provides an overview of the methodology applied including the definition of external stakeholder perimeter groups, selection criteria as well as a description of deployed research tools which comprise of focus groups, desk research, interviews / questionnaires and workshops
- **Sections 4-6** cover each of the three Study objectives<sup>5</sup> that were defined by the Commission. To do so, each section commences with a brief overview of the respective focus areas. Subsequently, a preliminary stocktake of current practices is presented. Sections 4 and 5 are completed by preliminary areas that could be seen as focus areas for identifying key principles that will be further expanded and analysed during the remainder of the Study. Section 6 includes a first, preliminary illustration of impediments and enabling factors to foster the development of a well-functioning market for green and sustainable finance

All information (including figures presented) is subject to review and may change for the Draft Final Study and the Final Study.

As agreed with the Commission, between the delivery of the Interim Study, the Draft Final Study and the Final Study, the following elements will be incorporated, among others:

- Feedback from the Commission on the Interim Study and the Draft Final Study;

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<sup>3</sup> Tender Specifications, section 2.4, page 13.

<sup>4</sup> Tender Specifications, section 2.6.2, page 15.

<sup>5</sup> See section 2.2 for a description of the three Study objectives.

- Input from the 2<sup>nd</sup> workshop with a variety of participants across stakeholder groups;
- Additional input from further desk research obtained after the cut-off point;
- Refinements and additions based on the analysis phase which, as agreed with the Commission, is ongoing at the point of submission of the Interim Study;
- Further analysis and detailing of high-level principles and best practices;
- Any structural changes to the report or addition of sections;
- Any other changes that might be required.

## 2. Context and objectives of the Study

### 2.1. Context of the Study

According to the Commission's Tender Specifications, "sustainability and the transition to a low-carbon, more resource-efficient and circular economy are key in ensuring long-term competitiveness of the EU economy. Sustainability has long been at the heart of the European Union project and the EU Treaties give recognition to its social, environmental and climate dimensions. The EU is committed to development that meets the needs of present and future generations, while opening up new employment and investment opportunities and ensuring economic growth" [...] "Reorienting private capital to more sustainable investments requires a comprehensive shift in how the financial system works. This is necessary if the EU is to develop more sustainable economic growth, ensure the stability of the financial system, and foster more transparency and long-termism in the economy".<sup>6</sup>

To that end, the Commission has commenced or conducted several key activities, including but not limited to:

- Appointment of a High-Level Expert Group (HLEG) on sustainable finance, offering a comprehensive vision on how to build a sustainable finance strategy for the EU;<sup>7</sup>
- Launch of the Action Plan on Sustainable Finance in March 2018, in response to the policy recommendations of the HLEG in the January 2018 report. In the Action Plan, the Commission acknowledges that "environmental and climate risks are currently not always adequately taken into account by the financial sector". For that reason, action 8 of the Action Plan requires the Commission to "explore the feasibility of the inclusion of risks associated with climate and other environmental factors in institutions' risk management policies";<sup>7</sup>
- Review of the Capital Requirements Directive (CRD)<sup>8</sup>. In light of this, the European Banking Authority (EBA) was mandated to "assess the potential inclusion of ESG risks in the review and evaluation performed by supervisors and to submit a report on its findings to the Commission, the European Parliament and to the Council by 28 June 2021";<sup>7</sup>
- In the context of the Capital Requirements Regulation 2 (CRR2)<sup>9</sup>, the tasking of the EBA to develop draft implementing technical standards specifying uniform disclosure standards and to submit the draft to the Commission by 28 June 2020 (Article 434a); moreover (Article 501c), the EBA was tasked to "assess whether a dedicated prudential treatment of exposures associated substantially with environmental and/or social objectives" would be justified and to submit a report by 28 June 2025;<sup>10</sup>

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<sup>6</sup> Tender Specifications, section 2.1, page 7.

<sup>7</sup> Tender Specifications, section 2.1, page 8.

<sup>8</sup> Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures. OJ L 150, 7.6.2019, p. 253–295 Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2019.150.01.0253.01.ENG&toc=OJ:L:2019:150:TOC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.150.01.0253.01.ENG&toc=OJ:L:2019:150:TOC).

<sup>9</sup> European Banking Authority (n.d.). *Interactive Rulebook - Capital Requirements Regulation 2 (CRR 2)*, Available at: <https://eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/100427>.

<sup>10</sup> European Banking Authority (2019). *Action Plan on Sustainable Finance*, Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).



- Adoption of new guidelines for companies on how to report climate-related information in June 2019, consistent with the Non-Financial Reporting Directive (NFRD, Directive 2014/95/EU)<sup>11</sup> and integrating the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosure (TCFD);<sup>12</sup>
- Publication of a regulation on sustainability-related disclosures in the financial services sector in December 2019.<sup>13</sup> From March 2021 onwards, financial market participants will have to disclose to their clients the impact of sustainability on financial returns and the impact of their investment decision on sustainability;
- Presentation of the European Green Deal in December 2019, namely a roadmap on how to make Europe the first climate-neutral continent by 2050. The plan provides insights into the investments needed, and financing tools available, to transition towards a more efficient use of resources and move to a clean and circular economy. As part of it, the Commission announced a "Renewed Sustainable Finance Strategy" aimed at providing the policy tools to ensure that financial systems effectively support the transition of businesses towards sustainability.<sup>14</sup> To achieve the goals set by the European Green Deal, the European Green Deal Investment Plan (EGDIP), also referred to as Sustainable Europe Investment Plan (SEIP), will mobilise at least EUR1trn in sustainable investments over the next decade;<sup>15</sup>
- Publication of the final report on the EU Taxonomy in March 2020 by the Technical Expert Group on Sustainable Finance, a unified EU green classification system to determine if an economic activity is environmentally sustainable based on harmonised EU criteria;<sup>16</sup>
- Adoption of its new action plan on the Capital Markets Union (CMU) which proposes 16 legislative and non-legislative actions with 3 key objectives, including "support a green, digital, inclusive and resilient economic recovery by making financing more accessible to European companies".<sup>17</sup>

This Study is an addition to the above-stated activities and serves as one of the multiple inputs that will inform the workstream for the implementation of the Commission Action Plan on Sustainable Finance. The Study takes other ongoing initiatives in the context of ESG into account (see description of stakeholder perimeter groups in section 3.2).

## 2.2. Purpose and objectives of the Study

The general objective of the Study is to explore the integration of ESG risk considerations into EU prudential supervision and into banks' risk management processes, business

<sup>11</sup> European Commission (2014). *Directive 2014/95/EU - Non-Financial Reporting Directive*. Available at: [https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting\\_en](https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en).

<sup>12</sup> TCFD (2017). *Recommendations of the Task Force on Climate-related Financial Disclosures*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>.

<sup>13</sup> Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector. OJ L 317, 9.12.2019, p. 1–16 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R2088>.

<sup>14</sup> European Commission (2019). *The European Green Deal*, Available at: [https://ec.europa.eu/info/sites/info/files/european-green-deal-communication\\_en.pdf](https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf).

<sup>15</sup> European Commission (2020). *The European Green Deal Investment Plan and Just Transition Mechanism explained*. Available at: [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_20\\_24](https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24).

<sup>16</sup> European Commission (2020). *TEG final report on the EU taxonomy*. Available at: [https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy\\_en](https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy_en).

<sup>17</sup> European Commission (2020). *A capital markets union for people and businesses: new action plan*. Available at: [https://ec.europa.eu/info/publications/200924-capital-markets-union-action-plan\\_en](https://ec.europa.eu/info/publications/200924-capital-markets-union-action-plan_en).

strategies and investment policies. To this end, the Commission has defined three specific objectives of the Study:

- **Objective 1:** Identify modalities of integrating ESG risks into EU banks' risk management processes;
- **Objective 2:** Identify modalities of integrating ESG risks into EU prudential supervision;
- **Objective 3:** Identify modalities of integrating ESG objectives into EU banks' business strategies and investment policies<sup>18</sup>.

The Commission has specified that the Study should provide a comprehensive overview of the state-of-play for each of the three objectives. Moreover, it should identify principles/best practices for Objectives 1 and 2 as regards the arrangements, processes, tools, and strategies, as well as appropriate instruments and strategies to promote the scaling-up of green finance and of the market for sustainable financial products as part of the scope of Objective 3.

As mentioned above, this Interim Study focuses on the comprehensive overview of the state-of-play for each of the three objectives.

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<sup>18</sup> For the avoidance of doubt, the term investment / investment activity in this report is used to indicate capital markets activity (e.g. Equity Capital Markets and Debt Capital Markets underwriting, sales and trading activity) as well as treasury portfolio. It does not include investments on behalf of clients (e.g. asset management or private banking activities) and associated products.

### 3. Overview of Study methodology and approach

#### 3.1. Data collection tools and techniques

To address the three objectives of the Study, a comprehensive research exercise is being undertaken, including the following research methods which were aligned with the Commission beforehand:

- **Focus Groups:** At the beginning of the Study, focus groups were held with key stakeholders, including banks, supervisors & regulators, civil society organisations and academics, in order to discuss and obtain perspectives on the preliminary envisaged focus areas, and to identify key themes of the study;
- **Desk Research:** Desk research<sup>19</sup> has been conducted across the stakeholder perimeter, to gather existing publicly available material of relevance for each objective. Material collected includes existing literature, case studies, publications, data and other empirical information;
- **Questionnaires/Interviews:** Structured questionnaires, including a mix of closed and open-ended questions, were provided to stakeholders<sup>20</sup> to collect input; the questionnaires and recipients were aligned with the Commission beforehand. Structured interviews were held with stakeholders, where appropriate, to complement the information gathered.

To ensure a consistent approach, a set of focus areas and themes were identified to provide a structure for each objective (see an overview of these focus areas in sections 4.1, 5.1, and 6.1), which also factored in inputs from stakeholders provided in the focus groups. In this context, it is worth pointing out that the identification of focus areas and themes did not entail a definition of ESG risk or themes. Instead, and in order to reflect the nature of the study being a stocktake, stakeholders were asked to provide their respective definitions.

#### 3.2. Definition of stakeholder perimeter groups

The Study consists of the collection and aggregation of information from as wide a range of representative stakeholders as possible, in order to reflect a full spectrum of views. Three stakeholder perimeter groups were defined and aligned with the Commission:

- i. Banks;
- ii. Supervisors & Regulators; and
- iii. International Organisations, Civil Society Organisations and Other Stakeholders (including for example academics, associations, data & ratings providers, civil society organisations, and international organisations/fora).

Each stakeholder perimeter group includes stakeholders from representative geographical areas of the EU as well as relevant non-EU jurisdictions. As shown in Table 1, a total of 151 stakeholders were identified, based on selection criteria that ensured an adequate representation of different stakeholder groups and views in the Study, as well as of geographical areas of the EU, and relevant non-EU jurisdictions. The selection criteria, as well as the initial list of stakeholders, were set in line with the Tender Specifications at the

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<sup>19</sup> Desk research has been based on publicly available material of relevance for each objective, including literature, case studies, publications, data, and other empirical information.

<sup>20</sup> Including banks, supervisors, and civil society organisations as detailed in section 3.2 below.

beginning of the Study. The stakeholder groups remain flexible and additional stakeholders may be added as required.

Table 1: Stakeholder perimeter groups

Stakeholders <sup>21</sup>	Description	Location/Coverage
<b>1. Banks</b>	Banks from EU and non-EU jurisdictions	<b>42</b> 29 from EU Member States (of which 7 G-SIBs vs 22 non-G-SIBs) 13 from Non-EU Member States (of which 11 G-SIBs vs 2 non-G-SIBs)
<b>2. Supervisors &amp; Regulators</b>	Micro-prudential supervisors and regulators of the banking sector in EU and non-EU jurisdictions	<b>43</b> 32 from EU Member States 11 from Non-EU Member States
<b>3. International Organisations, Civil Society and Other Stakeholders</b>	Composed of various other actors: <ul style="list-style-type: none"> <li>• Academics</li> <li>• Associations</li> <li>• Civil Society Organisations</li> <li>• Data Providers / Ratings Agencies</li> <li>• International Organisations/Fora</li> </ul>	<b>66</b> 19 from EU Member States European 13 from Non-EU Member States 34 with global presence <sup>22</sup>

### 3.3. Total coverage of the Interim Study

After designing the initial list of focus areas and key themes, three focus groups were conducted to provide an overview of the Study and its approach, discuss the preliminary envisaged focus areas, as well as to obtain stakeholders' perspectives on the focus areas and to identify key themes:

- One focus group with banks covering the "Incorporation of ESG risks into EU banks' risk management" (objective 1), as well as the "Integration of ESG objectives into banks' business strategies and investment policies" (objective 3);
- One focus group with supervisors and regulators<sup>23</sup> covering the "Integration of ESG risks into prudential supervision" (objective 2); and
- One focus group with other stakeholders (including civil society organisations and academics) covering all three objectives.

Moreover, questionnaires were designed to obtain additional input from stakeholders. Distinct questionnaires were developed per objective and stakeholder group. Questionnaires for banks and supervisors / regulators included detailed technical and closed-ended questions to identify current practices of respective stakeholders, as well as

<sup>21</sup> In terms of geographic coverage, stakeholders from all EU member states (including the UK) are covered in the Study. Please note that banks that are not independent entities, but subsidiaries were covered via their respective legal entity.

<sup>22</sup> Label not based on the geographic location but to indicate field of operation/focus (due to international presence).

<sup>23</sup> For the remainder of this report, the term "supervisors" will be used in place of "supervisors and regulators".

additional questions related to challenges, best practices and enabling factors. Questionnaires for international organisations, civil society organisations, and other stakeholders served the purpose of gathering the perspective of these stakeholders and focused on definitions, best practices, impediments and enabling factors. Feedback in the form of questionnaires / interviews was received from 28 banks, 15 supervisors & regulators, and 15 international organisations, civil society and other stakeholders.

Desk research was conducted, covering the aforementioned 151 stakeholders, referred to in the Study as 'analysed' stakeholders, which include banks, supervisors, international organisations, civil society organisations and other stakeholders. This ensured that a wide range of relevant perspectives is captured in this Study, including from those stakeholders not participating in the Study by means of focus groups and questionnaires / interviews.

For banks and supervisors that provided feedback via structured questionnaires / interviews, this information and feedback is typically significantly more granular than that available in the public domain and, as such, most empirical observations on banks and supervisors in this Study are based on the sample that participated in the questionnaires / interviews, referred to in the Study as 'respondents' or 'interviewed' stakeholders. For the purpose of this Study, input received in questionnaires / interviews was not fact checked. However, findings and outcomes on similar topics presented by other relevant studies have been reviewed and reflected in various sections as applicable.

**Table 2: Coverage of external stakeholder perimeter groups per tool and technique**

Objective	Desk Research	Focus Groups	Questionnaires / Interviews	Minimum Number as per Tender Specifications
<b>Objective 1</b>	Desk research covering: • 42 Banks • 43 Supervisors & Regulators	<ul style="list-style-type: none"> <li>• Focus group on objective 1 &amp; 3 involving 24 Banks</li> <li>• Focus group with 10 other Stakeholders (incl. 7 Civil Society Organisations &amp; 3 Academics) covering all three objectives</li> </ul>	<ul style="list-style-type: none"> <li>• 27 with banks</li> <li>• 15 with International Organisations, Civil Society Organisations and Other Stakeholders</li> </ul>	• 15 interviews
<b>Objective 2</b>	• 66 International Organisations, Civil Society Organisations and Other Stakeholders  620+ documents, papers and websites reviewed across stakeholder groups	<ul style="list-style-type: none"> <li>• Focus group on objective 2 involving 13 Supervisors &amp; Regulators</li> <li>• Focus group with 10 other Stakeholders (incl. 7 Civil Society Organisations &amp; 3 Academics) covering all three objectives</li> </ul>	<ul style="list-style-type: none"> <li>• 15 with supervisors</li> <li>• 15 with International Organisations, Civil Society Organisations and Other Stakeholders</li> </ul>	• 15 interviews
<b>Objective 3</b>		<ul style="list-style-type: none"> <li>• Focus group on objective 1 &amp; 3 involving 24 Banks</li> <li>• Focus group with 10 other Stakeholders (incl. 7 Civil Society Organisations &amp; 3 Academics) covering all three objectives</li> </ul>	<ul style="list-style-type: none"> <li>• 28 with banks</li> <li>• 15 with International Organisations, Civil Society Organisations and Other Stakeholders</li> </ul>	• 15 interviews

## 4. Modalities of integrating ESG risks into EU banks' risk management processes

This section includes an overview of the results of the stocktake exercise on the way banks currently deal with ESG risks. Furthermore, it includes a first preliminary overview of possible arrangements, processes, mechanisms, and strategies to be implemented by EU banks to map, assess, and manage ESG risks.

### 4.1 Overview of focus areas for research

For the purpose of this Study, the following key elements of the integration of ESG risks into EU banks' risk management processes<sup>24</sup> were analysed, as further detailed below:

- ESG risk definition & identification;
- ESG risk governance & strategy;
- ESG risk management processes & tools; and
- ESG risk reporting & disclosure.

This list of focus areas serves as a structure to systematically gather input and data during the research. The key focus areas analysed under this objective are illustrated in *Figure 1* and the following sections present the preliminary results of the stocktake exercise along the key identified themes.

Figure 1: Objective 1 focus areas and respective themes (illustrative)

<b><u>Focus Area</u></b>	<b><u>Themes</u></b>	<b><u>Illustrative description</u></b>
<b>ESG risk definition &amp; identification</b>	<b>ESG risk definition and perimeter</b>	Definition of ESG risks by banks, based on the underlying thematic sub-pillars and their relevance and materiality for banks' risk management practices
	<b>Risk identification approaches</b>	Approaches used by banks to identify ESG risks (top down vs. bottom up) and review perimeter of ESG risks taken under consideration
	<b>ESG risk transmission channels</b>	Relevance of ESG risks for traditional risk types (e.g. credit, market operational, reputational risk, etc.) and transmission channels (e.g. valuation of assets)
<b>ESG risk governance and strategy</b>	<b>ESG risk governance structures and board oversight</b>	Governance structure arrangements to ensure that ESG risks are properly understood and discussed at board and management level

<sup>24</sup> Banks are exposed to ESG risks indirectly - i.e. through lending and investment activity - as well as directly - i.e. through their own operations and organisational set-up; in line with the tender specifications, the primary focus of the Study is on the former.

		<b>ESG risk organisational set-up</b>	ESG risk focused teams and efforts to develop and consolidate dedicated expertise
		<b>ESG risk strategy and initiatives</b>	Definition of an ESG risk strategy and initiatives to advance objectives
<b>ESG risk management processes &amp; tools</b>	<b>Measurement &amp; assessment</b>	<b>Data taxonomy, standardisation and sourcing</b>	Data used by banks for ESG risk measurement, sourced internally, from clients, or externally, through vendors
		<b>Portfolio ESG risk measurement and scenario analysis</b>	Methodology and modelling approaches used to measure portfolio exposure to ESG risks and resulting output, metrics, and portfolio coverage
	<b>Integration into Risk processes</b>	<b>Risk appetite framework/ statement</b>	ESG integration within risk appetite framework as qualitative or quantitative statement
		<b>Lending/ investment policies, processes and strategies</b>	ESG-relevant lending and investment sectoral policies, integration into credit application and due diligence (e.g. transaction level), credit portfolio strategies, and monitoring
		<b>Risk parameters and models</b>	ESG integration into risk parameters and models
		<b>Stress testing, ICAAP and ILAAP</b>	ESG integration into regulatory processes including stress testing, ICAAP and ILAAP
<b>ESG risk reporting &amp; disclosure</b>		<b>Reporting and disclosure type and audience</b>	ESG-focused risk disclosures tailored to different needs and audiences (e.g. non-financial and regulatory Pillar 3 disclosures)
		<b>Information granularity and transparency</b>	Reporting content (e.g. inclusion of metrics, granularity) and impact of relevant EU legislation on disclosure practices

## **4.2 Stocktake of current ESG practices**

The following first key takeaways represent the results of the stocktake exercise conducted on the previously defined perimeter of external stakeholders, and are based on a first analysis of the data collected so far.

### **4.2.1 First key takeaways**

#### **ESG risk definition & identification:**

Most banks mention that they do not have a clear and granular definition of ESG risks in place, i.e. a mapping of the underlying ESG themes for each pillar and their relevance as risk drivers, based on specific sectors, geographies, client segments, and products. Civil society organisations and international initiatives were mentioned as key drivers of ESG-theme definition, providing input on key focus areas. ESG risks in scope of banks' risk management frameworks tend to be analysed individually across the E, S and G pillars, instead of being combined under one ESG 'umbrella' and may vary among banks. Climate risk (including both physical and transition risk) is currently a key theme for most institutions, in particular G-SIBs. Feedback provided by respondents on ESG was often centred on E&S risks rather than G, which was often not associated with the broader concept of sustainability.

Banks tend to map ESG risks to traditional risk types (i.e. financial and non-financial risks), and have so far prioritised reputational risk and, more recently, have also expanded their focus on credit risk, in particular for climate-related risk. While most banks (73%) state that they plan to cover ESG risks from a double materiality<sup>25</sup> perspective, some mention that it is unclear if this can be fully captured through traditional risk types, such as reputational risk.

The focus on the double materiality concept is consistent with the views of most supervisors and other stakeholders, including civil society organisations. As argued by civil society respondents, the double materiality perspective is aligned with broader EU-wide policies and legislation, such as the EU taxonomy, and it provides a more comprehensive view of ESG risks, capturing the environmental impact of financing activity more holistically.

#### **ESG risk governance & strategy:**

The majority of banks interviewed mentioned having refined their governance set-up to define ESG risk responsibilities at top management and board level. The most common form of integration is the discussion of ESG risks within existing committees at board (50%) and executive (38%) level. Integration into committees does not ensure that ESG risks are discussed in every meeting but rather that it is a standing agenda item, and hence the frequency with which these topics are covered varies among banks. As also mentioned by civil society organisations, as well as academia, further education and training on ESG risks may be required, in particular at board-level, to ensure full alignment and understanding of responsibilities with respect to ESG risk.

In terms of organisational structure, some banks have set up dedicated ESG risk teams, while others have dedicated resources to the topic within existing structures, in order to ensure integration of ESG risk across all risk types and reduce implementation complexity.

While interviewed banks often state that they have initiatives in place to enhance the integration of ESG risks, the majority have not formalised an ESG risk integration strategy

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<sup>25</sup> For the definition of double materiality, see section 4.2.2.1.



with clear timelines and responsibilities. With respect to climate risk, many smaller banks stated that they have not yet started its integration into risk management.

### **ESG risk management processes & tools:**

Analysed banks tend to use a mix of internal client data and externally sourced data to assess ESG risks. Respondents often consider the amount of information provided by clients as insufficient for the measurement of exposure to ESG risks, in particular for climate risk, and highlight data as a key challenge. This is especially due to data availability issues for certain client segments (e.g. SMEs) as well as concerns about data comparability and reliability. Data availability concerns were also mentioned in the context of applying the EU Taxonomy to the lending book.

Despite these challenges, some banks are using available data to progress on measuring exposure to ESG risks. This is, however, usually performed through pilot exercises, rather than repeatable 'business as usual' processes. These pilots are often performed in collaboration with civil society organisations or international organisations, using scenario analysis to assess exposure to transition and physical risks from climate change on selected portfolios. Transition risk assessments are mostly focused on the corporate book pertaining to high risk sectors (e.g. oil & gas, mining) rather than covering all relevant sectors. Physical risk assessments often also cover the retail book (e.g. residential mortgages). In order to capture the double materiality perspective of ESG risks, some banks have also committed to using science-based targets to align parts of their portfolio to the goals of the Paris agreement. Portfolio alignment exercises are strongly encouraged by civil society respondents as they require banks to quantify the environmental impact of their financing activities and steer their portfolio towards Paris aligned targets.

The integration of ESG in risk management processes varies significantly among banks. Overall, most interviewed banks mentioned having integrated ESG within their lending policies, credit applications and due diligence across selected high-risk sectors – albeit with varying levels of sophistication and granularity – and, to a lesser extent, in their investment activity (e.g. advisory or debt capital markets). Civil society respondents, however, pointed out that the scope of financial instruments covered under these policies is not sufficiently broad; for instance, the focus is often on project finance (where the use of proceeds is known). Integration within portfolio monitoring and steering is less advanced and most banks do not have an aggregate portfolio view of their exposure to ESG risks.

Half of the interviewed banks mentioned having integrated ESG factors within their risk appetite framework, although mostly as a qualitative statement rather than with quantitative metrics and limits. Integration of ESG risks into risk models, as well as stress testing, ICAAP, ILAAP and regulatory processes, are seen to be at a very early stage. Despite some banks having conducted targeted climate risk scenario analysis on segments of their portfolio, few carry out these exercises as structured group-wide stress testing efforts covering all relevant sectors. Civil society respondents argue that banks would benefit from supervisory guidance in this respect. This could be advanced by the provision of reference scenarios to banks to be used as input in the exercises, hence fostering standardisation and comparability of results.

One view held by some banks is that ESG risks are not integrated into risk processes as they are not found to be material, in particular, due to the shorter time horizon often associated with said risk processes. As illustrated by respondents, the long-term horizon that characterises ESG risks, in particular environmental risks, is difficult to reconcile with

capital planning time horizons of banks (e.g. three years for ICAAP). However, as illustrated by multiple civil society respondents, some climate-related risks (e.g. policy changes) might already materialise in the short term.

### **ESG risk reporting & disclosure:**

The majority of interviewed banks have not yet integrated ESG risks within their internal risk reporting frameworks. With respect to public disclosures, ESG risk-related information is usually included in banks' broader ESG disclosure practices and influenced by national and EU-wide legislative requirements such as the Non-financial Reporting Directive.

The level of depth of these disclosures varies, and information on the exposure to ESG risks tends to be qualitative in nature and not on par with international standards such as TCFD. Some respondents plan to enhance their ESG risk-related disclosures and align them both to voluntary disclosure standards (e.g. TCFD for climate issues) as well as to regulatory guidelines. Respondents also mentioned an intention to develop more quantitative risk-related metrics, for which a further need for standardisation is seen. In this respect, the update of the NFRD was mentioned by banks as a potential stimulus, as it might enhance reporting requirements for companies and close data availability gaps.

The need to enhance and standardise ESG risk-related disclosure is stated across stakeholder groups, with civil society organisations emphasising the relatively slow speed of adoption of international standards among banks. For instance, five years after the launch of the TCFD, the implementation of its disclosure standards is still not completed by many banks, in particular with respect to metrics and targets.

The following sections present the detailed findings along the key research focus areas and themes.

## 4.2.2 ESG risk definition & identification

### 4.2.2.1 ESG risk definition and perimeter

The starting point for discussing ESG integration within banks' risk management practices is to firstly understand how ESG risks are defined by banks. At a high-level, ESG risks can be defined as events or conditions related to environmental (E), social (S) and governance (G) themes that may have a negative impact on banks<sup>26</sup> (e.g. on assets) as well as on the external environment. In order to adequately capture how banks currently define ESG risks, this Study investigates what specific ESG themes<sup>27</sup> are captured under each of the E, S, and G pillars, and to what extent banks understand how these translate into risks based on their materiality and relevance.

Since the introduction of the ESG term in the context of asset management and investments<sup>28</sup>, several entities, in particular international organisations and standard setting bodies – e.g. the Global Reporting Initiative (GRI)<sup>29</sup>, Sustainability Accounting Standards Board (SASB)<sup>30</sup> –, as well as data providers and credit rating agencies, have played a role in advancing a common understanding of key factors and themes falling under each of the ESG pillars<sup>31</sup>.

More recent legislative activity, such as the publication of the EU Taxonomy<sup>32</sup>, as well as market activity – e.g. the Principles for Responsible Banking (PRB)<sup>33</sup> and the Taskforce on Climate-related Financial Disclosures (TCFD)<sup>34</sup> – have further increased the understanding of ESG themes. Even though these efforts are often focused on specific pillars (e.g. climate change for TCFD) or aspects (e.g. 'green' activities for the EU Taxonomy), they have highlighted the relevance of ESG themes within the banking sector.

Despite the similarity and convergence of these efforts, there is currently no commonly agreed list of ESG themes and their associated risks that can be directly applied by the banking sector. Some stakeholders, such as the UN PRI<sup>35</sup>, argue that such a list would likely be incomplete and soon out of date, due to the constant evolution of ESG themes. Moreover, given that ESG themes cover a wide range of issues, these are defined and prioritised by banks based on geography, sector, client segment, and product type under consideration.<sup>36</sup>

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<sup>26</sup> Banks are exposed to ESG risks indirectly, through lending and investment activity, and also directly, through their own operations and organisational set-up. The focus of the Study is on the indirect exposures.

<sup>27</sup> ESG themes are conceptual grouping of topics falling under each of the E, S and G pillars that may translate into ESG risks.

<sup>28</sup> UN Global Compact (2004). *Who cares wins: connecting financial markets to a changing world*. Available at: [https://www.unglobalcompact.org/docs/issues\\_doc/Financial\\_markets/who\\_cares\\_who\\_wins.pdf](https://www.unglobalcompact.org/docs/issues_doc/Financial_markets/who_cares_who_wins.pdf).

<sup>29</sup> Global Reporting Initiative (n.d.). *The global standards for sustainability reporting*. Available at: <https://www.globalreporting.org/standards/>.

<sup>30</sup> Sustainability Accounting Standards Board (n.d.). *Standards Overview*. Available at: <https://www.sasb.org/standards-overview/>.

<sup>31</sup> Not all these initiatives refer to the term "ESG", e.g. the GRI standards have topic-specific standards across "Economic, Environmental and Social" pillars (with the Governance pillar mostly captured under the former).

<sup>32</sup> European Commission (2020). *TEG final report on the EU taxonomy*. Available at: [https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy\\_en](https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy_en).

<sup>33</sup> UNEP FI (2019). *Principles for Responsible Banking*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/09/PRB-Guidance-Documents-Final-19092019.pdf>.

<sup>34</sup> TCFD (n.d.). *About the task Force*. Available at: <https://www.fsb-tcfd.org/about/>.

<sup>35</sup> UN PRI (2018). *PRI Reporting Framework Main definitions 2018*. Available at: <https://www.unpri.org/download?ac=1453>.

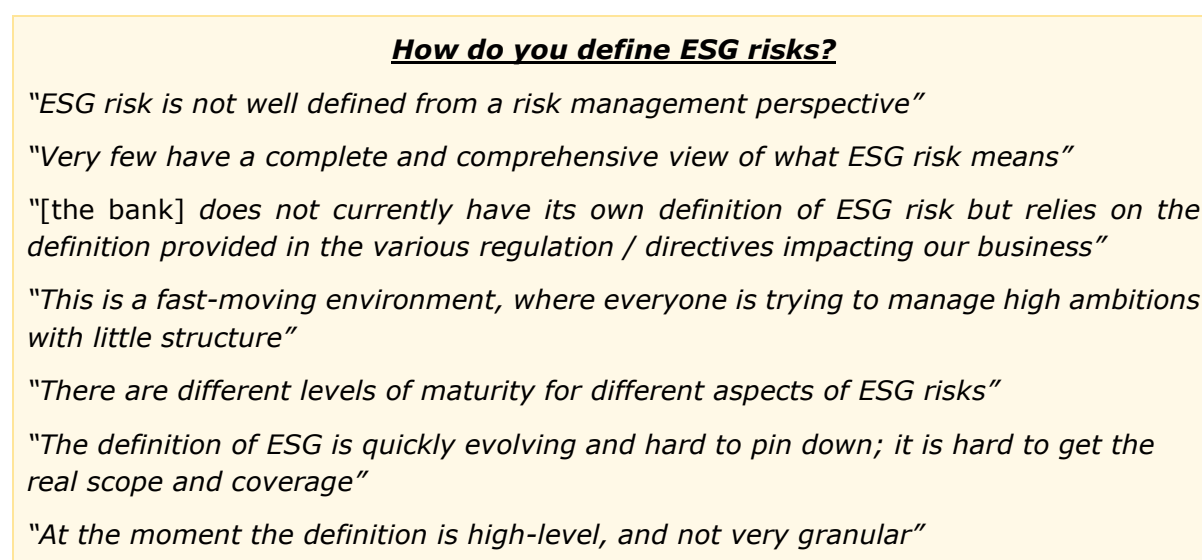
<sup>36</sup> European Banking Authority (2020). *Sustainable Finance: Market Practices (Staff Paper Series)*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Sustainable%20finance%20Market%20practices.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Sustainable%20finance%20Market%20practices.pdf).

The E pillar, and in particular climate change, is an exception to this, given that stronger standardisation is observed in the definition of its underlying themes. In particular, international initiatives such as the Network for Greening the Financial System (NGFS), a network of supervisors and regulators, have fostered greater coordination in the definition and understanding of climate-related risks. For example, in its latest report, the NGFS included a classification table illustrating the various sub-themes falling under transition and physical risks.

Overall, interviews showed that banks have high-level definitions of ESG themes and risks, which are often based on a combination of statements, standards, and external guidance from international organisations, civil society organisations, and supervisors. ESG themes are considered as dimensions of sustainability<sup>37</sup> and, while some banks use the terms ESG and sustainability interchangeably, others consider environmental and social (E&S) as part of sustainability, and governance as a standalone topic.

As illustrated by the examples given in *Figure 2*, many respondents highlighted the difficulty of defining ESG risks, in particular given the wide spectrum of topics covered, their constant evolution, and the lack of granular guidelines.

**Figure 2: Illustrative comments on ESG risk definition**<sup>38</sup>



*Figure 3* illustrates the perceived relevance of the identified macro-themes, and the most common ESG themes taken under consideration by banks, as well as any other themes mentioned. Despite the challenges raised by some stakeholders in comparing the macro-themes on a relative scale, climate change appears as the most highly ranked, followed by corporate behaviour and external stakeholder management.

With respect to the specific themes considered across pillars, waste management, water management, climate change (i.e. physical weather events and transition to a low-carbon economy), community relations / human rights, and business ethics were among the most commonly considered. Consideration of specific ESG themes does not necessarily indicate that these have been integrated within risk management, but rather that banks are aware of them.

<sup>37</sup> Defined as banking practices that take into account impact of activity on the external environment and social context, contributing to the achievement of society's needs without compromising those of future generations.

<sup>38</sup> Question: *How do you define ESG risks and what have you identified as the key drivers of ESG risks?*

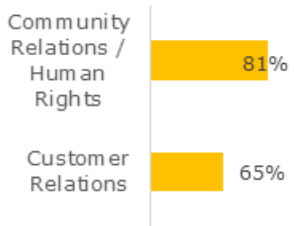
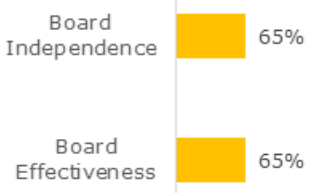
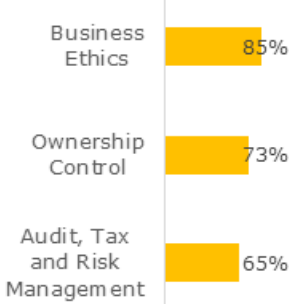
In their answers, banks strongly focused on discussing the relative importance of macro ESG themes, but few illustrated clear linkages between ESG themes and risks. Exceptions to this are climate change and governance, both of which were often linked to credit risk and business ethics, the latter of which was often mentioned with respect to reputational risk (see 4.2.2.3).

Some banks also discussed ESG risks without drawing clear lines between those to which they are exposed directly, as an organisation, or indirectly, through their banking activity. This was particularly observed when discussing the G pillar (as further detailed below), but also with respect to the S pillar.

Figure 3: ESG themes and ranking based on relevance<sup>39</sup>

Macro-themes	Rank	Illustrative themes	Details on key themes
Climate Change (E)	1	Physical Weather Events	<b>Physical Weather Events:</b> Climate change driven weather conditions of acute (e.g. firestorms) and chronic (e.g. temperature rise) nature <b>Transition to Low-Carbon Economy:</b> Process of adjustment to a low-carbon economy (driven by policy, technology, consumer sentiment and other) <b>Carbon Emissions / Footprint:</b> Impact of business activity on environment in terms of carbon emissions and environmental footprint <i>Other themes: energy efficiency</i>
		Transition to Low-Carbon Economy	
		Carbon Footprint	
Natural Resources & Pollution (E)	4	Waste Management	<b>Waste Management / Toxic Emissions:</b> management of waste and mitigation of toxic emissions generated by activity <b>Water Management / Stress:</b> Management of scarce resources such as water <b>Biodiversity &amp; Land Use:</b> Utilisation of natural land and protection of eco-system biodiversity <b>Raw Material Sourcing:</b> Sustainable supply chain and procurement practices <i>Other themes: deforestation, nuclear weapons, air pollution</i>
		Water Management	
		Biodiversity & Land Use	
		Raw Material Sourcing	
Internal Stakeholder Management (S)	6	Workers' rights	<b>Worker's rights:</b> Ensuring employees' basic rights through positive labour relations, safe working conditions, and fair wages <b>Diversity and Culture:</b> Creating a work environment that promotes employee satisfaction/morale, inclusion and diversity <b>Talent Management:</b> Offering career development and skills trainings for employees, and managing hiring and retention
		Diversity	
		Talent Management	

<sup>39</sup> Question: What sub-categories (of E/S/G) do you focus on? Please tick E/S/G themes considered relevant from a risk management perspective and rank from 1 (highest focus) to 6 (lowest focus) the ESG thematic pillars. Sample size: 15 (for rankings), 23 (for theme selection). Rankings were then aggregated to calculate their weighted average.

Macro-themes	Rank	Illustrative themes	Details on key themes
			<i>Other themes: health &amp; safety, culture, racial equality</i>
<b>External Stakeholder Management (S)</b>	<b>3</b>	 <p>Community Relations / Human Rights: 81%</p> <p>Customer Relations: 65%</p>	<p><b>Community Relations:</b> Operating as a good corporate citizen that protects human rights, is accountable to local community, and offers access to basic needs</p> <p><b>Customer Relations:</b> Focusing on customer welfare and satisfaction, through product quality, data privacy, and fair disclosure/marketing</p> <p><i>Other themes: public housing, discrimination, child labour, defence and weapons, cybersecurity</i></p>
<b>Board Quality (G)</b>	<b>5</b>	 <p>Board Independence: 65%</p> <p>Board Effectiveness: 65%</p>	<p><b>Board Independence:</b> Alignment of interest of management and shareholders for objective decision making and less possibility for entrenchment</p> <p><b>Board effectiveness:</b> Structures and diverse backgrounds of members leading to better decision making</p>
<b>Corporate Behaviour (G)</b>	<b>2</b>	 <p>Business Ethics: 85%</p> <p>Ownership Control: 73%</p> <p>Audit, Tax and Risk Management: 65%</p>	<p><b>Business Ethics:</b> Promotion of a culture for sustainable business practices and misconduct prevention</p> <p><b>Ownership &amp; Control:</b> Guarantee alignment of interests through low concentration of power and understanding of anti-takeover devices</p> <p><b>Audit &amp; Tax:</b> Adherence to best practice and monitoring mechanisms to lower the frequency &amp; scale of scandals, fraud, tax evasion, etc</p> <p><i>Other themes: corruption, bribery, extortion and money laundering, tax evasion, fraud, anti-competitive practices</i></p>

Source: BlackRock FMA analysis

Overall, it seems that banks currently place a stronger focus on the E pillar, and in particular climate change, compared to the S and G pillars. In fact, a significant portion of analysed banks<sup>40</sup> (62%) highlighted the increasing relevance of risks emanating from climate change, and its decomposition into physical and transition risk, within their annual disclosures. Respondents, and in particular some of the larger banks, mentioned that the definition and relevance of this pillar has been strongly influenced by regulatory activity (e.g. the draft ECB Guide on climate and environmental risk<sup>41</sup>), voluntary initiatives (e.g.

<sup>40</sup> The term 'analysed banks' refers to all banks that have been analysed as part of the desk research and are included in the stakeholder perimeter group (i.e. not only those who participated in interviews).

<sup>41</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

the TCFD<sup>42</sup>, the Carbon Disclosure Project<sup>43</sup>), international agreements (e.g. the Paris Agreement<sup>44</sup>) and policy initiatives (e.g. the EU Green Deal<sup>45</sup>).

With respect to climate change, some respondents stated that they have developed an understanding of its underlying risk factor pathways, thanks to pilot exercises conducted through portfolio risk measurement and scenario analysis, allowing them to quantify event-driven impacts on exposures (see section 4.2.4.1). A number of respondents mentioned having a focus on physical risk, including both extreme weather events (i.e. acute) and gradual temperature changes (i.e. chronic), given its tangible nature, making them more understandable and identifiable. Other banks mentioned having more of a focus on transition risk, which is instead driven by changes in legislation, technology, and shifting consumer preferences. As illustrated in a paper from Institution for Climate Economics (I4CE), the assessment of climate risk is subject to a high degree of socio-economic uncertainty, which includes, for example, the different perceived likelihoods of specific political and economic scenarios, as well as the lack of transparency on the global economy's greenhouse gas emissions trajectory.<sup>46</sup>

Even though climate change was ranked as the macro-theme with highest priority, the other themes falling under natural resources and pollution, namely waste management and water management, are among the most recurring focus areas. In particular, water stress is regarded as an increasingly relevant theme, often considered in conjunction with physical risk.<sup>47</sup> In fact, climate-related and other environmental risks cannot be easily separated, as they are interconnected and may reinforce one another, e.g. climate change could increase the degradation of the environment and vice versa.<sup>48</sup>

With respect to the S pillar, all banks in the sample cover themes related to this pillar in their ESG risk definition. Banks with a national focus, e.g. in smaller economies, showed a stronger emphasis on these topics, due to the large impact their lending activity has on the real economy.

External stakeholder management was perceived as more important than internal stakeholder management, although some of its themes (e.g. workers' rights) are equally considered. Within customer relations, cybersecurity and data protection were often mentioned, particularly in light of an increase in cyber-attacks that banks have been exposed to in recent years.

Key drivers for the integration of considerations under the S pillar are international declarations (e.g. the Universal Declaration of Human Rights<sup>49</sup>), conventions (e.g.

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<sup>42</sup> TCFD (n.d.). *About the task Force*. Available at: <https://www.fsb-tcfd.org/about/>.

<sup>43</sup> CDP (n.d.). *What we do*. Available at: <https://www.cdp.net/en/info/about-us/what-we-do>.

<sup>44</sup> UNFCCC (n.d.). *What is the Paris Agreement?* Available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>.

<sup>45</sup> European Commission (n.d.). *A European Green Deal*. Available at: [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en).

<sup>46</sup> I4CE (2019). *Towards an alternative approach in finance to climate risks: Taking uncertainties fully into account*. Available at: [https://www.i4ce.org/wp-core/wp-content/uploads/2019/11/1120-I4CE3117-Etude-IncertitudeEtAnalyseRisquesFinanciers\\_20p-va-web.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2019/11/1120-I4CE3117-Etude-IncertitudeEtAnalyseRisquesFinanciers_20p-va-web.pdf).

<sup>47</sup> BlackRock Investment Institute (2020). *Troubled water: Water stress risks to portfolios*. Available at: <https://www.blackrock.com/corporate/literature/whitepaper/bii-water-risks-july-2020.pdf>.

<sup>48</sup> EBA (2020). EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>49</sup> UN (1984). *Universal Declaration of Human Rights*. Available at: <https://www.un.org/en/universal-declaration-human-rights/>.



International Labour Organisation's Fundamental Human Rights Conventions<sup>50</sup>), standards (e.g. International Finance Corporation Performance Standards<sup>51</sup>) and principles (e.g. the UN Global Compact principles<sup>52</sup>). These principles are usually referenced or reflected in group wide position statements and integrated into lending and investment policies and transaction due diligence (see section 4.2.4.2.2).

Moreover, the broader societal context, as well as events such as the COVID-19 pandemic, are also seen as key drivers of change in focus on ESG themes. As mentioned by some participants, the pandemic has had an impact on ESG factors and may bring about a stronger focus on the S pillar going forward, for instance, on labour management and healthcare infrastructure. As further explored by Sustainalytics in a series of research-based blog articles, there are various ESG implications of COVID-19, ranging from the renewed appreciation of local supply chains – which are less subject to disruptions –, and extended considerations on the potential negative implications of an oil price collapse on the renewable energy sectors.<sup>53</sup>

Based on banks' responses, governance is the best understood of the ESG pillars, with priority given to corporate behaviour and, to a lesser extent, board quality. Overall, as also found in an EBA staff paper stocktake<sup>54</sup>, a large share of banks discussed governance from their own operational and organisational perspective – rather than that of companies they lend to –, as it comprises long-standing issues that are addressed by banking legislation and regulation. Topics such as anti-money laundering (AML) and avoidance of terrorism finance, which were repeatedly mentioned, somewhat cut across both governance of the bank (as they have implications on their own internal processes and compliance), as well as the governance of financed counterparties.

Overall, interviews revealed that governance, and in particular some of its sub-topics such as AML, is often not associated with discussions on ESG and sustainability. This is because it is usually embedded within traditional Know-your-Customer (KYC) and client onboarding practices, which are typically undertaken from a compliance perspective, rather than from an ESG risk standpoint (see section 4.2.4.2).

Some banks mentioned the importance of assessing client governance practices beyond a compliance perspective. Respondents pointed out that borrowers' governance practices and management quality are already assessed in traditional credit processes. Others emphasised that this assessment should be further expanded to capture, among other things, how E&S risks are managed by the counterparties, for instance through the set-up of adequate governance structures and control mechanisms for climate risk management.

Illustrative comments on the themes and considerations made by interviewed banks related to the three pillars are given in *Figure 4*.

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<sup>50</sup> International Labour Organization (n.d.). *Conventions and Recommendations*. Available at: <https://www.ilo.org/global/standards/introduction-to-international-labour-standards/conventions-and-recommendations/lang--en/index.htm>.

<sup>51</sup> IFC (2012). *Performance Standards*. Available at: [https://www.ifc.org/wps/wcm/connect/Topics\\_Ext\\_Content/IFC\\_External\\_Corporate\\_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards](https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards).

<sup>52</sup> UN Global Compact (n.d.). *The Ten Principles of the UN Global Compact*. Available at: <https://www.unglobalcompact.org/what-is-gc/mission/principles>.

<sup>53</sup> Sustainalytics (2020). *ESG Implications of COVID-19*. Available at: <https://www.sustainalytics.com/esg-investing-news/sustainalytics-blog-series-focuses-on-the-esg-implications-of-covid-19/>.

<sup>54</sup> European Banking Authority (2020). *Sustainable Finance: Market Practices (Staff Paper Series)*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Sustainable%20finance%20Market%20practices.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Sustainable%20finance%20Market%20practices.pdf).



Figure 4: Illustrative comments on ESG risk considerations per pillar

**What sub-categories (of E/S/G) do you focus on?**

Environmental

*"Physical risks are more tangible and better understood than transition risks"*

*"[...] more factors on climate change have been included following EBA and Bank of England guidelines"*

*"The real focus is on E [...] having a clear identification of climate risk and specifically the transition risk that the counterparty would have in moving to a lower carbon emitting business model"*

Social

*"The "S" pillar is harder to define, however there is a gradual realisation in the industry of its relevance"*

*"Key Drivers of "S" are human rights abuses and corporate complicity, impacts on communities, social and other forms of discrimination, forced/child labour, health & safety, and poor employment conditions."*

*"Social considerations vary by geographies"*

Governance

*"On "G" the internal risk control framework focuses more on financial-crime related drivers"*

*"There is also a strong focus on compliance with national and European regulation"*

*"Topics such as corruption and compliance are also part of governance, however they are managed by the compliance and financial crime team, which is separate from the Environmental and Social Risk team [...] Sustainability should not overlap or replicate existing things"*

*"The G pillar can also be interpreted as governance structures set-up to implement and oversee the environmental and social risks framework throughout the organisation"*

*"Governance is important, it is costly, and its implications are not yet fully understood"*

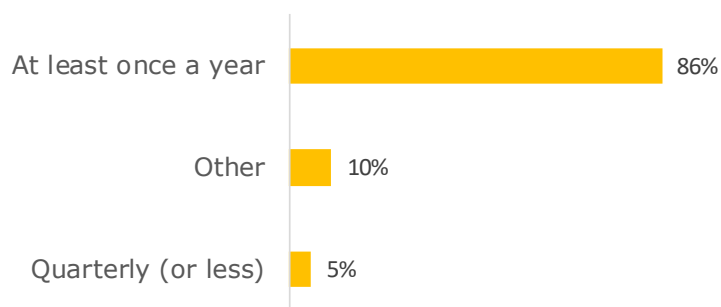
The relevant time horizon is also an important dimension to consider when looking at the definition of ESG risks. While some risks may play out in the short to medium term, such as those driven by policy changes, others may stretch out over considerably longer horizons (e.g. beyond 10 years).<sup>55</sup> As highlighted in an interview with an academic, one should take into account the time horizons applied by banks as there may be differences between the long-term view – i.e. the strategic perspective – and the short-term view, which is more of a risk perspective.

As illustrated in *Figure 5*, 86% of respondents review their definition of ESG risks on an annual basis, while others described this as a continuous process, influenced by evolutions

<sup>55</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](http://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

within the external environment. As highlighted by some respondents, the shaping of these themes across ESG pillars and their further decomposition into micro-themes (e.g. plastic consumption within waste management) is strongly driven by the external environment, including civil society organisations and customers.

Figure 5: Frequency of ESG risk definition reviews<sup>56</sup>



Source: BlackRock FMA analysis

Civil society organisations contribute to the advancements of specific ESG sub-themes, driven by their underlying mission. Significant engagement between civil society and the banking sector has occurred – for example, on climate change. This activity has not only been driven by organisations focused on the E pillar (e.g. World Wildlife Fund (WWF), who published a report on the financial risks and opportunities associated with water<sup>57</sup>) but also from more S pillar focused organisations (e.g. Oxfam, who investigated the financial risks of climate change in a recent article<sup>58</sup>, and Amnesty International, calling for climate change to come “top of the agenda”<sup>59</sup>). These engagement activities are often focused on fossil fuel financing – which is one of the most common interaction themes within the banking sector –, but also cover a wide range of other topics such as financial risks from natural degradation and biodiversity loss<sup>60</sup>, and potential corruption risks in blended finance mechanisms<sup>61</sup>.

One further point mentioned during interviews concerns the challenges related to treating ESG risks individually, rather than in conjunction with the other pillars. As mentioned by some banks, a holistic analysis may better shed light on the potential trade-offs between a desire to advance one ESG objective over another. As illustrated in an example provided by a respondent, a bank exiting from coal mining may be a good practice for environmental objectives, but if done abruptly and within developing countries, it may have potential detrimental effects from a social perspective. As further explained, this is because some

<sup>56</sup> Question: *How often do you review definitions of ESG risks / refine the scope of ESG risks under consideration (if applicable)?* Sample size: 21. “Other” refers to a bank who mentioned that ESG risk taxonomy does not require frequent update, and another one who mentioned continuously updating their definition through collection of external information.

<sup>57</sup> WWF and KFW (2019). *Freshwater risks & opportunities – An overview and call to action for the financial sector*. Available at:

[https://wwfeu.awsassets.panda.org/downloads/wwf\\_waterrisk\\_financialvalue\\_part4\\_keypiece\\_web.pdf](https://wwfeu.awsassets.panda.org/downloads/wwf_waterrisk_financialvalue_part4_keypiece_web.pdf).

<sup>58</sup> Oxfam (2020). *Bankrolling climate action and accountability*. Available at:

<https://politicsofpoverty.oxfamamerica.org/bankrolling-climate-action-accountability-financial-sector/>.

<sup>59</sup> Amnesty International (2020). *Davos: Climate emergency must come top of the agenda*. Available at:

<https://www.amnesty.org.nz/davos-climate-emergency-must-come-top-agenda>.

<sup>60</sup> WWF (2019) *Nature Risks - Framework for Understanding Nature-Related Risk to Business* Available at:

[https://www.panda.org/our\\_work/our\\_focus/finance/?356338/Nature-Risks-are-Financial-Risks](https://www.panda.org/our_work/our_focus/finance/?356338/Nature-Risks-are-Financial-Risks).

<sup>61</sup> Blended finance refers to the strategic use of development finance for the mobilisation of additional commercial finance towards the SDGs in developing countries. Source: Transparency International (2018). *Better Blending – Making the case for transparency and accountability in blended finance*. Available at: [https://images.transparencycdn.org/images/2018\\_WorkingPaper\\_BetterBlending\\_English.pdf](https://images.transparencycdn.org/images/2018_WorkingPaper_BetterBlending_English.pdf).

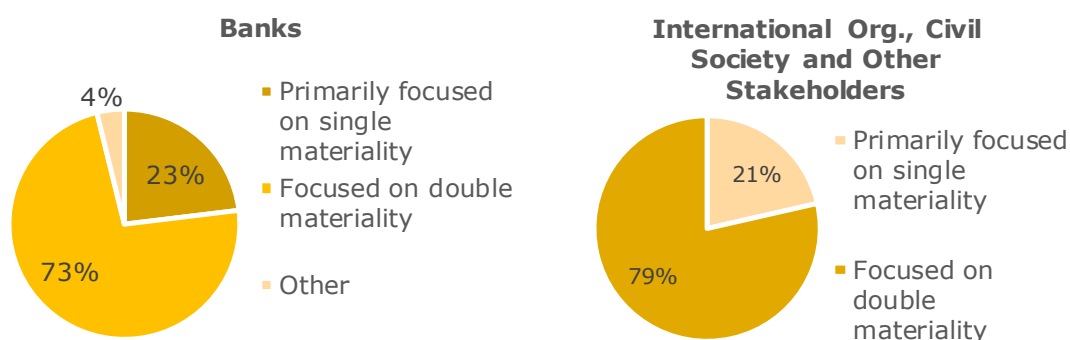
emerging markets may base their economies on 'brown' revenues and exiting from these sectors may pose a threat to the job-security of the local population. Moreover, as mentioned by another respondent, a combined view may be needed to align risk management processes to what is expected from external stakeholders.

On the other hand, some respondents highlighted the different nature of ESG pillars with respect to risk management practices, e.g. climate risk being easier to quantify than S or G risks. Overall, this wide spectrum of views emphasises the complexity of analysing ESG risks, which requires balancing granular and tailored approaches while maintaining a holistic focus.

In order to understand the extent to which the above-mentioned ESG themes are addressed within banks' risk management, the concepts of 'single materiality' and 'double materiality' perspectives play a key role. The single – also known as financial – materiality perspective considers ESG themes when they constitute financial risks for the bank (e.g. through their negative impact on the balance sheet). The double materiality concept as defined within the Commission's Guidelines on Reporting Climate-related Information<sup>62</sup>, a supplement to the Non-Financial Reporting Directive (NFRD), instead indicates that ESG considerations are relevant both when analysing financial materiality, as well as when taking into account the impact of banking activity on the external environment and societal context.

As shown in *Figure 6*, 73% of interviewed banks stated that they define ESG risks through the double materiality perspective. Banks focused on single materiality (23%) are usually at an early stage of ESG integration, and often mentioned that the double materiality approach should be the focus going forward. While no G-SIB mentioned being focused exclusively on single materiality, non-G-SIBs were somewhat equally split across the two perspectives.

**Figure 6: ESG definition by materiality approach<sup>63</sup>**



Source: BlackRock FMA analysis

As further shown in *Figure 6*, the double materiality perspective is also the view mostly encouraged (79%) by interviewed international organisations, civil society organisations and other stakeholders. This is in line with publicly shared perspectives from some of these organisations (e.g. GRI<sup>64</sup>) – who encourage banks to address ESG issues even if these go

<sup>62</sup> European Commission (2019). *Guidelines on Reporting Climate-related Information*. Available at: [https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines\\_en.pdf](https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf).

<sup>63</sup> Question: *Does the above definition of ESG risk focus on single or double materiality?* Sample size: 25.

<sup>64</sup> GRI (2020). *GRI contribution to the EU public consultation regarding the proposal by the European Commission for regulation*. Available at: [https://www.globalreporting.org/media/5egmieer/nfrd\\_update-2020.pdf](https://www.globalreporting.org/media/5egmieer/nfrd_update-2020.pdf).

beyond a financial impact –, as well as ESG rating providers – who include environmental and social impact related-data in their scores.

Multiple civil society respondents pointed out that banks should focus on double materiality as it is aligned with the principles and objectives of EU-wide activity (e.g. EU taxonomy). However, as argued by another civil society respondent, ESG assessments by banks are currently skewed towards corporate risks (i.e. financial materiality) rather than corporate impact (i.e. double materiality). As further elaborated by the respondent, ratings on corporate impact are sometimes characterised by an unclear measurement approach that bundles together different types of data-points which should instead be treated differently (e.g. mixing together forward-looking statements, with information on implemented procedures and outcomes achieved).

On the other hand, respondents endorsing the single materiality view, suggest that ESG integration should be a step-by-step approach, and it may therefore be simpler and more practical for banks to begin by first addressing financial materiality. An academic respondent further stated that financial materiality should be prioritised for the time being, as discussions on sustainability may often be abstract and high-level, and hence, they lack the materiality aspect that is needed to bring the topic to the attention of financial institutions.

Another important consideration raised by a civil society respondent concerns the different time horizons for single and double materiality. While single materiality may be more short-term focused, double materiality usually has more of a long-term perspective. Banks should therefore keep in mind the interplay between the different time horizons in their materiality considerations. This point is also emphasised in the guidelines on reporting climate-related information.<sup>65</sup>

Many banks highlighted that their annual disclosures (e.g. integrated annual reports / sustainability reports) are a key tool to illustrate how impacts of banking activity on the external environment (i.e. double materiality) are addressed and mitigated. On the other hand, there is less communication and disclosure on the financial materiality aspect, which is usually covered within risk-focused sections (e.g. the TCFD disclosure) and centred on climate-related risks (see section 4.2.5).

Overall, many respondents highlighted the issue of whether the double materiality concept is fully captured through existing risk categories, or if it introduces new considerations that cannot be adequately mapped. As further detailed in section 4.2.2.3, many respondents mentioned double materiality as being relevant mostly from a reputational risk perspective, as the impact of their banking activity on the environment is often subject to public scrutiny. However, some respondents also mentioned that reputational implications can translate into financial implications, hence indicating that double materiality is also inherently connected to financial materiality.

In essence, there seems to be no “clear line between the different approaches to materiality”<sup>66</sup>. Risk management functions of banks seem to consider ESG risks only if they indirectly translate into financial risks, whilst the management of other ESG risks and

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<sup>65</sup> European Commission (2019). *Guidelines on Reporting Climate-related Information*. Available at: [https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines\\_en.pdf](https://ec.europa.eu/finance/docs/policy/190618-climate-related-information-reporting-guidelines_en.pdf).

<sup>66</sup> IIF (2020). *Building a Global ESG Disclosure Framework: a Path Forward*. Available at: [https://www.iif.com/Portals/0/Files/content/Regulatory/IIF%20Building%20a%20Global%20ESG%20Disclosure%20Framework-a%20Path%20Forward%20\(June%202020\)%20final.pdf](https://www.iif.com/Portals/0/Files/content/Regulatory/IIF%20Building%20a%20Global%20ESG%20Disclosure%20Framework-a%20Path%20Forward%20(June%202020)%20final.pdf).

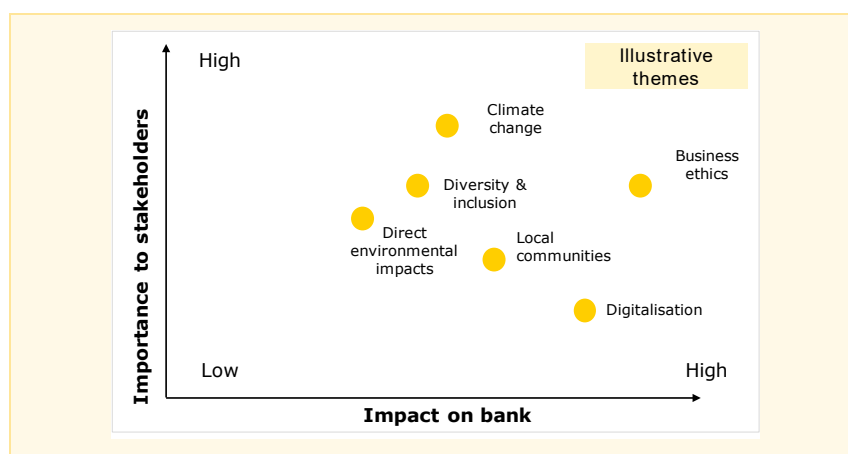
themes is handled by central Sustainability or Corporate Social Responsibility (CSR) departments (see section 4.2.3).

#### 4.2.2.2 ESG risk identification approaches

As part of their ICAAP, banking institutions in the EU are expected to perform a risk identification process, at least annually, to identify risks that are material, and update or review their 'internal risk inventory'.<sup>67</sup> Following the risk identification process, material risks are then aggregated and included within the key risk types, which are assigned to a risk owner, who reports on and/or actively manages these risks. Despite this structured approach for risk identification in place in banks, most institutions have not yet systematically integrated ESG considerations within that process. This is in line with the joint European Banking Federation (EBF) and Institute of International Finance (IIF) Climate Finance Survey, which found that only 17% of banks have fully integrated the process for identifying and assessing climate-related risks and opportunities in their risk management framework.<sup>68</sup> As discussed in the previous section, this is also related to the lack of a common ESG risk definition and the overlap of ESG risks with existing risk types.<sup>69</sup>

When asked about their ESG risk identification process, a wide range of banks mentioned that they also carry out materiality analysis from a broader Corporate Social Responsibility<sup>70</sup> (CSR) perspective, and not as part of risk processes (such as ICAAP). This approach, which is endorsed by common standards such as the GRI, encourages the development of so-called materiality matrixes as the final output. As illustrated in *Figure 7*, these visualisation tools, which are included in the majority of analysed banks' CSR/Sustainability Reports (i.e. 64%), help illustrate which ESG themes have particular relevance for the bank and for stakeholders. As mentioned by respondents, these exercises are used to identify key themes; however, they do not have a connection with risk types (e.g. credit, market risk).

Figure 7: Illustrative materiality matrix structure



Source: Public reports from banks and BlackRock FMA analysis

<sup>67</sup> European Central Bank (2018). *ECB Guide to the internal capital adequacy assessment process (ICAAP)*. Available at: [https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.icaap\\_guide\\_201811.en.pdf](https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.icaap_guide_201811.en.pdf).

<sup>68</sup> EBF and IIF (2020). *Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure*. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

<sup>69</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.

<sup>70</sup> Defined as: a company's commitment to carry out its activities in an ethical way, mindful of the social, economic and environmental impact.

For these types of analyses, banks rely on internal and external input, which is actively collected through questionnaires or direct dialogue with a wide range of stakeholders (including customers, civil society, investors), and subsequently prioritised as deemed relevant and in alignment with the bank's broader strategy.

Banks seem to use different approaches for ESG risk identification, with most relying on a combination of top-down and bottom-up approaches, using a mix of quantitative and qualitative data. For instance, top-down approaches include sectoral reviews carried out at portfolio level aimed at identifying sectors that are most exposed to ESG risks, and potentially reviewing their sector ratings accordingly (e.g. for carbon intensive sectors). Another example of a top-down approach is the identification of ESG risks through the 'Top and Emerging Risk identification process', a practice also mentioned in the risk management chapter of the Climate Financial Risk Forum (CFRF) guide.<sup>71</sup>

Bottom-up approaches rely on more granular data than top-down approaches, are often conducted in collaboration with the business lines and are connected to business processes. Some banks mentioned the existence of differentiated approaches across ESG pillars. For instance, for climate risk, according to respondents, the approach for the identification of physical and transition risks is becoming increasingly bottom-up.

As part of the ESG risk identification process, most banks mentioned the importance of effective interaction between the three lines of defence – in particular risk management functions, business units and other group functions – to ensure that all risks and threats facing the bank are considered in this process. One bank also mentioned having an ESG risk working group in charge of scanning the internal and external environment on a semi-annual basis to identify new and emerging ESG risks. *Figure 8* provides examples of considerations related to ESG risk identification processes mentioned by respondents.

Figure 8: Comments on risk identification approaches

**What are your approaches to ESG risk identification?**

*"Key ESG issues are identified through the materiality assessment, by asking internal and external stakeholders about topics that may have a positive or negative impact on the external environment"*

*"ESG risk is included in the identification approach at aggregate level (top-down approach), however we are in the process of building it from a bottom-up view"*

*"As part of our Top & Emerging risk process, the bank has identified ESG risks as a high priority risk partly due to increasing focus from our stakeholders and regulators"*

*"For ESG risk more broadly, the Group uses a combination of Bottom up/Top down, internal/external information, and both quantitative and qualitative methods when identifying ESG Risks"*

*"As for all financial risks, we maintain a risk register to identify climate-related risks and provide appropriate mitigation measure where necessary"*

<sup>71</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.



#### 4.2.2.3 ESG risk transmission channels

At a high-level, banks can be exposed to ESG risks in two ways. The first – the direct exposure – arises from own operations; for instance, banks may be exposed to ESG operational risk if their offices are in high flood risk areas. The second – the indirect exposure – arises through financing and investment activity, and is therefore more significant in terms of potential impact based on the business mix of banks. For instance, through their loan book, banks could be lending to counterparties operating in high flood risk areas, whose asset and collateral value may negatively be impacted by extreme weather events.<sup>72</sup>

As mentioned above, the focus of this Study is on this indirect risk. As also argued in a recent EBA discussion paper, ESG risks related to institutions' fully-controlled activities and related management arrangements are expected to be already taken into account in the existing risk management and internal governance frameworks.<sup>73</sup> However, all risk types were included in the analysis.

From the rise of CSR, ESG risks have been mostly addressed from an operational, compliance, and reputational risk perspective.<sup>74</sup> More recently, there have been coordinated efforts – for instance, through the set-up of the UNEP FI<sup>75</sup> –, to understand ESG implications for other financial risk types, in particular for credit risk. However, interviews showed that banks have not yet developed a clear mapping of how different ESG themes, at a granular level, feed into financial risk types.

Almost all banks consider ESG as a transversal theme impacting other risk types rather than as a principal risk type, with a significant share of banks recognising it as a driver of financial risks (e.g. credit risk) in their reporting. This is in line with examples of good practice provided by the CFRF, according to which “climate risk is a cross-cutting risk type that manifests through most of the established principal / standalone risk types.”<sup>76</sup> Given the relevance of ESG for all risk types, many banks mentioned that understanding these interconnections will likely be a step-by-step process, where some risk types (e.g. reputational risk) as well as ESG themes (e.g. climate risk) will be more advanced than others.

As observed among banks, advancements on these mapping efforts are mostly related to climate risk assessments. As emphasised by a respondent bank, climate risk should be separated from the other ESG or sustainability risks given that it is more relevant for financial risk types and its mapping efforts are more advanced. This is because there is some shared evidence, as well as growing awareness, of how physical and transition risks

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<sup>72</sup> OECD (2016). *Financial Management of Flood Risk*. Available at:

<https://www.oecd.org/daf/fin/insurance/OECD-Financial-Management-of-Flood-Risk.pdf>.

<sup>73</sup> EBA (2020). EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms. Available at:

[https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>74</sup> See for example: Prudential Regulation Authority (2018). *Transition in thinking: The impact of climate change on the UK banking sector*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D>.

<sup>75</sup> UNEP FI (n.d.). Pilot Projects on Implementing the TCFD Recommendations for Banks. Available at: <https://www.unepfi.org/banking/tcfd/>.

<sup>76</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.

can materialise as financial risk and induce spill-over effects. As illustrated in a Bank of International Settlements (BIS) paper, climate-related risks involve “dealing with multiple forces that interact with one another, causing dynamic, nonlinear and disruptive dynamics that can affect the solvency of financial and non-financial firms, as well as households’ and sovereigns’ creditworthiness”.<sup>77</sup>

Figure 9 provides an overview of the relevance of ESG risks perceived by interviewed banks based on their mapping to traditional financial and non-financial risk types. The strongest focus is on credit risk, reputational risk, and strategic risk. Given the current momentum on climate change related risks, some banks prefer advancing their mapping efforts on this specific theme, and plan to expand to other ESG themes later. Multiple respondents mentioned the need to prioritise specific ESG themes for these mapping efforts, developing a step by step roadmap in order to manage the high level of complexity.

The high scoring of credit risk by respondents is an indication of the relevance of climate risk factors for this risk type, which is also one of the most explored in academic literature. For example, a paper from the EDHEC Business School, which investigated the relationship between exposure to climate change and firm credit risk, found a negative correlation between distance-to-default and the amount of a firm’s carbon emissions and carbon intensity, hence suggesting exposure to climate risk affects the market’s perception of creditworthiness of corporate debt instruments.<sup>78</sup>

Figure 9: ESG relevance to risk types<sup>79</sup>

Risk Relevance	Score	Description	Illustration (not exhaustive)
<b>Credit risk</b>	4.0/5	Loss due to the failure of a counterparty to meet its agreed obligations to pay the bank	ESG component may affect PG/LGD calculation (e.g. damages to borrowers’ assets may reduce their collateral value / ability to pay loans)
<b>Reputational risk</b>	3.9/5	Loss of earnings or market capitalisation as a result of stakeholders taking a negative view of the organisation	Decrease in corporate valuation due to scandals / increased scrutiny by clients and customers on ESG issues (e.g. pollution, investments in controversial sectors, etc)
<b>Strategic risk</b>	3.3/5	Loss due to poor business decision management or from pursuit of an unsuccessful business plan	Failure to factor in rising ESG themes, leading to misalignment of business model to market best practice (e.g. not being able to finance the environmental transition)
<b>Concentration risk</b>	3.0/5	Potential for loss in a bank’s portfolio due to concentration to a single counterparty, sector or country	Rapid increase in risk exposure across certain ESG friendly asset classes through thematic investments lacking diversification (e.g. renewables)

<sup>77</sup> Bank of International Settlements (2020). *The green swan moment: Central banking and financial stability in the age of climate change*. Available at: <https://www.bis.org/publ/othp31.pdf>.

<sup>78</sup> EDHEC (2020). *Climate Change and Credit Risk*. Available at: <https://risk.edhec.edu/publications/climate-change-and-credit-risk>.

<sup>79</sup> Question: Where do you consider ESG as a significant driver of risk among traditional risk types? Please provide a score on ESG relevance to each risk type on a scale from 0 to 5, with 0 being not relevant and 5 being very relevant). Sample size: 24 The score illustrated is the average score provided by respondents, however, not all respondents scored all risk types.



<b>Legal risk / conduct / compliance risk</b>	2.9/5	Loss due to the breach of contractual obligations or loss due to a breach of regulatory practices and/or code of conduct and result into civil fines, sanctions, etc	Incurrence of fines due to lack of consideration on compliance with "E&S international standards and regulation on G"
<b>Operational, IT &amp; cyber security risk</b>	2.6/5	Loss resulting from inadequate procedures, systems or policies and/or from a breach of confidentiality, integrity of information systems	Fraudulent activity within the bank and/or fraud in relation to improper utilisation of financing, originally granted for the ESG scope support
<b>Market risk</b>	2.4/5	Loss of earnings or economic value due to adverse changes in financial market rates or prices	Asset valuations as well as risk-returns across equity, bonds, commodity affected by ESG (e.g. energy and commodity prices by low-carbon transition)
<b>Liquidity risk</b>	1.7/5	Loss due to the failure of a bank to meet short term financial demands	ESG asset classes/instruments may be prioritised above traditional asset classes and / instruments affecting the bank's liquidity or funding

Source: BlackRock FMA analysis

Figure 10 lists some comments provided by respondents during interviews when discussing ESG relevance within the various risk types. Most comments were focused on climate-related risks, highlighting that market activity and regulatory guidance on this theme have fostered a stronger focus on its financial implications. On the other hand, respondents also mentioned a higher exposure to conduct risk, stemming from the increasingly elaborate regulation and expectations on ESG.

Figure 10: Illustrative comments on ESG relevance for risk types

**Where do you consider ESG as a significant driver of risk among traditional risk types?**

Credit Risk: "ESG risks may have remarkable effects in credit risks, especially among our Large and Corporate Investment Banking clients and in our sensitive sectors"

Reputational: "Reputational risk is high due to continually rising stakeholder expectations; and potential for criticism on not taking ambitious enough positions or not being able to deliver fully on ambitious positions"

Compliance: "Compliance risk profile is also elevated as regulations are evolving fast for ESG and climate risk creating potential for non-compliance against fragmented regulations"

Market Risk: "Market risks may arise from ESG factors due to environmental and social events with a direct impact on the value of our assets. For example, increase in land pricing due to climate tax or deforestation"

Liquidity Risk: "ESG themes can directly affect the liquidity of assets, temporarily or permanently preventing their trading". For example, Stranded Assets"

Other comments across risk types:

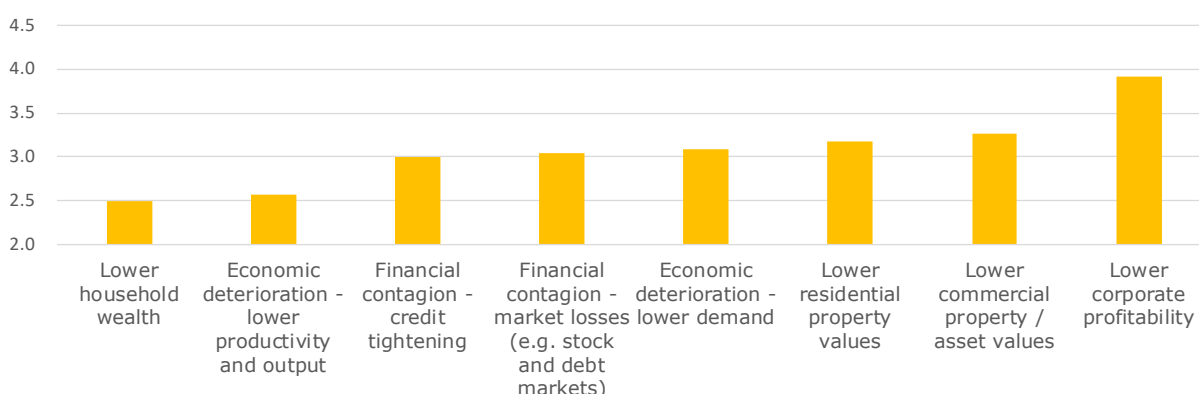
"Climate risk is seen as a cross-cutting risk which touches both financial and non-financial risk; the rest of ESG is currently embedded in the non-financial risk framework"

*"Climate risk is much more advanced [...] and represents a true financial risk [...] There is no evidence that any of the other risks have the same financial risk as climate risk"*

As illustrated in a report from the NGFS, ESG risks impact individual bank balance sheets and the broader economy through various transmission channels.<sup>80</sup> For instance, climate risks may impact traditional economic variables (e.g. change in demand, input prices and productivity) that bring additional stress into the economy through a decrease in profitability and asset valuation. As highlighted in the NGFS paper, this in turn results in losses for the financial sector, which then feed back into the overall economic deterioration through market losses and credit tightening.<sup>80</sup>

As mentioned by respondents during interviews, an improved understanding of the various ESG risk transmission channels is seen as an important step to develop a clear map of ESG themes to risk types. Despite efforts to advance work on this topic, many respondents stated that there is still no common understanding of the importance and relative relevance of these transmission channels, for instance, due to the different time horizons associated with ESG risks. As illustrated in *Figure 11*, participants identified lower corporate profitability and lower commercial and residential property values as the major transmission channels for ESG risks (and climate risk specifically), as further specified in responses.

**Figure 11: Main transmission channels of ESG risks<sup>81</sup>**



Source: BlackRock FMA analysis

As further detailed in Section 4.2.4.1.2, many banks are developing approaches to quantify the extent to which climate risk impacts these transmission channels. For instance, exercises on physical risks are focused on assessing, among other things, the impact on property values (both residential and commercial). Similarly, transition risk exercises are often focused on corporates and assess the impact of changes in legislation, technology, and consumer demand on corporate profitability.

*Figure 12* illustrates comments provided by banks when discussing the various transmission channels of ESG risks and are mostly focused on climate-related risk.

<sup>80</sup> Network for Greening the Financial System (NGFS) (2019). *A call for action – Climate Change as a source of financial risk*. Available at: <https://www.banque-france.fr/en/financial-stability/international-role/network-greening-financial-system/first-ngfs-progress-report>.

<sup>81</sup> Question: *What do you believe to be main transmission channels for ESG risks?* Sample size: 23. The score illustrated is the average score provided by respondents, however, not all respondents scored all transmission channels.

Figure 12: Illustrative comments on ESG risk transmission channels

Channel	Consideration	Examples provided by respondents
<b>Lower corporate profitability</b>	Lower Revenues	<ul style="list-style-type: none"> <li>- Clients with weak ESG risk management yield lower returns for the bank due to unsustainable business model of the credit client</li> <li>- Loss of income due to inadequate products, not aligned with transition</li> <li>- Reputational issues driven by poor ESG practices can have a big impact on corporate companies' profitability</li> </ul>
	Higher Costs	<ul style="list-style-type: none"> <li>- Higher expenditure will be required to adapt to low carbon economy</li> <li>- Since ESG-aligned investments for companies will not necessarily increase productivity, public funding grants will be key to make the transition period economically profitable</li> </ul>
<b>Lower commercial or residential property / asset values</b>	Lower Valuations	<ul style="list-style-type: none"> <li>- Commercial buildings and properties with low-energy efficiency standards depreciated compared to energy efficient properties</li> <li>- Non-compliance with energy efficiency standards leading to a down-grade of energy certification labels</li> <li>- Extreme weather events (e.g. floods) impacting value of properties</li> </ul>
<b>Economic deterioration - lower demand</b>	Changes in consumer preferences and behavioural patterns	<ul style="list-style-type: none"> <li>- Lower demand for carbon-intensive products from consumers, based on price elasticity and availability of alternatives (e.g. Energy, Auto, Transport)</li> </ul>
		<ul style="list-style-type: none"> <li>- Crisis situations driven by ESG aspects (e.g. Covid pandemic) impacting demand for certain products due to changes in behavioural patterns</li> </ul>
<b>Financial contagion - market losses (e.g. stock and debt markets)</b>	Volatility	<ul style="list-style-type: none"> <li>- Turbulence in financial markets related to uncertainty on ESG factors</li> </ul>
		<ul style="list-style-type: none"> <li>- ESG factors impacting valuation of underlying assets within securities portfolios (e.g. energy efficiency investments)</li> </ul>
<b>Financial contagion - credit tightening</b>	Pricing considerations	<ul style="list-style-type: none"> <li>- Reluctance to provide financing to sectors or geographies highly exposed to ESG risks (e.g. flood prone areas)</li> </ul>
<b>Economic deterioration - lower productivity and output</b>	Supply chain disruptions	<ul style="list-style-type: none"> <li>- Crisis situations driven by ESG aspects (e.g. Covid pandemic) impacting availability of inputs, productivity of workers, and output</li> </ul>
		<ul style="list-style-type: none"> <li>- Extreme weather events damaging or delaying cross-sector supply chains</li> </ul>
<b>Lower household wealth</b>	Lower wealth	<ul style="list-style-type: none"> <li>- Impact on wealth due to residential properties devaluation in high physical risk areas</li> <li>- Loss of job-related income due to stranded assets in certain sectors and industries re-sizing / closing down</li> </ul>
	Instability	<ul style="list-style-type: none"> <li>- Migration due to changes in weather conditions</li> </ul>

## 4.2.3 ESG risk governance & strategy

### 4.2.3.1 ESG risk governance structures and board oversight

Article 74(1) CRD requires banks to have robust governance arrangements, including well-defined organisational structures, with transparent and consistent lines of responsibility, as well as effective processes to identify, manage, monitor and report the risks they are or might be exposed to. To this end, respondents emphasised the importance of having adequate governance structures in place to ensure that ESG risks are properly understood and discussed at board and management level; however, their approaches to integrate ESG risks into governance differ.

As illustrated in *Figure 13*, 25% of interviewed banks mentioned having dedicated ESG risk committees either at management or executive level, and 13% having a dedicated committee at board level. It is worth noting that dedicated ESG risk committees are observed most commonly among G-SIBs and, in addition, board-level committees are observed among this group only. Where dedicated committees are not in place, ESG themes are often discussed as a topic within other committees; 38% of banks include it as an agenda item within existing management or executive committees and 50% of banks cover it within existing board level committees (e.g. risk committees). Few banks (8%) mentioned not having yet integrated ESG risk within any committee discussion. As pointed out in a survey by ShareAction, the extent to which climate-related risk is discussed in committees has changed over the years; whilst their first survey found that climate-related risk was discussed in 74% of banks' group risk committees, the second survey found this number to have grown to 100%.<sup>82</sup>

**Figure 13: ESG risk committees at board and executive and management level<sup>83</sup>**



Source: BlackRock FMA analysis

<sup>82</sup> ShareAction (2020). *Banking on a Low-Carbon Future II - A ranking of the 20 largest European banks' responses to climate change*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>83</sup> Question: *Do you have a dedicated ESG risk committee in place? Please select which type of committees you have in place (you may select more than one option)*. Sample size: 24. Percentages do not add up to 100% as multiple entries were allowed. "Other" refers to a bank that mentioned discussing ESG on ad-hoc basis only as part of their credit committee. Please note that dedicated ESG risk committee are different than risk committee referred in the EBA Guidelines on internal governance. See EBA (2017) EBA (2017). *Guidelines on internal governance (EBA/GL/2017/11)*. Available at: [https://eba.europa.eu/sites/default/documents/files/documents/10180/1972987/eb859955-614a-4afb-bdcd-aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20\(EBA-GL-2017-11\).pdf](https://eba.europa.eu/sites/default/documents/files/documents/10180/1972987/eb859955-614a-4afb-bdcd-aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20(EBA-GL-2017-11).pdf).

Participants mentioned the following reasons for the integration of ESG risks into existing structures, rather than dedicated risk governance structures: i) ESG risks are not necessarily considered as a new risk type, but rather as a transversal risk across existing risk categories that will materialise, to varying extents, through (for example) credit, market, operational, and reputational risk; ii) existing risk management governance structures are considered to be reasonably advanced, and therefore used for the purpose of integrating ESG risks; and iii) embedding ESG risks into existing governance structures enhances risk management integration without significantly adding complexity.

On the other hand, a common reason mentioned by banks for having dedicated ESG risk committees is the need to gain momentum in the short-term until ESG risks are fully integrated in the BaU<sup>84</sup> risk management.

When including ESG risks within other board committees, there are differing opinions and approaches in relation to how, by whom, and to what extent ESG risks are covered. The majority of interviewed banks do not address ESG risks via a risk-type-specific committee but via its board-level risk committee, which is responsible for the oversight of a bank's risk position across all risk types. However, as highlighted by one interviewed academic, a lack of clarity around board member and executive management level of accountability and liability in the integration of ESG risks persists. This is in line with findings from ShareAction's report, which found that across 40% of surveyed banks "the board merely approves climate-related policies and targets" and does not play a central role in advancing the ESG agenda.

As highlighted by an interviewed academic, successful ESG risk integration across firms requires board-members to be fully aligned and engaged in oversight. As suggested by multiple respondents, including civil society organisations and academics, the strengthening of board-level understanding of ESG risks could be achieved through targeted trainings on the topic.

When there is a dedicated ESG-related committee in place – for example, an environmental and social risk committee – respondents stated that it acts as a central place to discuss, evaluate, approve, and monitor ESG-related risk management processes and is often composed of representatives from various departments e.g. Compliance, Credit risk, Reputational risk, Operational risk or Legal.

As further detailed in section 6.2.3.2, more commonly, committees focus not only on the risk angle but have a wider ESG agenda, where a double materiality view is adopted. As an example, some banks mentioned having established committees to oversee and steer their environmental and societal impact and sustainability strategy holistically (named as e.g. CSR Committee, Ethics Committee). The case study in *Figure 14* compares an integrated vs a dedicated ESG governance structure

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<sup>84</sup> Business as Usual, i.e. the normal execution of standard functional operations within an organisation

Figure 14: Case study on the comparison of committee structures for ESG risk integration

### **Dedicated climate governance as part of the overall sustainability governance**

A European bank has instituted a committee related to climate change chaired by CFO, and co-chaired by the board member responsible for wholesale banking. It is further comprised of a number of board members and senior managers from the wholesale and retail businesses.

The committee is advised by an internal climate expert group comprising experts from wholesale banking, front office, sustainability team, and risk function. Responsibility of the committee goes beyond managing climate-related risks which also include:

- Mandating processes for identifying and managing climate-related risks and opportunities
- Guiding climate-related policies, strategy, objective-setting and monitoring
- Monitoring and overseeing progress on relevant goals and targets
- Guiding external disclosures

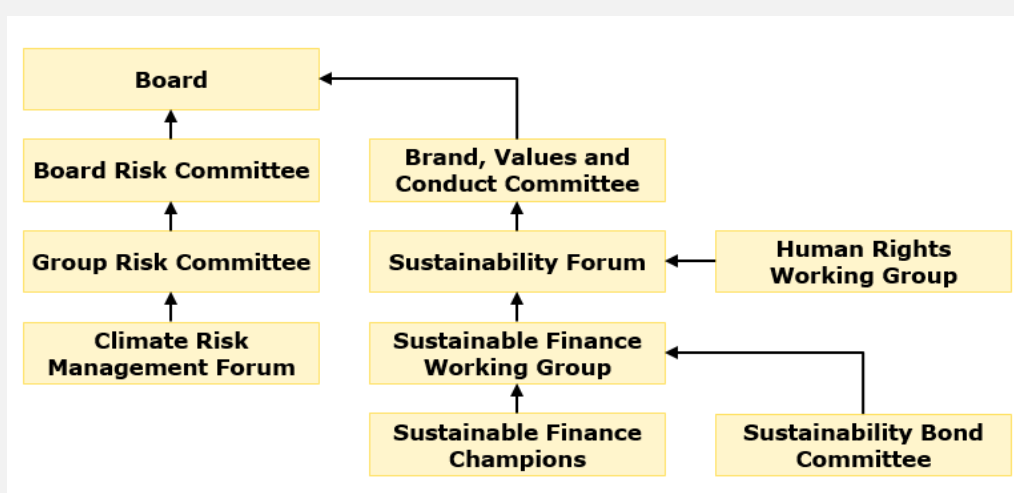
The committee meets six times per year and follows an agenda prepared by the climate expert group, which meets monthly.

### **Integrated ESG governance at both management and board level**

A European bank includes ESG risk as a topic under the Group Risk Committee at management level. There is a cross-business dedicated forum – Sustainability Forum – reporting to management and the board and being responsible for the development and delivery of the broader sustainability strategy, beyond ESG risks. The forum is comprised of representatives from various team including corporate affairs, brand and marketing, conduct, financial crime and compliance.

At board level, ESG risk is overseen by both the Board Risk Committee focusing on financial risks and the Brand, Values and Conduct Committee focusing on non-financial risks.

The bank is currently considering integrating ESG risks into day-to-day activities e.g. incorporating into the Credit Risk Committee at operational level.



Source: Public reports from banks and BlackRock FMA analysis

Accountability of executives and top management for ESG risk integration was also mentioned in interviews with other stakeholders, including civil society organisations and

academia. In particular, as illustrated in a report from the World Economic Forum<sup>85</sup>, the introduction of managerial incentives is considered a tool to foster such accountability, aligning the interests of executive directors to the broader organisational sustainability agenda, which may include ESG risk integration. As further detailed in the paper, introduction of such incentives requires the identification of KPIs that are applicable and material (e.g. setting science-based targets for portfolio shares) and for which effectiveness can be monitored after introduction.

#### 4.2.3.2 ESG risk organisational set-up

The integration of ESG risks into a bank's wider organisation also typically considers existing structures at operational level. The majority of interviewed banks address ESG risks via multiple traditional risk departments, rather than having dedicated ESG risk departments. The majority of interviewed banks also stated that they address ESG risks within at least two risk departments. *Figure 15* summarises the respective risk departments which share the responsibility for integration and management of ESG risks, as provided by respondent banks.

Even though many banks address ESG risks via different departments, the credit risk department was commonly referenced by interviewed banks, given the need to assess ESG risks at client or transaction level during the loan origination process. Many banks stated that the enterprise risk department, together with the reputational risk department, also supports the ESG risk assessment for various financing activities or performs second-line responsibilities for risk management across the organisation.

**Figure 15: Departments advancing ESG integration into risk management<sup>86</sup>**



Source: BlackRock FMA analysis

Across these risk departments, some of the interviewed banks mentioned having dedicated team or personnel focusing on ESG risks. For the rest of the banks, no dedicated resources are allocated. Further illustrative examples of how banks set up ESG teams and their responsibilities are outlined in *Figure 16*.

<sup>85</sup> World Economic Forum (2019). How to Set Up Effective Climate Governance on Corporate Boards – Guiding Principles and Questions. Available at:

[http://www3.weforum.org/docs/WEF\\_Creating\\_effective\\_climate\\_governance\\_on\\_corporate\\_boards.pdf](http://www3.weforum.org/docs/WEF_Creating_effective_climate_governance_on_corporate_boards.pdf).

<sup>86</sup> Question: Under which department(s) do ESG risk management and integration responsibilities lie? Please provide details on your organisational set-up. Sample size: 24. Percentages do not add up to 100% as multiple entries were allowed.

Figure 16: Illustrative and non-exhaustive examples of ESG risk-related teams

Credit Risk

- Dedicated resources within Credit Risk to advance ESG integration focused on sustainable lending.
- Specific team responsible for ESG risk assessment at client and transaction level.
- Dedicated team responsible for analysis of ESG deals in the wholesale bank.

Reputational Risk:

- The department is responsible for covering part of the impact assessment from credit risk.
- Dedicated resources involved in reputational risk assessment for financing carbon intensive or governance sensitives cases.
- Reputational Risk performs second-line responsibilities for ESG risk management across the organisation.

Enterprise Risk:

- Enterprise Risk Committee is mandated with the overall responsibility for holistic climate risk management including the oversight of the development of a climate risk framework.
- Dedicated Climate Risk team within Enterprise Risk Management.

Operational Risk:

- Responsible for product governance and business continuity without dedicated team focusing on ESG.
- Dedicated team in place; environmental and social risks identified by the operational risk department are reported to corporate compliance or internal control directors.

Other:

- Dedicated team of Subject Matter Experts in E&S risks under the Sustainable Finance team to support the business in its risk decision making.
- Dedicated personnel under Responsible Banking division, Wholesale Business teams, and Public Policy department.

Training was also mentioned by respondents as an important tool to foster ESG risk integration in different divisions, not only within the risk function but also within business teams and other central divisions. Given the relevance of training to educate all lines of defence, some banks have expanded their training modules to include ESG risk topics. This is in line with a report from the CFRF, which states that formal training is needed to educate all lines of defence regarding climate risk terminology, metrics and policies.<sup>87</sup> As further suggested in the report, considerations should be made on requiring such training to be mandatory (similarly to anti-money laundering training).

<sup>87</sup> See, for example: Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.



#### 4.2.3.3 ESG risk strategy and initiatives

Given that the integration of ESG risk in banks' governance and strategy is still an ongoing and evolving process within many institutions, banks mentioned some elements that they consider important to facilitate or accelerate the integration of ESG risks into key decision-making and risk processes.

Sponsorships from top management and CEO, i.e. the level of engagement and oversight on ESG risk integration, was the highest rated theme. This was followed by cross-functional work with business lines and central CSR/Sustainability teams and board oversight (see *Figure 17*). Banks were also asked to select the top three elements for which they considered themselves most committed. Notably, the first two of the highest rated considerations were also within this group (sponsorship and cross-functional work), but board oversight was not, highlighting room for improvement in ESG integration.

**Figure 17: Importance of considerations for ESG risk governance and strategy<sup>88</sup>**



Source: BlackRock FMA analysis

Overall, few analysed banks publish information on a formalised and holistic ESG risk integration strategy with detailed milestones and activities. In addition, of the few respondents who mentioned having a formalised ESG risk strategy, these strategies are mostly centred on climate risk and are mapped to the TCFD pillars (i.e. strategy, governance, risk management and metrics & targets).

Other illustrative responses provided by banks include: i) a wider ESG strategy or priority exists in the bank beyond ESG risks, ii) ESG risks have been embedded in the bank's general risk strategy, iii) ESG risks have not yet been embedded into the bank's strategy, but there are plans to do so, or iv) the bank is waiting for further regulatory guidance to develop a strategy and timeline.

Many banks have defined key strategic initiatives in relation to ESG risk integration over the next three years. Examples are provided in *Figure 18* and range from the enhancement of ESG risk know-how to the development of green lending policies. With respect to climate

<sup>88</sup> Question: *How important are the following considerations for ESG risk integration within governance and strategy? How committed is your bank respectively? Please provide an absolute score for each consideration, with 0 being not important and 5 being very important. Sample size: 24. The score illustrated is the average score provided by respondents.*

risk, many smaller banks, but also some larger institutions, stated that they have not yet started the integration in risk management.

Figure 18: Examples of key strategic initiatives on ESG risk integration

**What are the key strategic initiatives on ESG risk integration your organisation will focus on going forward in the next 3 years?**

*"Within risk functions we are in the process of developing and implementing a holistic climate risk framework, to i) strengthen governance around the topic, ii) embed climate risk considerations into our BaU risk management practices and decisions making, iii) define qualitative climate risk appetite and quantitative targets"*

*"Our focus will be on the implementation of the ECB guidelines for Banks on Climate-Related and Environmental Risk Management and the EBA Loan Origination Guidelines as they provide a clear roadmap towards full integration of ESG into risk management and business origination"*

*"Improve ESG risk definition, know-how, assessment and screening of client / transaction, including systematic capturing of risk drivers in the IT landscape"*

*"Enhance internal ESG score for assessments and reporting purposes, setting risk appetite for ESG risks and developing top-down stress testing capabilities"*

#### **4.2.4 ESG risk management processes & tools**

##### **4.2.4.1 Measurement & assessment**

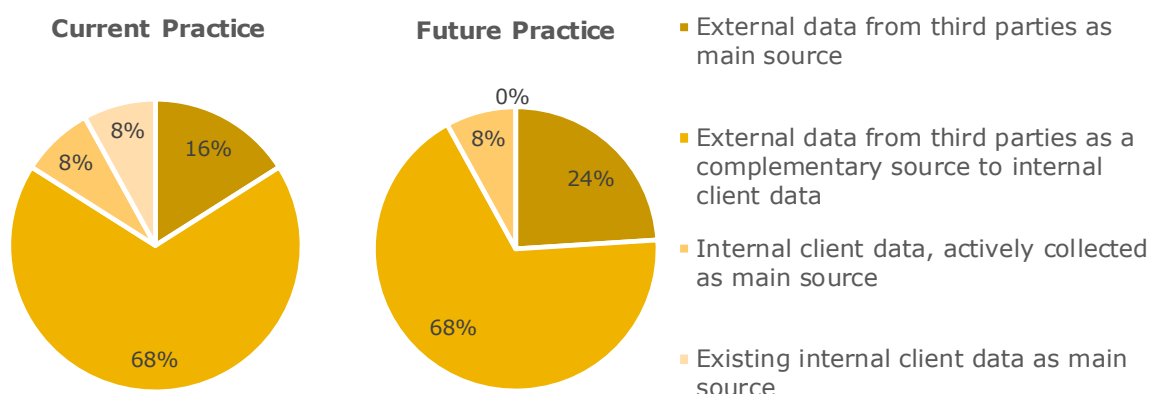
###### **4.2.4.1.1 Data taxonomy, standardisation and sourcing**

Adequate data represents one of the key inputs required for effectively measuring and assessing a bank portfolio's exposure to ESG risks. This data includes quantitative metrics, (e.g. clients' carbon emissions), qualitative information on their organisational set-up and operations (e.g. presence of teams focused on ESG risks and policies in place, plans to align to a net zero pathway, sourcing practices), as well as broader macro-economic, social and environmental data (e.g. shared socio-economic pathway scenarios).

Even though very few banks publicly disclose their data sourcing practices, interviews clarified that the majority of banks currently seem to use a mix of internal client data and externally sourced data from third party providers for ESG risk management purposes (see *Figure 19*). It is worth highlighting that all G-SIB respondents mentioned the sourcing external data, either using it as a main source or complementary source to internal data. On the other hand, non-G-SIBs tend to rely more strongly on internal client data.

In the future, the majority of interviewed banks plan to either actively enrich their data, by developing or expanding client questionnaires to collect relevant information (68%), or, if not already done so, complement it by sourcing additional data from third party data providers (24%). As mentioned by multiple banks, the expectation for the future is that external data providers will play a more central role in the ESG data landscape, providing standardised and centralised data-points (where possible) that various banks can use.

Figure 19: Sources of data used to measure ESG risks<sup>89</sup>



Source: BlackRock FMA analysis

Where externally sourced data is used, this serves either to verify existing information, or to gather more granular datapoints for specific portfolio measurement exercises. This is often focused on the E pillar and, in particular, climate change. The external information sourced may include, among others, scores calculated from third party providers (e.g. ESG ratings) as well as raw data (e.g. carbon emissions, geo-location of assets, geo-political risks, forced labour indexes).

As found in other stocktaking exercises<sup>90</sup>, banks that use external data usually rely on a range of data providers. Some of the most commonly quoted providers include MSCI, Refinitiv, Sustainalytics, RepRisk and Rhodium, which are used for scores, ratings and underlying key performance indicators (KPIs).

Interviews with data providers indicated a structured approach for the identification of ESG risks within an industry or firm. As illustrated during interviews, this assessment looks at the exposures of businesses, products, and geographies to certain risks, as well as counterparty's capabilities to manage these risks (for instance, through the development of policies to restrict activity in sensitive areas). Moreover, it is common practice for these ESG ratings to capture the double materiality perspective (e.g. through capturing a counterparty's emissions).

However, reliance on these datapoints is not always seen as the target state for banks, as some respondents raised concerns over the differences in underlying data aggregation approaches and a preference for the development of own methodologies. In fact, as illustrated in the Massachusetts Institute of Technology (MIT) paper "Aggregate Confusion: the Divergence of ESG Ratings" there is significant divergence in ESG measurement approaches among data providers.<sup>91</sup> This is evidenced by the weak correlation between ESG ratings of prominent ESG rating agencies compared to the stronger correlation seen among traditional credit ratings. This point was further emphasised in an interview with a civil society organisation, who argued that standardisation in ESG measurement methodology is required to reduce noise and strengthen the credibility of ESG risk

<sup>89</sup> Question: Which sources and types of data do you use, or plan to use in the near future, to measure ESG risks? Sample size: 25.

<sup>90</sup> See, for example: EBF and IIF (2020). Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

<sup>91</sup> Berg F., Koebel J., Rigobon R. (2019). Aggregate Confusion: the Divergence of ESG Ratings. MIT Sloan School Working Paper 5822-19. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3438533](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3438533).

measurement. As suggested by the respondent, the output of any ESG risk assessment (e.g. the score) should clearly distinguish between the impact driven by single versus double materiality.

Some banks also source scenario-related data from specialised environmental agencies such as the Intergovernmental Panel on Climate Change, the International Institution for Applied System Analysis, and the International Energy Agency. According to respondents, these are fed into internal methodologies to integrate them into climate risk assessments and scenario analysis.

Nonetheless, despite the wide landscape of data providers, they typically do not offer full coverage of all asset-classes, geographies and counterparty types, hence requiring banks to enrich the information with their own datasets. As illustrated in the risk management chapter of the CFRF risk management guide, the low coverage of counterparties in their portfolios and the cost of using multiple providers have led some banks to choose internal options for now.<sup>92</sup>

Client data is sourced by many banks through dedicated questionnaires during client onboarding or credit application processes (as further detailed in section 4.2.4.2). The information sourced can differ significantly across banks and client types. However, it is usually either related to the use of proceeds, or to the ESG profile of the counterparty (e.g. CO<sub>2</sub> emissions). As highlighted by respondents, capturing information on the use of proceeds is very common in project finance (e.g. to assess whether the use of funding is restricted to renewable or energy-efficient energy sources). However, sometimes there are also restrictions in corporate or retail banking relating to the use of funds for ESG-linked objectives.

Respondents often mentioned that they check for information regarding the attainment of certain ESG standards (e.g. energy-efficiency certifications) to capture the ESG profile of counterparties. With respect to the S and G Pillars, information collected includes, for example, background on the counterparty and its governance practices for 'KyC' purposes (e.g. on management quality), and relevant information on social conduct, such as having incurred fines or penalties due to non-compliance with standards (e.g. on health and safety, labour laws, supply chain standards, accidents and controversies). Information sourced through questionnaires is often tailored both to the client sector as well as client size factoring in relevance and the concept of proportionality.

As illustrated in *Figure 20*, when asked whether available client information is considered sufficient to assess exposure to ESG risks, the G pillar appeared to be the area with the best coverage of respondents' information needs, with "good or somewhat good amount of information available", often due to information collected by banks during KyC processes in compliance with national and international requirements.

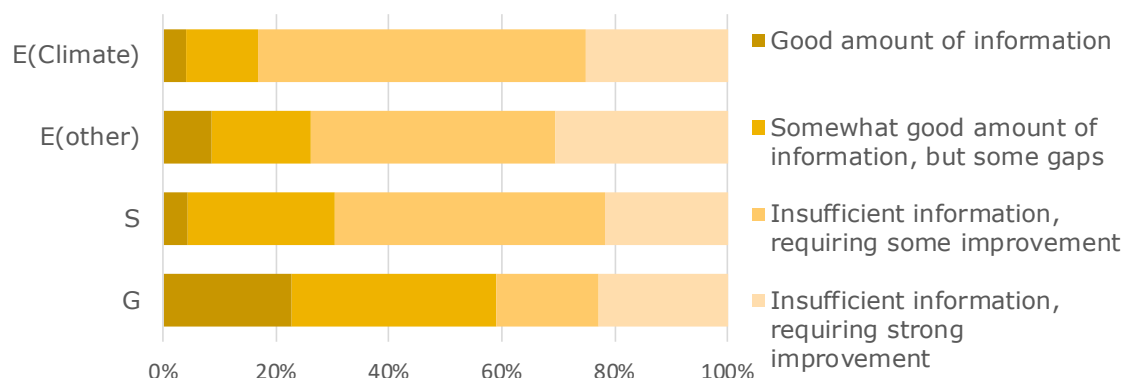
On the other hand, the E pillar related to climate change was flagged as that most characterised by "insufficient information, requiring some improvement" or "strong improvement". One reason mentioned by respondents is that climate change data gaps are more evident due to the better understanding of what information is required, as well as the more quantifiable nature of the risk, which is not always the case for the S and G pillars.

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<sup>92</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.

When looking at differences in answers between G-SIBs and non-G-SIBs, it appears that overall G-SIBs are relatively more positive regarding the amount of information available, despite the majority still deeming it insufficient. For instance, more respondents from this group selected “good amount of information” available across some pillars and fewer selected “insufficient information, requiring strong improvement”, compared to the non-G-SIBs. This might be related to the fact that they also source information externally, as illustrated above, and have broader exposure to larger and listed counterparties.

Figure 20: Level of client information available to assess the risk profile<sup>93</sup>



Source: BlackRock FMA analysis

Furthermore, many respondents highlighted the existence of data discrepancies across portfolios due to differences in reporting practices between listed and non-listed or smaller counterparties. As mentioned by many respondents, and in particular those with high exposure to SMEs, the lack of data for these counterparties presents key challenges for portfolio measurement. According to interviewed banks, this often leads to the reliance on averages and development of proxies, which are not always seen as accurate and reliable. Comments related to data availability regarding retail exposures were raised less frequently and were mostly related to the assets backing retail products (e.g. mortgages) rather than characteristics of the borrower as an individual.

As further detailed in section 6.2.4.1, lack of data is also seen as a challenge given the expectation of having to apply the EU taxonomy to banks’ lending books. Multiple respondents mentioned that the application of the taxonomy may be a challenge, given the granularity of information and technical understanding of underlying activities required. However, as also mentioned by an academic, the EU taxonomy can be an important tool for banks to better understand the business of the counterparties they finance and establish more structured dialogues with clients to gather data.

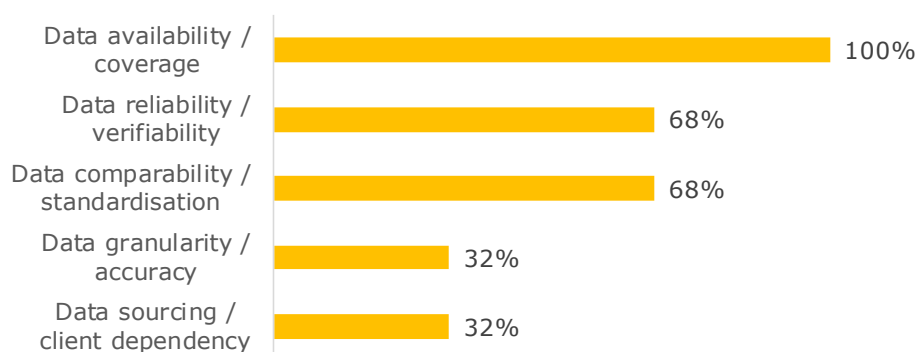
Respondents also mentioned the expectation that data requirements will increase for topics other than climate change once these are better understood and that, at this point in time, information for certain topics is not readily available. Examples mentioned include circular economy, and social risks along the supply chain.

As illustrated in *Figure 21*, interviewed banks mentioned various concerns related to ESG data, and those most commonly ranked among the top three include: i) data availability and coverage; ii) data reliability and verifiability; and, iii) data comparability and

<sup>93</sup> Question: Do you think you have enough key information from your clients to assess their ESG risk profile? Sample size: 24. Please note percentage values might not add up to 100% due to incomplete answers on some pillars.

standardisation. As regards the E Pillar, other studies, such as the joint survey from EBF and IIF<sup>94</sup>, have highlighted that challenges related to data availability are a major impediment to developing an explicit climate-risk identification process. Similarly, the consultation published by the EBA also specifies that the lack of data for the identification and measurement of ESG risks is one of the main challenges faced by institutions.<sup>95</sup>

Figure 21: Commonly mentioned data concerns<sup>96</sup>



Source: BlackRock FMA analysis

Data availability and coverage concerns usually relate to non-listed counterparties. They also include concerns on geographic coverage, in particular for emerging markets. One of the most-quoted examples among respondents concerned the lack of data on clients' carbon emissions (Scope 1&2<sup>97</sup>).

A second issue raised by respondent banks relates to data reliability and verifiability. As mentioned by respondents, requesting data from clients can be done in a reasonably standardised way (e.g. through dedicated questionnaires). However, verifying the accuracy and reliability of the data provided is perceived as an auditing task, and hence not necessarily one that banks see themselves equipped to perform or for which they have available time and capacity. Hence, respondents often mentioned external data as a preferred option under this perspective, thus shifting the burden of verifying its accuracy to an external party.

Lastly, low comparability and standardisation of data also appear as a key concern. As also reported by some data providers, the level of quality and relevance of information provided by securities' issuers can vary significantly, even for the same issuer across time.<sup>98</sup> Moreover, fragmented and divergent reporting practices, as well as a lack of agreement on key metrics to be used, seem to pose challenges for cross-counterparty analysis.

<sup>94</sup> EBF and IIF (2020). Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

<sup>95</sup> European Banking Authority (2020). EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>96</sup> Question: With respect to data, which considerations are you most concerned about and how do these differ among the E/S/G pillars? Sample size: 19.

<sup>97</sup> Defined as: Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy.

<sup>98</sup> Fitch Ratings (2020). ESG in Credit. Available at: <https://your.fitch.group/esqwhitepaper.html>.

Overall, these topics were identified as key concerns across both G-SIBs and non-G-SIBs. However, data concerns related to granularity and accuracy were mostly mentioned by non-G-SIBs, suggesting that their client information is often at a more superficial level and hence does not provide sufficient insights to distinguish among counterparties or assets with similar characteristics.

Nonetheless, some stakeholders suggested that these challenges may be addressed with the use of emerging technologies. As suggested in a paper by the WWF, the adoption of novel spatial data methods within the financial sector, combined with the growth in new satellites and machine learning, are opening new possibilities for the generation of timely and consistent global climate and environmental datasets.<sup>99</sup>

In order to address data gaps, especially as regards non-listed counterparties, many respondents mentioned the importance of collaborating with corporates and the real economy to develop and standardise data. There are expectations by some banks that the update to the Non-Financial Reporting Directive (NFRD) may provide a stimulus in this respect. In fact, the potential expansion of the perimeter of entities to which the NFRD applies, which is currently under consideration, may extend reporting requirements to non-listed companies. At the same time, the need for proportionality was mentioned by many respondents.

Figure 22 illustrates some of the key comments made with respect to data sourcing practices and key considerations.

Figure 22: Illustrative comments on data sourcing

**Do you think you have enough key information from your clients to assess their ESG risk profile? What is missing and/or could be improved?**

*"The geographic dimensions, social and economic contexts and also sectoral profiles may impact the availability of more granular data"*

*"There is not a lot of data on SMEs, and more generally on non-listed counterparties, so they require additional data gathering efforts"*

*[When looking to measure physical risks], "even the best asset level database, with clients' asset locations, is not complete"*

*"Requesting additional information from clients however may create transaction costs"*

*"Usually the critical information is received from the client dialogues, without particular chance to audit and validate them"*

*"In terms of data comparability from different sources, a few metrics were defined to compare across sources and capture inconsistencies"*

*"Accurate carbon data availability remains an issue"*

*"The quality of the data and information we receive from both our clients but also from rating agencies is insufficient. In particular with respect to the latter, information appears often to be inconsistent. Regulation of these agencies and standards would be required"*

<sup>99</sup> WWF (2020). *Climate & Nature Sovereign Index – Introducing a framework for a clear assessment of environmental risk*. Available at: [https://www.wwf.org.uk/sites/default/files/2020-07/Climate\\_%26\\_Nature\\_Sovereign\\_White\\_Paper.pdf](https://www.wwf.org.uk/sites/default/files/2020-07/Climate_%26_Nature_Sovereign_White_Paper.pdf).



#### 4.2.4.1.2 Portfolio ESG risk measurement and scenario analysis

The focus of respondent banks in relation to measuring and quantifying portfolio exposure to ESG risks is primarily on climate change, and on both transition and physical risks. As mentioned by some respondents, ad-hoc portfolio exercises have been conducted to quantitatively model and measure, through scenario analysis, exposure to climate risks, whereas other ESG risks are usually embedded into standard processes such as credit applications. The ad-hoc nature of these exercises is also mentioned in other studies, which highlight that only few financial institutions run climate risk scenario analysis regularly and, even when these exercises are performed, they do not feed into day-to-day processes.<sup>100</sup>

Some banks mentioned using external frameworks and tools, such as the E&S Risk Management Toolkit provided by the European Bank for Reconstruction and Development (EBRD)<sup>101</sup>, to derive risk scores for customers based on industry classifications and pre-defined criteria across the E&S Pillars. Other banks also mentioned using external data providers to consolidate a view of their loan-book's ESG profile, by aggregating ESG scores at counterparty level. However, banks also mentioned that, whilst this provides a good understanding of the current portfolio, it does not provide any forward-looking insights, which is the approach increasingly taken by larger institutions that perform or plan to perform climate change scenario analysis.<sup>102</sup>

As illustrated in *Figure 23*, approaches seeking to quantify climate risk can assess the impact of banking activity on the external environment, capturing the double materiality perspective through Paris alignment exercises, or the climate risks to which the bank is exposed and that may be financially relevant. Exercises can either focus on measuring the current exposure to these risks (i.e. providing a snapshot of the current situation), or use scenario analysis to assess the evolution of the portfolio under different climate scenarios. These different approaches are also illustrated in the EBA discussion paper on the management and supervision of ESG risks, which presents three methods: i) portfolio alignment, ii) risk framework (as further detailed in 5.2.4.1.1), and iii) exposure method.

As recently highlighted by the BIS, forward-looking approaches can allow financial institutions to “test the resilience of corporations in their portfolios to potential materialisations of physical and transition risks, their impact on KPIs and the adaptive capacities of these firms”.<sup>103</sup> As highlighted by respondents, given that many of the risks are unprecedented and have complex and non-linear effects, the modelling of these risks is difficult; scenario analysis is particularly useful in this respect, allowing the exploration of a range of possible outcomes.

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<sup>100</sup> GARP (2020). *Second Annual Global Survey of Climate Risk Management at Financial Firms*. Available at: [https://climate.garp.org/wp-content/uploads/2020/05/GRI\\_ClimateSurvey\\_051320.pdf](https://climate.garp.org/wp-content/uploads/2020/05/GRI_ClimateSurvey_051320.pdf).

<sup>101</sup> EBRD (n.d.). *EBRD Environmental and Social Risk Management Manual (E-Manual)*. Available at: <https://www.ebrd.com/who-we-are/our-values/environmental-emanual-toolkit.html>.

<sup>102</sup> Fitch Ratings (2020). *Banks' Risk Management Embraces ESG*. Available at: <https://www.fitchratings.com/research/banks/banks-risk-management-embraces-esg-04-12-2019>.

<sup>103</sup> Bank for International Settlements (2020). *The green swan: Central banking and financial stability in the age of climate change*. Available at: <https://www.bis.org/publ/othp31.pdf>.



Figure 23: Illustrative framework for climate risk measurement

The below figure represents an illustrative framework to summarise the approaches to climate risk measurement, illustrating the key data points required and their output.

	<b>Analytics Type</b>	<b>Data</b>	<b>Measurement</b>	<b>Scenario Analysis</b>
<b>Climate Risk</b>	<b>Physical Risk</b>	<b>Geo-location, climate maps</b>	<b>Physical Risk Score</b> at asset, counterparty / instrument level that captures acute and chronic event severity and probability maps	<b>Stress Testing capability</b> to measure financial impact of Physical Risk under different scenarios
	<b>Transition Risk</b>	<b>Emissions across value chain, sector-specific output, Paris-aligned "pathways"</b>	<b>Transition Risk Score</b> at sector and counterparty level that captures policy, technology and societal preferences risk drivers	<b>Stress Testing capability</b> to measure financial impact of Transition Risk under different scenarios
<b>Impact on Climate</b>	<b>Carbon Footprint / Paris Pathway Alignment</b>		<b>Financed emissions</b> of the portfolio and its <b>emissions intensity</b>	Evolution of <b>portfolio's alignment to Paris Agreement</b> under <b>range of scenarios</b> and portfolio / strategy implications

Source: BlackRock FMA analysis

In recent years, several voluntary initiatives were started, such as the UNEP Finance Initiative, aimed at co-building methodologies to assess loan-books' exposure to climate-related risks and opportunities. Almost half of the analysed banks (41%) joined one of the two banking pilot phases launched by UNEP FI to co-develop climate risk measurement capabilities.<sup>104</sup>

As mentioned in the risk management chapter of the CFRF guide, working with external experts to fill the internal knowledge and expertise gaps may be needed in order to develop tools to identify and assess physical and transition risk.<sup>105</sup> In fact, only a limited number of analysed banks (15%) have launched their own climate risk measurement exercises to test specific and well-defined scenarios (e.g. assessing the impact of a carbon tax on their loan-book) without having participated in the above mentioned voluntary pilots.

Similarly, exercises to capture the impact of banking activity on the climate, which are considered by many respondent banks as the double materiality perspective of ESG risks, have been advanced by several initiatives focused on developing methodologies to align portfolios to the goals of the Paris Agreement, such as the Science Based Targets Initiative<sup>106</sup> or the Transition Pathway Initiative<sup>107</sup>. As highlighted by interviewed banks, these exercises usually focus on a well-defined segment of the portfolio, such as high-carbon sensitive sectors, and not the entire balance sheet. This is also the approach encouraged by some civil society organisations; as argued by an interview respondent, the focus should be on carbon-intensive sectors first, in order to prioritise efforts and develop sector-specific methods.

<sup>104</sup> UNEP FI (n.d.). *Pilot Projects on Implementing the TCFD Recommendations for Banks*. Available at: <https://www.unepfi.org/banking/tcfd/>.

<sup>105</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.

<sup>106</sup> Science Based Targets (n.d.). *Approaches and methods*. Available at: <https://sciencebasedtargets.org/methods-2/>.

<sup>107</sup> Transition Pathway Initiative (n.d.). *The TPI tool*. Available at: <https://www.transitionpathwayinitiative.org/>.

Figure 24 summarises high-level comments provided by respondent banks on portfolio risk measurement exercises, including their scope, approach and level of advancement.

Figure 24: Illustrative comments on portfolio risk measurement exercises

**How do you quantify/assess your portfolio exposure to ESG risks?**

*"Risk assessment exercises are focused on climate risk, transition and physical, whereas the approach for other ESG risks is more soft-wired"*

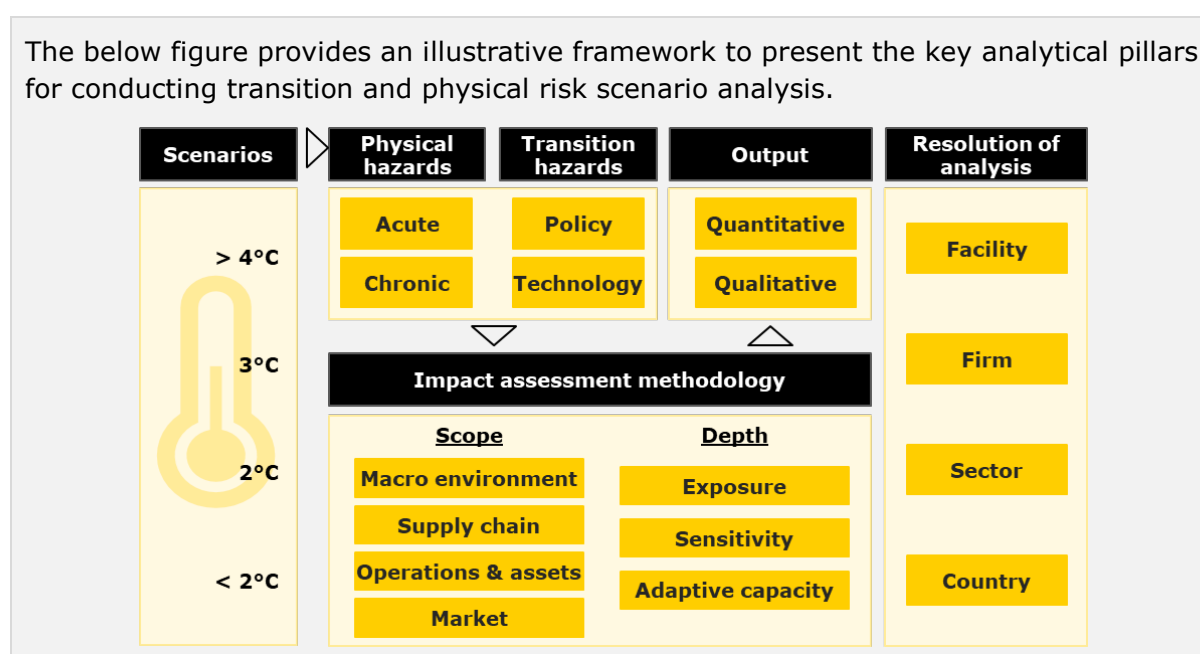
*"Quantification efforts have been more bespoke and ad-hoc rather than integrated into business as usual exercises. That's where we would like to get to"*

*"It's more difficult to try and quantify the double materiality perspective compared to single materiality"*

*[The bank] "has identified seven sectors in the wholesale portfolio that are sensitive to climate risks - such as coal, gas, power, steel, transport - and two sectors under the retail balance sheet, which are the mortgage portfolio and the consumer portfolio related to auto-financing business"*

Even though risk measurement methodologies observed across transition and physical risk may vary, there are some high-level considerations – for instance, related to the exercise scope and depth – that are applicable to all exercises. The key analytical pillars for conducting these exercises are illustrated in Figure 25. These include: i) the scenarios used, ii) physical and transition hazards examined, iii) impact assessment methodology developed, iv) outputs produced, and v) the outcome of analysis (and impacted counterparties) of the risk examined.<sup>108</sup>

Figure 25: Case study on methodologies for climate scenario analysis



Source: Vivid Economics – framework re-adapted

<sup>108</sup> UNEP FI (2019). *Changing Course: A comprehensive investor guide to scenario-based methods for climate risk assessment, in response to the TCFD*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/05/TCFD-Changing-Course-Oct-19.pdf>.

Physical risk exercises are performed on the corporate loan book, commercial real estate and mortgage books and may consider the impact of both incremental shifts in climate conditions and changes in extreme events.<sup>109</sup> Analysis of incremental shifts, i.e. chronic hazards, is less common, as methodologies to date are more developed on acute extreme weather events<sup>110</sup>, for instance, looking at commercial real estate and commercial mortgage backed securities exposure to hurricane and flood risk.<sup>111</sup>

Physical risk exercises adopt different approaches based on the underlying portfolio in scope. For real estate portfolios, whether commercial or retail, exercises assess the impact of weather events on property values and, subsequently, on metrics such as loan-to-value ratios.<sup>112</sup> Exercises on corporate portfolios tend to focus on sectors that may be impacted by weather changes (e.g. agriculture or energy sector). These usually follow specific steps, including: i) assessing sector productivity, given the impact of weather events, ii) deriving changes in revenues and cost of goods sold, across homogeneous sectoral and geographic segments, and iii) estimating changes in credit risk of individual borrowers.<sup>112</sup> For these exercises, methodologies cover the impacts of physical hazards on counterparties' operations and assets (e.g. asset impairment and business interruption), and in some cases, such as the case study in *Figure 26*, cover the broader value chain impact.

Insurance protection against natural hazards can help mitigate the effects of extreme weather events on borrowers and should hence be factored in physical risk measurement analysis. As illustrated by the Prudential Regulation Authority (PRA), the high penetration of private market insurance makes the net short-term financial risk of flooding in the UK low to moderate.<sup>113</sup> As further illustrated, differences in legal insurance requirements between lending to households versus large companies should also be factored in given that insurance against natural catastrophes is often mandatory for households but not necessarily a requirement for companies. This is the case in multiple countries; for instance, the French residential housing portfolio is also widely protected from natural catastrophes as most of households have underwritten an insurance contract on their main house.<sup>114</sup>

Despite the potential relevance of insurance protection, a report by the UNEP FI highlights that these considerations are currently excluded from most analysis conducted by banks, due to uncertainties related to present-day coverage and future changes in insurance availability and pricing.<sup>115</sup> In fact, the increase in frequency of extreme weather events,

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<sup>109</sup> UNEP FI (2018). *Navigating a new climate – Part 2: Physical risks and opportunities*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/07/NAVIGATING-A-NEW-CLIMATE.pdf>.

<sup>110</sup> UNEP FI (2019). *Changing Course: A comprehensive investor guide to scenario-based methods for climate risk assessment, in response to the TCFD*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/05/TCFD-Changing-Course-Oct-19.pdf>.

<sup>111</sup> BlackRock Investment Institute (2019). *Getting physical: assessing climate risks*. Available at: <https://www.blackrock.com/us/individual/insights/blackrock-investment-institute/physical-climate-risks>.

<sup>112</sup> UNEP FI (2018). *Navigating a new climate – Part 2: Physical risks and opportunities*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/07/NAVIGATING-A-NEW-CLIMATE.pdf>.

<sup>113</sup> Prudential Regulation Authority (2018). *Transition in thinking: The impact of climate change on the UK banking sector*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D>.

<sup>114</sup> ACPR (2019). *French banking groups facing climate change-related risks: Analyses et synthèses*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/as\\_101\\_climate\\_risk\\_banks\\_en.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/as_101_climate_risk_banks_en.pdf)

<sup>115</sup> UNEP FI (2018). *Navigating a new climate – Part 2: Physical risks and opportunities*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/07/NAVIGATING-A-NEW-CLIMATE.pdf>.

such as floods, may reduce insurance firms' willingness to provide flood insurance at affordable prices or trigger their inability to pay out claims.<sup>116</sup>

**Figure 26: Case study on a physical risk pilot of a European G-SIB**

A European G-SIB performed a pilot assessment, on a sample of clients in its portfolio, to assess exposure to acute and chronic physical risks, i.e. driven by extreme weather events and weather pattern changes.

The assessment focused not only on direct impacts on clients' assets but also on indirect impacts through supply chains and markets. The outcome of this exercise was a physical risk score between 1 and 100 and was calculated based on three risk factors: operational risks, supply chain risks and risks of market share losses. The exercise was conducted on nine identified sectors highly exposed to physical risks, for which the top 10 clients were selected for each sector.

A final score below average, i.e. 50, suggested a low-risk profile. Nonetheless, the analysis revealed disparities between the sectors reviewed. In particular, the semiconductor and tech and digital sectors had the highest exposure due to the dependence of their value chains on components made in countries with high exposure to physical risks. Differences could also be aggregated at regional level, highlighting greater vulnerability in Southeast Asia compared to North America.

Sectors	Operations Risk Score	Heat Stress	Water Stress	Floods	Sea Level Rise	Hurricanes	Market Risk Score	Supply Chain Risk Score	Total
Semiconductor	39	39	52	24	9	18	72	66	52.5
Technology & Hardware	41	39	52	25	10	22	63	60	51.8
Pharmaceutical & Biotechnologies	37	41	45	24	9	20	62	60	47.8
...	...	...	...	...	...	...	...	...	...
Total	36	40	44	24	9	18	51	45	<b>41.5</b>

Source: Public reports from banks and BlackRock FMA analysis

Transition risk measurement exercises are most commonly performed on the corporate loan book pertaining to high-carbon sectors and try to reflect how low-carbon policy and technology transition, to mitigate climate change, could impact the credit risk of exposures.<sup>117</sup> As illustrated in a PRA report on the UK banking sector, carbon-intensive industries are those where government policy changes can already be observed, which also include consumer loans for diesel vehicles and buy-to-let lending, given energy

<sup>116</sup> Prudential Regulation Authority (2018). *Transition in thinking: The impact of climate change on the UK banking sector*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D>.

<sup>117</sup> UNEPFI (2018). *Extending our Horizons – Part 1: Transition-related risks & opportunities*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/04/EXTENDING-OUR-HORIZONS.pdf>.

efficiency requirements<sup>118</sup>; however, the primary focus of respondents remained on the corporate book.

Transition risk exercises usually focus on two types of transition hazards (or shocks). The first are policy-driven and describe the additional costs or revenues that could arise from changes in the policy environment. These could manifest as either a direct price on carbon, – for instance, through a carbon tax or extension of exchange trade systems (ETS) –, or as an indirect carbon cost – for example through coal production restrictions.<sup>119</sup> The second type of hazards are technology-driven, and could manifest as changes in relative prices of services – for instance, through falling costs of renewable energy generation or storage.<sup>119</sup>

As illustrated in the case study in *Figure 27*, transition risk exercises performed by banks usually follow specific steps, namely: i) choice of reference scenarios ii) definition of sectors and client segments, iii) identification of risk factor pathways, to reflect how the chosen scenarios may impact sectors differently, and iv) determination of borrower-level calibration points, by selecting representative sample of borrowers, contextualising the scenario impact for them and translating this into Probability of Default (PD) changes.

**Figure 27: Case study on a transition pilot of a non-European G-SIB**

A non-EU G-SIB performed a pilot transition risk assessment on its utilities sector portfolio.

### **1. Scenario choice**

The 2°C scenario within the Regional Model of Investment and Development - Model of Agricultural Production and its Impacts on the Environment (REMIND-MAGPIE) integrated assessment model (IAM), developed by the Potsdam Institute for Climate Impact Research (PIK) was used. Assumptions of this scenario include: i) carbon price increases starting at USD 2/tCO<sub>2</sub>eq in 2020 and rising to 100/CO<sub>2</sub>eq by 2040, ii) middle of the road world, where socio-economic patterns continue on historic trends, iii) energy mix transitions rapidly from fossils to renewables, and others.

### **2. Sector definition and segmentation**

The exercise was conducted for the utilities sector in Europe and US, including power generation, power transmission & distribution, integrated utilities, electricity production & distribution. These were segmented into four homogeneous groups: regulated high-carbon, regulated low-carbon, unregulated high-carbon, unregulated low-carbon.

### **3. Identification and analysis of risk factor pathways**

Sensitivities to the scenario through risk factor pathways were determined for all segments, for instance through direct emission costs, indirect emissions costs, low/carbon capex and changes in revenues.

### **4. Borrower level calibration**

<sup>118</sup> Prudential Regulation Authority (2018). *Transition in thinking: The impact of climate change on the UK banking sector*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D>.

<sup>119</sup> UNEP FI (2019). *Changing Course: A comprehensive investor guide to scenario-based methods for climate risk assessment, in response to the TCFD*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/05/TCFD-Changing-Course-Oct-19.pdf>.

Probability of default calibration was undertaken to understand how the transition scenarios could impact the credit standing of entities assessed. Companies were segmented and grouped together with similar characteristics. The stress was only applied to exploration and production sub-sets. The approach used a bottom-up, quantitative-based stress test supported by qualitative assumptions where required.

### Results

Results from this exercise showed that under the 2040 2° scenario the climate stressed exposure to default-weighted average portfolio PD was:

- 2.2x greater in the US relative to 2017
- 2.3x greater in the EU relative to 2017

However, given that the majority of utilities were investment grade, stressed average PDs resulted in portfolio remaining largely in the investment grade area.

*Source: Public reports from banks and BlackRock FMA analysis*

Lastly, when looking at ESG risk assessment from a double materiality perspective, most banks discussed Paris Alignment exercises, given growing public commitments to align lending and investment activities with science-based targets, such as the Collective Commitment to Climate Action.<sup>120</sup>

The case study in *Figure 28* provides an overview of the approach undertaken by five banks that publicly pledged to develop a methodology to measure the climate alignment of their lending portfolios under the Katowice commitment in 2018.<sup>121</sup>

Figure 28: Case study on credit portfolio alignment<sup>122</sup>

For the banking business, aligning with the Paris Agreement implies reorienting financial instrument products or portfolios away from non-consistent activities and/or scaling-up consistent activities as the alignment determines how much and by when should green, transitioning and brown activities be developed or financed.

The alignment approach undertaken by banks under the Katowice commitments follows the process of measuring, setting targets, steering and progress tracking.

### **Measuring alignment:**

Firstly, the Paris Agreement goals (which aims to ensure below 2°C and if possible 1.5°C increase in average temperatures relative to pre-industrial levels) can be translated into usable data and indicators using a climate scenario that outline the potential pathways needed to reach the Paris goals.

For climate scenario analysis, Paris Agreement Capital Transition Assessment (PACTA) tool<sup>123</sup> is used by banks under the Katowice commitment to quantify a financial

<sup>120</sup> UNEP FI (2019). *33 banks commit to immediate action towards aligning with global climate goals*. Available at: <https://www.unepfi.org/news/industries/banking/collective-commitment-to-climate-action/#:~:text=The%20Collective%20Commitment%20to%20Climate,Paris%20Agreement%20on%20Climate%20including%3A&text=being%20publicly%20accountable%20for%20their%20climate%20impact%20and%20progress%20on%20these%20commitments>.

<sup>121</sup> 2° Investing Initiative (2019). *The Katowice commitment: one year on*. Available at: <https://2degrees-investing.org/the-katowice-commitment-one-year-on/>.

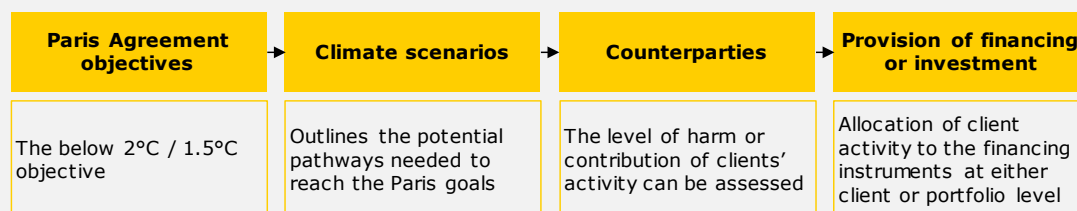
<sup>122</sup> 2° Investing Initiative (2020). *Credit Portfolio Alignment- An application of the PACTA methodology by Katowice Banks in partnership with the 2 Degrees Investing Initiative*. Available at: <https://2degrees-investing.org/wp-content/uploads/2020/09/Katowice-Banks-2020-Credit-Portfolio-Alignment.pdf>.

<sup>123</sup> 2° Investing Initiative (n.d.). *PACTA*. Available at: <https://2degrees-investing.org/resource/pacta/>.



portfolio's exposure to a 2°C benchmark in relation to a series of climate-related technologies. In doing so, it provides a 'misalignment' or 'alignment' indicator that measures the extent to which current and planned production profiles, investments, greenhouse gas (GHG) emissions, are aligned to the trajectory.

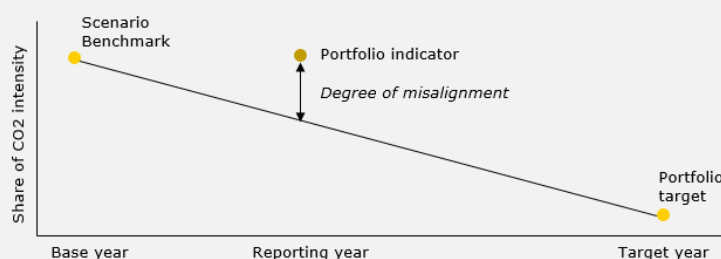
#### Illustrative approach to measuring alignment



#### **Target-setting:**

Secondly, scenario benchmark<sup>124</sup> and long-term targets need to be set based on the end goal and trajectory for the portfolio to be consistent with the Paris Agreement's goals. The financial instrument is considered as 'aligned' if the level of the indicator is below (respectively above) that of the benchmark from a climate scenario for brown activities (respectively green activities). Alignment can be measured at portfolio, client or asset level.

#### Illustrative alignment at portfolio level



#### **Steering:**

Finally, by closely examining the gaps between banks' lending portfolios and climate benchmarks, banks can reorient the financial instrument so that it stays on track with the trajectory. Steering can be achieved at portfolio level, either by accompanying existing counterparties to align their activities, or by adjusting the customer base.

Source: 2° Investing Initiative (2020)

Despite the nascent status of this field, a trend towards using sector-specific approaches such as physical intensities can be observed – for example, the Sectoral Decarbonisation Approach<sup>125</sup> by the Science Based Targets initiative (SBTi). In addition, efforts are being undertaken to develop disclosure metrics that indicate the implied temperature rise (ITR), which attempts to estimate the global temperature rise associated with the emissions of (a portfolio of) companies.<sup>126</sup> However, as stated by respondents, such ITR metrics are

<sup>124</sup> Defined as physical and financial metrics that reflect the specific transition pathways for a given activity (a technology, a commodity, a process or an industrial sector), depending on the sector and activity.

<sup>125</sup> Sectoral Decarbonisation Approach (2015). *A method for setting corporate emission reduction targets in line with climate science*. Available at: <https://sciencebasedtargets.org/wp-content/uploads/2015/05/Sectoral-Decarbonization-Approach-Report.pdf>.

<sup>126</sup> Banque de France (2020). *Responsible Investment Report 2019*. Available at: [https://www.banque-france.fr/sites/default/files/media/2020/06/26/rapport-annuel-investissement-responsable\\_2019\\_en.pdf](https://www.banque-france.fr/sites/default/files/media/2020/06/26/rapport-annuel-investissement-responsable_2019_en.pdf).

still subject to significant challenges, such as a lack of robustness or consensus in terms of methodology, as well as coverage limitations.

Civil society organisations highlighted the importance of setting sector-specific targets as it would be misleading to set an overall target on carbon emissions for the entire portfolio. For example, overweighting healthcare in the portfolio can improve the overall carbon physical intensity figure; however, it does not help to reduce emissions in the real economy. Instead, civil society organisations advocate methodologies that assess the degree of portfolio alignment with a given climate scenario to establish a forward-looking view. While the scope of portfolios measured should be broad, outcomes should remain at sectoral level and not be aggregated. Additional examples of methodologies developed by industrial bodies aiming at assessing a portfolio's alignment with low-carbon trajectories are summarised in Figure 29.

Figure 29: Overview of various approaches for measuring Paris Alignment<sup>127</sup>

Methodology	Approach	Metrics	Solution Providers
Sector Decarbonization Approach (SDA)	<ul style="list-style-type: none"> <li>Approach developed by SBTi for 'brown' sectors such as energy / power</li> <li>Sector-level carbon emissions allocation approach based on production intensity</li> </ul>	<ul style="list-style-type: none"> <li>Depending on sector, e.g., kgCO<sub>2</sub>/ kWh</li> </ul>	<ul style="list-style-type: none"> <li>PACTA / 2° Investing Initiative</li> <li>The Transition Pathway Initiative</li> <li>S&amp;P Trucost</li> </ul>
GHG Emissions per unit of Value Added (GEVA)	<ul style="list-style-type: none"> <li>Approach developed by SBTi for 'non-brown' sectors (e.g. IT)</li> <li>A carbon budget is equated to global GDP and a company's share of emissions is determined by its gross profit</li> </ul>	<ul style="list-style-type: none"> <li>kgCO<sub>2</sub>/ gross value-added</li> </ul>	<ul style="list-style-type: none"> <li>S&amp;P Trucost</li> </ul>
Absolute Emissions	<ul style="list-style-type: none"> <li>Approach developed by SBTi</li> <li>The percent reduction in absolute emissions required by a given scenario is applied to all companies equally</li> </ul>	<ul style="list-style-type: none"> <li>Absolute kgCO<sub>2</sub> emissions</li> </ul>	<ul style="list-style-type: none"> <li>SBTi</li> </ul>
Fair-share approach	<ul style="list-style-type: none"> <li>Each technology-specific element (technology share, production volume) is set to change at a rate consistent with the climate scenario (e.g. power, fossil fuels)</li> </ul>	<ul style="list-style-type: none"> <li>Rate of change of absolute production by technology</li> </ul>	<ul style="list-style-type: none"> <li>PACTA / 2° Investing Initiative</li> </ul>
Firm strategy-based	<ul style="list-style-type: none"> <li>Carbon impact ratio is determined based on bottom-up strategy assessment of individual firms</li> <li>Sector specific calculation principles for high-stakes sectors (energy, equipment suppliers with low carbon potential, carbon intensive and financial) to compute induced emissions and emission savings</li> </ul>	<ul style="list-style-type: none"> <li>Carbon Impact Ratio (Emission Savings/ Induced Emissions)</li> <li>Carbon/ EV, Carbon/ GDP</li> </ul>	<ul style="list-style-type: none"> <li>Carbon4 Finance</li> </ul>

Source: Institut Louis Bachelier et al. (2020) and BlackRock FMA analysis

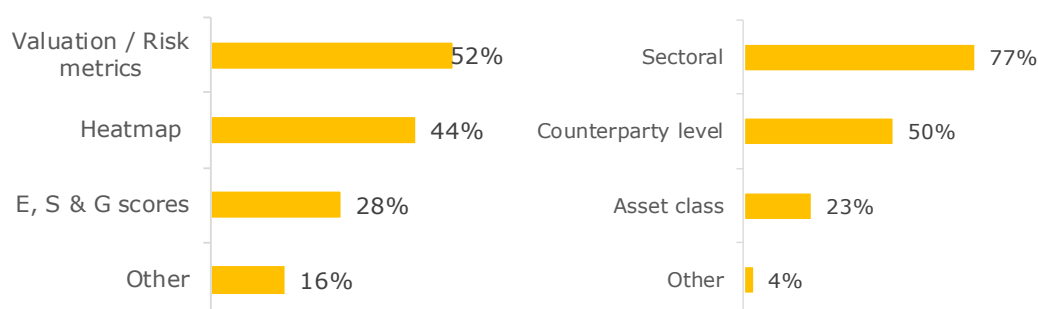
Overall, interviews highlighted that G-SIBs are more likely to perform portfolio transparency exercises (compared to non-G-SIBs), in particular on corporate books for transition risk and mortgage books for physical risks. As illustrated in Figure 30, the

<sup>127</sup> Institut Louis Bachelier et al. (2020). *The Alignment Cookbook - A Technical Review of Methodologies Assessing a Portfolio's Alignment with Low-carbon Trajectories or Temperature Goal*. Available at: <https://www.louisbachelier.org/wp-content/uploads/2020/07/rapport-0607.pdf>.



outputs of these exercises can vary significantly and most often result in i) valuation and risk metrics, such as adjusted PDs, LGDs, Loan to value (LTV) and Value at Risk (VAR) ratios, ii) heatmaps, representing sectoral or geographic exposure to transition or physical risk, and iii) in aggregated scores, resulting in signals of ESG riskiness. Specifically, valuation and risk metrics are the most common output for interviewed G-SIBs, whereas heatmaps are the most common among interviewed non-G-SIBs. The level of granularity of these exercises often goes down to counterparty level (50% of banks), however the majority often opt for an aggregated analysis at sectoral level.

Figure 30: Output of ESG risk measurement exercises and coverage<sup>128</sup>



Source: BlackRock FMA analysis

As pointed out in the EBF and IIF report, results of these pilot exercises are not always published<sup>129</sup> and differ based on the nature of the exercise. Many banks report that there are no significant risks identified across their portfolios, even though there is evidence of certain sectors being more or less exposed to these risks.

As mentioned by many banks, results obtained through these exploratory assessments have the potential to be further enhanced and refined, particularly in light of the current challenges faced in their refinement. As illustrated in an interview with a data provider, ESG risk measurement challenges can either be driven by theory complexity or lack of data. As further detailed, transition risk modelling is characterised by significant theoretical uncertainties, related to the underlying economic policy and technology scenarios adopted, which require complex political forecasting and may be based on subjective assumptions. On the physical risk side, however, the problem is found to be more data driven, and the same asset, assessed by different parties, could lead to directionally different results.

As highlighted in the previous section, data availability issues were among the most quoted challenges, and these also manifest with different nuances across transition and physical risk assessment exercises. For instance, access to borrower-level data can be restricted due to privacy rules, particularly for retail mortgages.<sup>130</sup> Banks also often lack data on the locations and production characteristics for commercial borrowers (e.g. to understand the revenue mix of borrowers which is relevant for transition risk assessment).

Moreover, banks lack historical data with which they can assess the impact of climate risk on credit losses. As illustrated in the UNEP FI paper, no long-term policy experiments have

<sup>128</sup> Question: *What is the output of your ESG risk measurement exercises and what is the portfolio coverage?* Sample size: 25. Percentages do not add up to 100% as multiple entries were allowed.

<sup>129</sup> EBF and IIF (2020). *Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure*. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

<sup>130</sup> UNEP FI (2018). *Navigating a new climate – Part 2: Physical risks and opportunities*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/07/NAVIGATING-A-NEW-CLIMATE.pdf>.

been rolled out at the scale required for a 2°C transition, and “the financial impacts of more binding policy constraints on industries, including those reliant on fossil fuels, for example, remain untested”.<sup>131</sup> As further outlined in a report by the Institute for Climate Economics (I4CE), there are various challenges when conducting such measurement exercises, as these risks, which are long-term, difficult to associate with a probability, and for which there is limited historical data, are often difficult to reconcile with standard risk processes based on probabilities established from the past.<sup>132</sup>

Third, as also mentioned in other reports, time frames are a critical challenge in the assessment of climate-related risk; for instance, banks mentioned that if the timeframe is too long, the results are too intangible to be of use, particularly for banks, where the lending horizon is normally 1 to 5 years.<sup>133</sup> However, if the timeframe is too short, the results will not inform strategic decision-making, indicating the importance of clarity on the time frame at the beginning of any assessment.<sup>133</sup>

As highlighted by an interviewed civil society, however, the long-term nature through which climate risks manifest should not hinder their current assessment, as many events are already having concrete manifestations in the short term through policy changes – such as the setup of Energy Trading Systems (ETS) – as well as through acute weather events. Even though some physical risks are foreseen in a time horizon of 10-15 years, they should not be underestimated in the short term; for example, chronic changes such as low water levels in Europe during the 2018 summer significantly disrupted river transport and supplies in Germany or Switzerland.<sup>134</sup> Moreover, as previously mentioned in section 4.2.2, the assessment of ESG risks from a double materiality perspective should not consider the length of financing as the only relevant timeframe. It should also consider the time horizon over which the financed asset will be used, as that would more accurately reflect the ultimate impact it will have on the environment.

Lastly, there remains an open question as to the need for standardisation of scenarios, methodologies, and outputs of scenario-based assessments. Scenarios used are often different across risk measurement exercises; for example, physical risk methodologies often focus on a 4°C ‘business-as-usual’ scenario, while transition risk scenarios often focus on a 2°C scenario.<sup>135</sup> Moreover, as banks currently choose the reference scenarios to use in their exercises, results are not easily comparable. To address this challenge, as mentioned by civil society organisations and data providers in interviews, and as further detailed in section 4.2.4.2.4, supervisors should provide banks with the reference scenarios to input into their models.

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<sup>131</sup> UNEPFI (2018). Extending our Horizons – Part 1: Transition-related risks & opportunities. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2018/04/EXTENDING-OUR-HORIZONS.pdf>.

<sup>132</sup> I4CE (2019). *Towards an alternative approach in finance to climate risks: Taking uncertainties fully into account*. Available at: <https://www.i4ce.org/download/for-another-approach-to-climate-risk-in-finance-taking-uncertainties-fully-into-account/>.

<sup>133</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>.

<sup>134</sup> ACPR (2019). *French banking groups facing climate change-related risks: Analyses et synthèses*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/as\\_101\\_climate\\_risk\\_banks\\_en.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/as_101_climate_risk_banks_en.pdf).

<sup>135</sup> UNEP FI (2019). *Changing Course: A comprehensive investor guide to scenario-based methods for climate risk assessment, in response to the TCFD*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/05/TCFD-Changing-Course-Oct-19.pdf>.

#### 4.2.4.2 **Integration into risk processes**

##### 4.2.4.2.1 **Risk appetite framework / statement**

It is a regulatory requirement that financial institutions must have in place a risk appetite framework (RAF) that considers all the material risks to which the institution is exposed, that is forward-looking and aligned with the strategic planning horizon set out in the business strategy.<sup>136</sup>

There are three observed methods to approach ESG risk, namely: i) treating it as a standalone, principal risk type, ii) including it as a risk within other existing risk types (i.e. a “cross-cutting” risk), or iii) doing both, hence within existing risk types and as a principal risk.<sup>137</sup> As further illustrated in the CFRF report, if climate risk is considered a standalone risk category, the risk appetite includes both a high-level statement and qualitative or quantitative metrics that link back to it.<sup>137</sup> If climate risk is instead considered within other existing risk categories, the risk appetite may not have a specific statement on ESG risks but should have metrics that can be clearly linked back to it.

Most banks that include ESG risks in their RAF fall under the second category, meaning they consider ESG risk as a transversal risk driver. ESG risks are often included under reputational, operational and compliance risk, in particular for governance aspects such as fraud, compliance and corporate governance. Some banks also integrate climate risks under credit risk.

As detailed in *Figure 31*, interviews showed that 46% of banks have not integrated ESG within their RAF; however, the majority plan to do so in the future. On the other hand, 27% and 23% have fully or partially integrated it. For the subset of interviewed banks that stated that they have integrated it, all respondents mentioned having included it as a qualitative statement, while only some have integrated it with quantitative metrics across selected ESG pillars. Climate risk is the most advanced with 38% of banks claiming to have integrated quantitative metrics related to this topic in their RAF at least partially.

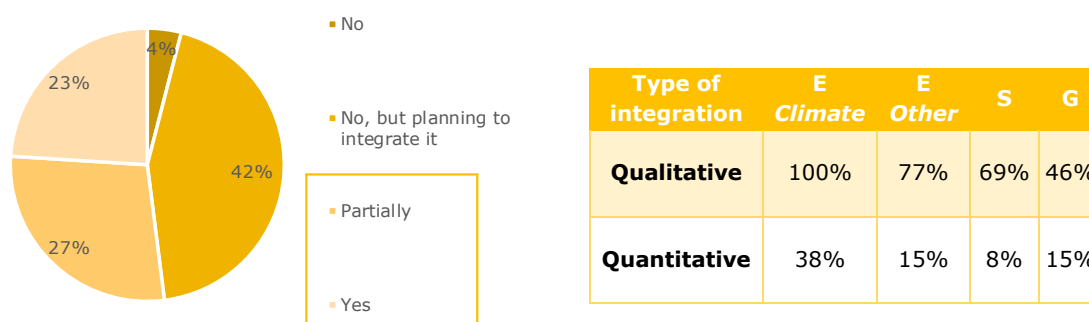
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<sup>136</sup> European Banking Authority (2018) *EBA Final Report - Guidelines on the revised common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing* (EBA/GL/2018/03). Available at:

[https://eba.europa.eu/sites/default/documents/files/documents/10180/2282666/6c2e3962-6b95-4753-a7dc-68070a5ba662/Revised%20Guidelines%20on%20SREP%20\(EBA-GL-2018-03\).pdf](https://eba.europa.eu/sites/default/documents/files/documents/10180/2282666/6c2e3962-6b95-4753-a7dc-68070a5ba662/Revised%20Guidelines%20on%20SREP%20(EBA-GL-2018-03).pdf).

<sup>137</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>.

Figure 31: ESG integration within risk appetite statement / framework<sup>138</sup>



Source: BlackRock FMA analysis

Risk metrics are designed to ensure that portfolios stay within the limits outlined in the RAF and are further enforced in sectoral position statements and policies. Usually, these metrics have an associated set of thresholds, proposed by the business and set by the institution's board, which allow clear monitoring through a Red Amber Green (RAG) status (or similar) and constitute an early warning system which can prompt action as required.<sup>139</sup> ESG-related metrics can either be backward-looking or forward-looking indicators and are usually tailored to the business model and complexity of the bank.<sup>140</sup> For instance, for the purposes of managing concentration in credit risk, institutions may set quantitative and qualitative internal credit risk limits for their aggregate credit risk, as well as portfolios with shared credit risk characteristics, sub-portfolios, and individual counterparties.<sup>140</sup>

An example of quantitative integration, provided by a respondent, is the definition of risk acceptance parameters for exposures to selected sensitive industries, which ensure that concentrations remain within tolerance at a portfolio level. An example of qualitative integration in RAF, illustrated by some respondents, consists of the referencing of sectoral lending and investment policies and forward-looking targets (e.g. exiting coal within a certain time frame).

Many banks argued that the qualitative integration into RAF is often an intermediate step, as more time is needed to solve data-related challenges and develop appropriate quantitative metrics for further integration. Banks that mentioned plans to integrate ESG quantitatively into RAF, in most cases, focus on climate risk for now. *Figure 32* illustrates some of the comments provided reflecting the stage of integration of ESG factors into RAF either qualitatively or quantitatively.

<sup>138</sup> Question: *Is ESG integrated within your Risk Appetite Statement/Framework (RAF). If yes, how (sub-risk type, principal risk, what limits)?* Sample size: 25 (pie chart), 18 (table).

<sup>139</sup> Climate Financial Risk Forum (2020). Climate Finance Risk Forum Guide 2020 – Risk Management Chapter. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>

<sup>140</sup> European Banking Authority (2020). *EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

Figure 32: Illustrative comments on ESG integration into RAF

**Is ESG integrated within your Risk Appetite Statement/Framework (RAF). If yes, how (sub-risk type, principal risk, what limits)?**

*[the RAF] "states that the bank covers E and S risks in specific policies; essentially, it is only a reference to the respective policy"*

*"Risk acceptance parameters are also in place for sensitive industries which have a higher level of inherent environmental, social and governance risks. These parameters ensure that portfolios stay within the prohibitions or requirements outlined"*

*"ESG risk is already integrated into the risk appetite; however, to be further integrated, data is needed"*

#### 4.2.4.2.2 Lending and investment policies, processes and strategies

ESG Risks can affect key aspects of the credit risk management process, including but not limited to: i) lending and investment policies, often referenced in the risk appetite and connected to high-level position statements, ii) client onboarding and transaction due diligence, iii) portfolio monitoring, and iv) credit strategies and portfolio steering.

Table 3 summarises respective percentages of respondents that have integrated ESG within these processes. The majority of banks mentioned having integrated some aspect of ESG risks in their lending policies and applications, with fewer having done so in portfolio monitoring and credit strategies. For example, 69% of respondents claim to have developed environmental lending policies, but less than 38% have defined strategies to steer the portfolio towards desired levels (e.g. through portfolio sell-offs, securitisation strategies).

It should be noted that integration into credit application and due diligence is overall more frequent than integration into credit policies. This may be due to the fact that integration into due diligence may be implemented by adding selected questions or requirements for clients (e.g. not having been involved in any legal disputes or misconduct) and may therefore not translate into a more articulated and formalised credit policy.

Integration of ESG factors in investment processes<sup>141</sup>, which includes the treasury portfolio, capital markets underwriting activity (e.g. green bonds) as well as off-balance sheet activity (e.g. advisory), is less advanced across all of the processes. For instance, the integration of environmental factors in investment policies is observed for 23% of banks; for strategies and portfolio steering, this number is 12%. Moreover, integration into investments is often restricted to certain types of instruments or portfolios (e.g. project finance transactions only under capital markets' products).

<sup>141</sup> Investment processes does not include investments on behalf of clients (i.e. asset management / private banking activity and associated products).

Table 3: Overview of ESG integration in credit portfolio processes<sup>142</sup>

Risk Management Tool / Process	E Climate	E Other	S	G
<b>Credit policies</b>	69%	69%	62%	46%
<b>Credit application and due diligence</b>	81%	69%	77%	54%
<b>Credit portfolio monitoring</b>	50%	31%	35%	27%
<b>Credit strategies and portfolio steering</b>	38%	31%	31%	31%
<b>Investment policies</b>	23%	27%	27%	23%
<b>Investment application and due diligence</b>	23%	27%	31%	27%
<b>Investment portfolio monitoring</b>	12%	8%	12%	12%
<b>Investment strategies and portfolio steering</b>	12%	8%	12%	15%

Source: BlackRock FMA analysis

Interviews showed that many banks have defined high-level E&S risk policies, often referenced within their broader credit policy, that lay-out rules for credit analysis and define cross-sector standards which apply to financing and banking activities (e.g. a requirement for compliance with the United Nations Universal Declaration of Human Rights). These cross-sector standards often lead to the development of lists of 'prohibited activities' that will not be financed irrespective of their size, geography, or lending conditions (e.g. the prohibition of the undertaking of any kind of banking or lending activity related to the production of and/or trade in controversial weapons).

Most banks have also developed sectoral lending policies related to high E&S risk industries (see also section 6.2.5.) which may be applicable to both project financing and client-level financing. These sector-specific policies, which can be very technical, may define mandatory thresholds for determined E&S criteria or conditions and their associated time horizons (e.g. a condition to only finance clients whose reliance on coal is  $\leq 10\%$  and who have a strategy to reduce this percentage to  $\leq 5\%$  by 2025). One of the most common sector policies concerns coal financing, with most analysed banks (i.e. 72%) having developed a policy to restrict financing activity in this space.

In addition to these exclusion criteria, policies may also indicate evaluation criteria to further guide the assessment of the relative ESG profile during the due-diligence process. Figure 33 provides an illustration of these different elements in one sectoral policy.

<sup>142</sup> Question: To what extent and how is ESG integrated within your existing lending and investment policies and processes? Please add a tick where relevant and, if applicable, provide additional details including the relevant E/S/G pillar(s) under consideration. Sample size: 25.

Figure 33: Case study on sector policy on coal fired power generation

Illustrative example of a bank that restricts its financing to coal-fired power plants and clients operating in the sector

### **Exclusion Criteria**

#### *A. Dedicated / Project Financing*

- The Bank will not participate in dedicated financing for the development of new coal-fired power plants or their expansions, regardless of the country.
- For coal-fired power plants already in operation (brownfield), the Bank will not participate in any dedicated refinancing.
- The Bank may finance investments intended for carbon capture on existing facilities in order to facilitate energy transition

#### *B. Clients significantly active in operation of coal-fired power plants*

- The Bank will not develop a relationship with companies that generate more than 25% of their turnover in the thermal coal industry and have not adopted a transition strategy consistent with the objectives of the Paris Agreement
- The Bank will not enter into relationships with companies increasing or planning to increase their thermal coal capacities
- Companies that have no coherent climate-friendly transition path and fail to provide a coal phasing out plan by 2021 will be placed in a watchlist portfolio, which will limit the financial services made available to them to the financing of, and investment in, energy transition
- Clients generating more than 50% of their turnover from coal (mining, power plants, infrastructure) are placed in the watchlist portfolio, with the exception of companies exclusively involved in thermal coal extraction, for which no new financial service is possible.

### **Methodology and Evaluation Criteria**

- The transition path will be assessed starting in 2021 on the basis of the transition scoring developed by the Group on all its counterparties, including the existence of a coal phasing out plan as a decisive factor
- The transition path will have to be materialised at least by the existence of a diversification strategy, demonstration of the desire to exit coal industry, or a commitment to reduce the absolute share of coal in the company's activities.

Source: Public reports from banks and BlackRock FMA analysis

As mentioned by many respondents, such policies are usually regularly updated to make sure they reflect changes in risk and business landscape, as well as to respond to external pressures from other stakeholders. For instance, work from civil society organisations such as ShareAction seems to have fostered discussions on the current adequacy of banks' sectoral policies; as found in their banking report "policies in relation to high-carbon sectors are currently still insufficient to ensure alignment with the goals of the Paris

Agreement”.<sup>143</sup> Specifically, for example, coal policies are found to prohibit coal-related project finance, but exclusions of companies reliant on coal are still limited. Similarly, an assessment from WWF found that, despite some good practices, no major global bank had robust enough policies in place to safeguard World Heritage sites.<sup>144</sup> In some cases, civil society engagement with banks on this front led to banks tightening or publishing dedicated policies.

Depending on the specifics of banks’ above-described policies, clients often have to undergo an ESG or Environmental Social Risk (ESR) assessment processes or due diligence for banks to grant and renew credit. A report by the Organisation for Economic Co-operation and Development (OECD) states that due diligence is “preventive” and can help banks avert or address adverse impacts related to human and labour rights, the environment, and corruption associated with their clients, as well as to avoid financial and reputational risks.<sup>145</sup> This process usually applies to wholesale and corporate banking clients only, and some banks may apply it to all transactions, while others apply it to limited sectors or product types. As derived from *Table 3*, on average<sup>146</sup> 79% of banks mentioned having integrated E&S factors in their due diligence, while this percentage is lower with respect to the G pillar (i.e. 56%).

Typically, due diligence is conducted by banks in two instances: i) extending / reviewing credit to a new client or ii) extending credit to an existing client with ongoing or pre-existing relationship.<sup>145</sup> In the first case, there needs to be a client onboarding process (KyC) during which the bank evaluates the counterparty’s profile and assesses if there are any discrepancies with internal policies. As mentioned by some respondents, ESG factors can be directly integrated in the KyC process, where relevant elements related to the G pillar are already captured or assessed through a parallel process. Additionally, transaction due diligence is conducted to evaluate financial and non-financial data and estimate the profile of the transaction. Based on this assessment, a rating is typically produced and associated with specific lending terms.<sup>145</sup> Similarly to KyC, ESG factors can either be integrated within this assessment or give rise to a dedicated E&S risk assessment process, as illustrated in *Figure 34*.

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<sup>143</sup> ShareAction (2020). *Banking on a Low-Carbon Future II - A ranking of the 20 largest European banks’ responses to climate change*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>144</sup> WWF (n.d.). *Convincing major banks to save our heritage*. Available at: <https://www.wwf.org.uk/success-stories/convincing-major-banks-save-our-heritage>.

<sup>145</sup> OECD (2019). *Due Diligence for Responsible Corporate Lending and Securities Underwriting: Key considerations for banks implementing the OECD Guidelines for Multinational Enterprises*. Available at: <http://mneguidelines.oecd.org/Due-Diligence-for-Responsible-Corporate-Lending-and-Securities-Underwriting.pdf>.

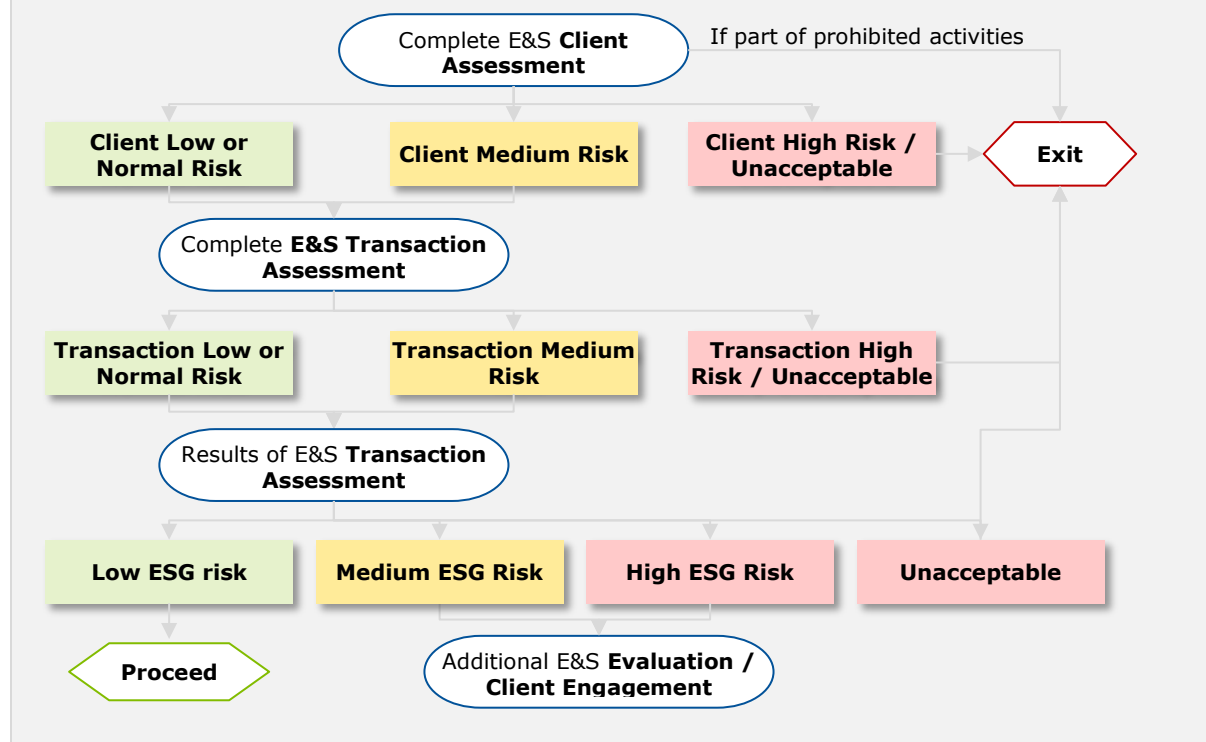
<sup>146</sup> Average calculated across the E(climate), E(other) and S pillars.



Figure 34: Case study on ESR transaction due diligence

Illustrative example of a bank that implements E&S transaction due diligence for wholesale clients.

The first step is completing the client assessment and if this yields low or medium risk, the E&S transaction assessment is performed. Following the results of the E&S transaction assessment, an additional evaluation by the ESR team or client engagement dialogue is activated in cases of medium or high E&S risk



Source: Public reports from banks and BlackRock FMA analysis

Based on the results of the transaction assessment, decisions on whether to proceed with the transaction (or not) are made. As mentioned by some respondents, if medium or high ESG-related risks are identified, additional evaluations are conducted, and a second due-diligence screen may be applied to all transactions (or to selected transactions falling above specific thresholds). This enhanced due diligence may often involve the client, and decision-making might then involve specialised units within the bank (e.g. the Environmental and Social Risk unit or CSR unit).

Banks often mentioned that, when conducting enhanced due diligence, they rely on external frameworks to assess certain types of transactions. For instance, the Equator Principles, which are based on International Finance Corporation (IFC)'s Performance Standards<sup>147</sup>, are used by 54% of analysed banks as a framework to assess selected financial products<sup>148</sup> related to project finance transactions. Project finance transactions also appear to be the type of transaction where due diligence can be conducted at the highest-level of granularity, as the use of proceeds is well defined. For corporate general-

<sup>147</sup> Equator Principles (2020). *The Equator Principles – July 2020*. Available at: <https://equator-principles.com/wp-content/uploads/2020/05/The-Equator-Principles-July-2020-v2.pdf>.

<sup>148</sup> Equator principles apply to selected number of transactions with relevant thresholds and criteria for application; these include 1) Project Finance Advisory Services, 2) Project Finance, 3) Project-Related Corporate Loans, and 4) Bridge Loans and 5) Project-Related Refinance, and Project-Related Acquisition Finance.

purpose loans, this is often not the case, in particular for non-listed counterparties, who, as mentioned by several respondents, often lack data and require more time to gather needed information as part of the due diligence.

With respect to credit portfolio monitoring, responses highlighted that ESG considerations are less integrated in these steps, and mostly focus on climate risk. As observed among some analysed banks, reviews are usually performed with a certain frequency, which may also be related to the risk profile of the counterparty or transactions. For instance, Low-Risk clients may be re-assessed from an ESG risk perspective every three to five years, whereas high-risk clients may be re-assessed annually.

As also pointed out in an OECD paper, while some banks require an update on ESG issues for all clients, other banks include such criteria only for select clients (prioritised if reputational issues or if allegations of adverse impacts have arisen), or for specific sectors. Beyond annual credit reviews, the monitoring of clients on ESG issues appeared limited when not required by specific criteria integrated in covenants or risk prioritisation criteria by sector or geography as outlined in a bank's policy.<sup>149</sup>

When looking at credit portfolio strategies, ESG integration appears even less advanced, with only few banks mentioning credit strategies in place to steer their portfolio towards lower ESG risk exposure. A small number of banks mentioned Paris Alignment tools to steer portfolios towards lower levels of emissions (this is discussed in more detail in section 6.2.4).

Often, banks think of portfolio strategies from a strategic and product driven point of view, rather than as a risk mitigation technique. For instance, banks have stopped providing certain products (e.g. derivatives related to coal-based trading, physical inventory management transactions in coal and crude oil) or prioritised other types of assets (e.g. mortgage and Buy-To-Let transactions to properties with high-energy efficiency ratings) as part of their strategy.<sup>150</sup> This strategic choice, however, has indirectly resulted in a risk mitigation strategy.

Figure 35 provides a selection of comments from respondents with respect to the various phases of credit granting and monitoring, illustrating various considerations that come into play along the process.

Figure 35: Illustrative comments on ESG integration into credit processes

**To what extent and how is ESG integrated within your existing lending and investment policies and processes?**

*"All customers whose activities fall within the sectors covered by the E&S risk policy must be assessed for E&S risk management and compliance with the policies as part of the annual review and credit assessment"*

*"KYC, AML, anti-corruption, anti-bribery policies already provide basis for managing S and G factors. E factors are mostly dependent on the company and transaction profile"*

<sup>149</sup> OECD (2020). *OECD Business and Finance Outlook*. Available at: <http://www.oecd.org/finance/Sustainable-and-resilient-finance.htm>.

<sup>150</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>.

*"Where an obligor is rated as medium or high, the details are referred to the Environmental Risk Management team, a dedicated team in the Group Credit Risk Management function, who conduct enhanced due diligence"*

*"We perform an ESG risk screening as part of KYC onboarding and monitoring process resulting in an ESG score that is integrated in all product offering approval process"*

*"All the Project Finance deals have action plans that are monitored during the term of the deal"*

*[Have] "integrated environmental and climate change risks into Mandate and Scale annual credit portfolio reviews for different sectors"*

#### 4.2.4.2.3 Risk parameters and models

An important precondition for the integration of ESG risk in risk management processes is the quantitative integration of ESG risks in risk parameters, which then inform, for example, credit ratings and capital requirements. As highlighted by respondents, however, ESG considerations are so far typically not integrated in models used for the calculation of capital requirements due to i) the lack of regulatory guidance, ii) limited evidence of ESG risk materiality and impact, as well as iii) concerns related to quantification methodologies under different time horizons (as further detailed in section 4.2.4.2.4).

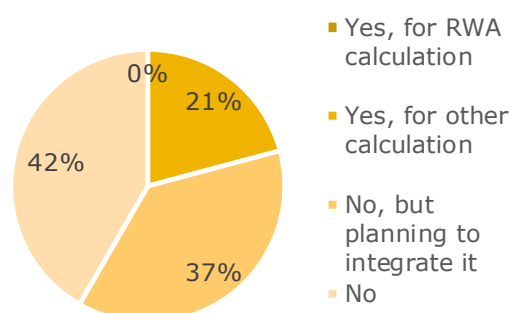
Hence, only a very limited number of banks have directly integrated ESG factors within internal risk parameters and models. As illustrated in *Figure 36*, 21% of respondents mentioned that they have integrated ESG risks, while the remaining banks are somewhat evenly split across those who are planning to integrate it in the near future, and those who have not yet decided. Those respondents who stated that they have integrated ESG factors into models mentioned having done so in models with an impact on credit ratings (and ultimately on pricing); however, this was often through some form of qualitative integration. The findings are in line with results from the GARP survey on climate risk management, according to which most financial institutions think that climate risk has either been partially priced or totally omitted from market pricing.<sup>151</sup>

With respect to credit models, and specifically for PD and LGD assessment, a two-step approach is seen as more practical in the current state. This firstly requires a traditional model-driven credit rating PD/LGD assessment, and secondly a macro-climate overlay by expert judgement "notching and de-notching" ratings.<sup>152</sup> This is in line with some respondents' plans to apply a qualitative or quantitative overlay (e.g. an ESG score) to their rating models. On the other hand, other banks mentioned having integrated ESG considerations indirectly through input factors into existing PD models for corporate lending, for instance in the qualitative obligor assessment (e.g. management quality is a G factor).

<sup>151</sup> GARP (2020). *Second Annual Global Survey of Climate Risk Management at Financial Firms*. Available at: [https://climate.garp.org/wp-content/uploads/2020/05/GRI\\_ClimateSurvey\\_051320.pdf](https://climate.garp.org/wp-content/uploads/2020/05/GRI_ClimateSurvey_051320.pdf).

<sup>152</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>.

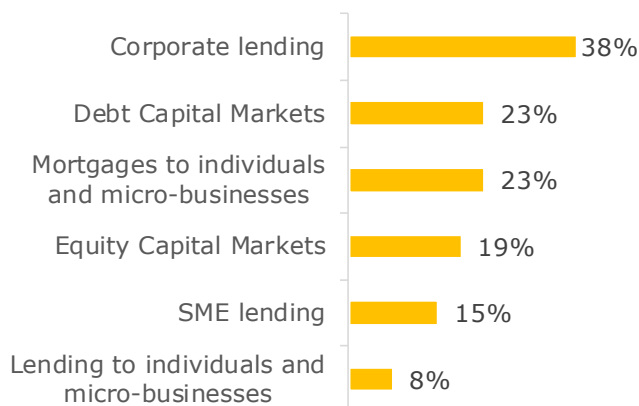
Figure 36: Direct incorporation of ESG risks into existing parameters/models<sup>153</sup>



Source: BlackRock FMA analysis

Correspondingly, ESG risk considerations do not yet impact risk-driven pricing considerations in a structured way among interviewed banks. This may be due to the fact that, on average, the majority of interviewed banks mentioned that they have not collected any consolidated evidence as to how different asset classes are affected by ESG risk (e.g. in terms of solvency of the counterparty or asset valuation)<sup>154</sup>. As illustrated in *Figure 37*, corporate lending is the segment on which most insights have been collected, with 38% of banks stating that they have collected evidence on the impact of ESG risks. Debt capital markets and mortgages to individuals or microbusinesses follow, with 23% banks having collected evidence on the ESG riskiness of these asset classes. It is worth specifying that most evidence collected is qualitative in nature.

Figure 37: Evidence collected on ESG risks impact on asset classes<sup>155</sup>



Source: BlackRock FMA analysis

This finding is in line with the stocktake conducted by the NGFS on banking institutions, which found that most banks have not established any strong conclusions on a risk differential between green and brown assets.<sup>156</sup> Lack of such evidence was mentioned by

<sup>153</sup> Question: With regards to risk models (e.g. credit risk), do you incorporate ESG risks directly into any existing parameters/models? Sample size: 24.

<sup>154</sup> Question: Do you have any evidences on how different asset classes are affected by ESG risk (e.g. in terms of solvency of the counterparty or asset valuation)? Average calculated based on evidences collected across 5 asset classes, namely: Corporate lending, SME lending, Lending to individuals and micro-businesses (mortgages), Lending to individuals and micro-businesses, Equity Capital Markets, Debt Capital Markets.

<sup>155</sup> Question: Do you have any evidences on how different asset classes are affected by ESG risk (e.g. in terms of solvency of the counterparty or asset valuation)? Sample size: 25.

<sup>156</sup> Network for Greening the Financial System (2020). A Status Report on Financial Institutions' Experiences from working with green, non-green and brown financial assets and a potential risk differential. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_status\\_report.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf).

respondents as inhibiting the integration of ESG considerations into pricing, as well as their integration into risk parameters.

Besides this risk-based approach, other banks mentioned having their pricing impacted by ESG factors as a tool to foster positive behaviour, for instance, through products such as ESG-linked loans (as further described in section 6.2.4.2).

Figure 38: Illustrative comments on ESG integration into parameters and models

**'With regards to risk models (e.g. credit risk), do you incorporate ESG risks directly into any existing parameters/models?'**

*"As our capabilities and understanding of the risk develops, we intend to factor these into pricing to accurately reflect the cost of risk"*

*"The integration of ESG risks has an influence on pricing in some cases, when the rating is impacted. In other cases, the pricing can be used by the bank to provide incentives to the client (e.g. Sustainability Link Loans)"*

*"ESG considerations are incorporated in the qualitative assessment of the obligors. The final outcome of the credit rating systems is a combination (based on an algorithm) of quantitative and qualitative data"*

*"We are implicitly covering ESG risks in our internal rating scorecards (via parameters such as "Special risks" and "Industry outlook"), and thereby, indirectly impacting risk metrics"*

*"Rating can from time to time be adjusted downward according to ESG criteria"*

*"Once a year, these [climate scores] are used as an overlay to credit metrics based on expert judgment" [...] "What we achieve is to make some differentiation but not quantification"*

#### 4.2.4.2.4 Stress testing, ICAAP and ILAAP

The EBA, the ECB and the PRA (as examples), have started to define expectations on the integration of climate-related risks into stress testing frameworks and its inclusion in the ICAAP (see section 5.2.4.2). Consequently, institutions have started to explore forward-looking approaches such as scenario analysis and stress testing, seeking to evaluate which methods and metrics are the most suitable for them, considering their strategy and overall approach to ESG risks.<sup>157</sup>

As illustrated in *Figure 39*, climate-related risk is the pillar for which integration into stress testing is most advanced, with banks using scenario analysis to quantify the impacts from transition or physical risk in their portfolio, as previously described in section 4.2.4.1. More specifically, all interviewed G-SIBs mentioned having run, or planning to run in the near term, a climate risk stress test, unlike non-G-SIBs, for which some have no current plans.

However, not many banks conduct these exercises at group-wide or total balance sheet level; rather, these are often focused on specific carbon-intensive sectors. With respect to

<sup>157</sup> EBA (2020). *EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

the other S and G pillars, no clear examples for stress testing were provided, besides one bank that mentioned having run a stress test for COVID-related scenarios, which was considered to be related to the S pillar.

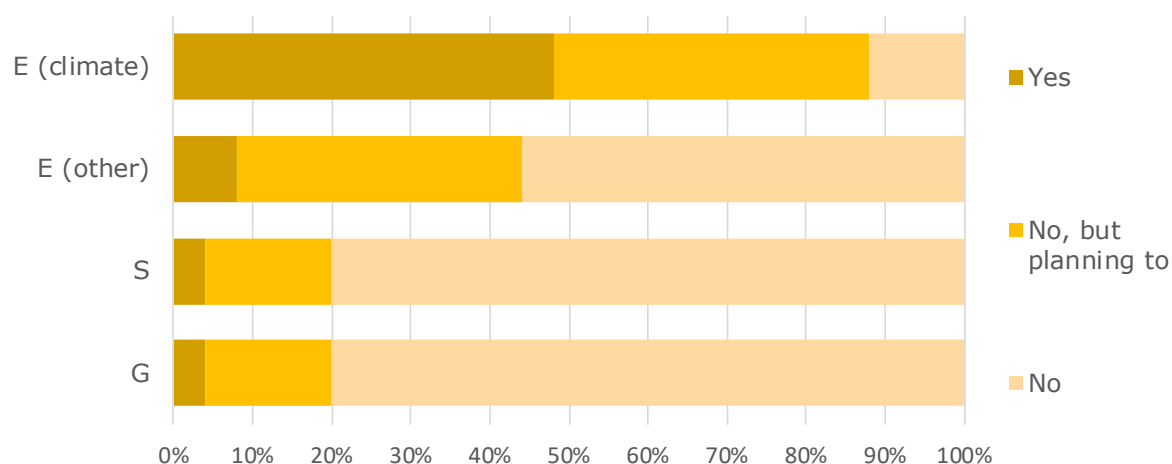
For those banks which stated they were not planning to integrate climate-related risks into these exercises, most mentioned they have not done so as climate-related risks were not found to significantly impact financial planning in the short- to medium-term time horizon (e.g. up to 5 years).

An issue raised by civil society organisations and data providers in this context, is related to the reference scenarios used in the assessment. As illustrated by respondents, reference scenarios vary among banks, and some may develop in-house assumptions that are not publicly disclosed. Hence, according to respondents, supervisors should provide reference scenarios (e.g. 3° scenario) including guidance on policy changes expected to be considered. This would foster standardisation of stress testing and scenario analysis exercises and allow for greater comparability of results.

As further argued by civil society respondents, whilst scenarios should be provided, a degree of freedom in the modelling approach should be granted to banks, rather than opting for full standardisation of scenario analysis approaches. This would allow for banks to tailor the exercises to their loan-books, and it would also provide an incentive to improve methodologies. However, banks should provide full transparency on their modelling methodologies and assumptions.

Overall, respondents within certain jurisdictions, namely those subject to regulatory activity from EBA, Autorité de Contrôle Prudentiel et de Résolution (ACPR) and Bank of England (BoE), mentioned plans to develop such capabilities in the future and to participate in ongoing exploratory pilots on climate scenarios.

**Figure 39: Stress testing and scenario analysis performed on ESG risks<sup>158</sup>**

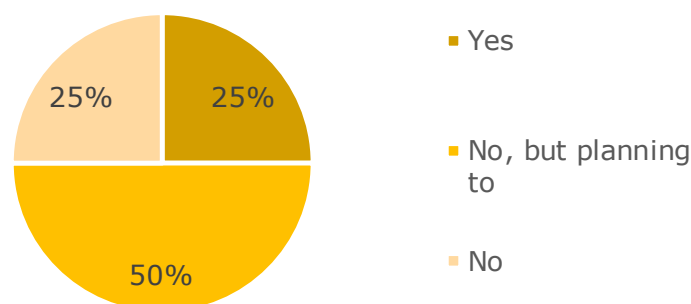


Source: BlackRock FMA analysis

With respect to ICAAP and ILAAP, the majority of interviewed banks (75%), have not yet integrated ESG risks within these processes (see Figure 40). Those who have integrated it thus far, mentioned having done so within ICAAP only and mostly from a top-down sector-based perspective, rather than bottom-up counterparty level analysis.

<sup>158</sup> Question: Do you perform any scenario analysis / stress testing on ESG risks? Sample size: 25.

Figure 40: ESG risk integration into ICAAP, ILAAP and capital planning<sup>159</sup>



Source: BlackRock FMA analysis

For banks that covered ESG risks in their ICAAP, many mentioned having not found them to be material. This is in line with the ECB's report on banks' ICAAP practices, which found that 78% of banks had either not integrated climate-related risks in their ICAAP or had done so, but found them to be non-material.<sup>160</sup> As further illustrated in the report, the criteria used for the materiality assessment are not well elaborated and are mostly of a qualitative nature. Hence, no additional capital requirements were found to be set aside.

Considerations raised by interviewed banks with respect to the challenges faced in the integration of ESG risk into ICAAP (see Figure 41) include the difference between the time horizon on which this exercise is based (i.e. often three years for the ICAAP), while climate-related risks are often assumed to materialise over a much longer time horizon. For instance, the PRA found that financial risks from climate change have a tendency to be beyond banks' typical planning horizons, which were found to be averaged at 4 years in the UK banking sector, hence, creating a mismatch between the horizon considered and the one needed for risks to be fully realised.<sup>161</sup>

Figure 41: Illustrative comments on ESG integration into ICAAP, ILAAP and Stress Testing

**'Are ESG risks covered in your in ICAAP, ILAAP and capital planning?'**

*"If we talk about ESG risks, these have a time horizon of 10-15 years. But the ICAAP framework is developed on a one-year time horizon, so ESG doesn't really fit in there"*

*"In the context of integrating ESG factors further into ICAAP/ILAAP, the problem of the long-time horizon of ESG risks could be solved by scenario-analysis"*

As raised by a civil society respondent, and mentioned in section 4.2.4.1, some climate risks can also have an impact in the short term, as policy changes can materialise much earlier. Hence, they argue that differences in time horizons should not be used as a deterrent for the integration of these risks into regulatory processes.

<sup>159</sup> Question: Are ESG risks covered in your in ICAAP, ILAAP and capital planning? Sample size: 24.

<sup>160</sup> European Central Bank (2020). ECB report on banks' ICAAP practices. Available at: <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.reportbanksicaappactices202007~fc93bf05d9.en.pdf>.

<sup>161</sup> Prudential Regulation Authority (2018). Transition in thinking: The impact of climate change on the UK banking sector. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/report/transition-in-thinking-the-impact-of-climate-change-on-the-uk-banking-sector.pdf?la=en&hash=A0C99529978C94AC8E1C6B4CE1EECD8C05CBF40D>.



The short-term horizon of capital requirements was also presented as a key issue by civil society respondents, many of whom call for changes in regulatory frameworks to extend this. It is worth noting that, even though few banks adopt long-term time horizons in their ICAAP, this does not necessarily have implications for capital requirements and is instead used for portfolio steering.

## 4.2.5 ESG risk reporting & disclosure

### 4.2.5.1 Reporting and disclosure type and audience

In accordance with regulation, banks are expected to establish regular and transparent reporting mechanisms in order to ensure timely, accurate, concise, understandable and meaningful reporting, which enables the sharing of relevant information on the identification, assessment, monitoring and management of risks.<sup>162</sup> Reporting infrastructures can be used for internal monitoring purposes, to inform management and the board about risks, and to aggregate information for external disclosures; hence, they play a key role in reducing information asymmetry.<sup>163</sup> In fact, and as referenced in a paper by the IIF, recent years have seen increased stakeholder demand for more consistent, granular, and comprehensive disclosure of information relevant to ESG factors.<sup>164</sup> Calls for improved disclosure of ESG risks have been particularly strong from civil society. Change Finance, a civil society network mobilised by Finance Watch, has publicly stated that “we need to change the behaviour of our corporations, including financial firms. This starts with measuring and disclosing the impacts that businesses have on the planet”.<sup>165</sup>

As highlighted in *Figure 42*, the majority of interviewed banks have not yet integrated ESG risks within their internal risk reporting framework. A significant number (~50%) plan to integrate climate risk in the near future; however, this may not necessarily be done as bank-wide risk reporting. Overall, G-SIBs appear more advanced than non-GIBs across all ESG pillars; in particular, all G-SIBs mentioned that they have already integrated, or have plans to integrate, climate risk in their internal risk reporting, whereas the same does not apply to non-G-SIBs.

Interviewed banks with ESG risk reporting in place stated that it is often conducted at sectoral level in order to monitor exposure to sensitive or high-risk (e.g. carbon intensive) sectors. As an example, one respondent described how industry reviews are carried out on a yearly basis to assess portfolio exposure to ESG risks. This analysis results in comprehensive risk reports, which are then shared internally within the bank. Results from such exercises can be integrated in risk reporting and flagged or discussed in committees when results are deemed critical or falling outside the bank’s risk appetite (specific metrics mentioned by banks are detailed in the next sub-section).

<sup>162</sup> See, for example: European Banking Authority (2017). *Guidelines on internal governance* (EBA/GL/2017/11). Available at:

[https://eba.europa.eu/sites/default/documents/files/documents/10180/1972987/eb859955-614a-4afb-bdcd-aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20\(EBA-GL-2017-11\).pdf](https://eba.europa.eu/sites/default/documents/files/documents/10180/1972987/eb859955-614a-4afb-bdcd-aaa664994889/Final%20Guidelines%20on%20Internal%20Governance%20(EBA-GL-2017-11).pdf)

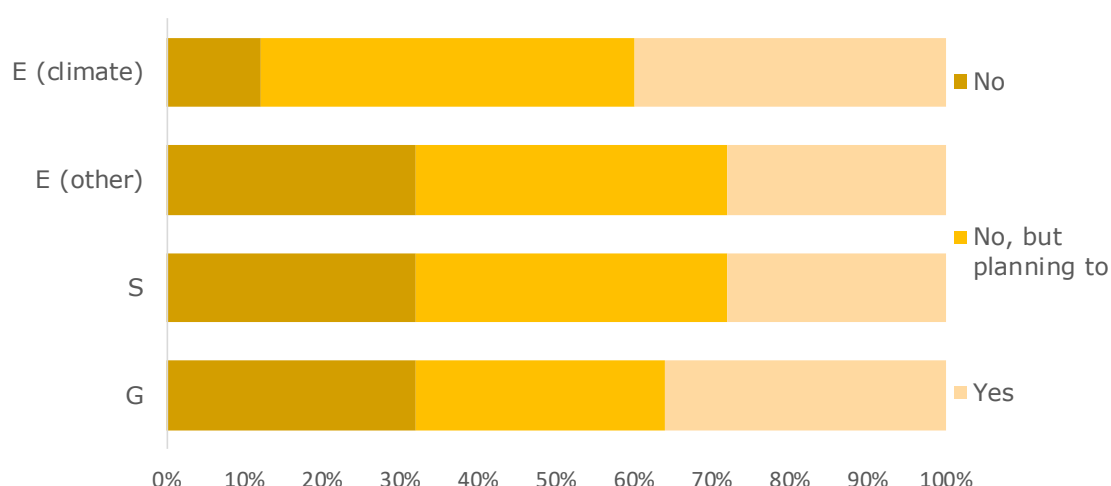
<sup>163</sup> In this section Study the term reporting refers mainly to internal and regulatory reporting, whereas disclosure refers to all other ESG-related publications (e.g. ESG / CSR / Sustainability Reports, etc)

<sup>164</sup> See, for example: IIF (2020). *Building a Global ESG Disclosure Framework: a Path Forward*. Available at: [https://www.iif.com/Portals/0/Files/content/Regulatory/IIF%20Building%20a%20Global%20ESG%20Disclosure%20Framework-a%20Path%20Forward%20\(June%202020\)%20final.pdf](https://www.iif.com/Portals/0/Files/content/Regulatory/IIF%20Building%20a%20Global%20ESG%20Disclosure%20Framework-a%20Path%20Forward%20(June%202020)%20final.pdf)

<sup>165</sup> Change Finance (n.d.). *Saving our planet*. Available at: <https://www.changefinance.org/it/solution/saving-our-planet-2/>



Figure 42: ESG risk integration within internal risk reporting<sup>166</sup>



Source: BlackRock FMA analysis

With respect to public disclosures, ESG risk related information is usually included within banks' broader ESG disclosure practices, which can come in the form of a variety of reports named in different ways, including: 'Integrated', 'CSR', 'Sustainability', 'Non-Financial', or 'ESG' Reports<sup>167</sup>. The majority of analysed banks mentioned ESG risk or climate-related risks within at least one of the above-mentioned yearly disclosures, while a smaller subset of banks also publishes dedicated climate-risk focused reporting (e.g. dedicated TCFD reports). The case study in Figure 43 provides an overview of the different types and formats of disclosure of a bank. It should be noted that not many banks provide such an extensive coverage of their ESG-risk related activities.

Figure 43: Case study on ESG risk disclosure formats and types

A European bank communicates on its ESG risk integration strategy and current status through different disclosure formats, which disclose information on topic with varying levels of detail.

Dedicated Climate Risk Report following the TCFD and NFRD guidelines

- Illustration of climate risk relevance for strategy (based on materiality)
- Explanation on the relevance of scenario analysis for portfolio allocation and assessment

Exercise	Scenario Used	Horizon
<b>Coal reduction target</b>	International Energy Agency (IEA) 2 Degrees Celsius and IEA 450 scenarios	Up to 2020
<b>Transition risks (credit)</b>	IEA Sustainable Development Scenario (SDS) scenario	Up to 2040/2050
<b>Portfolio alignment (multiple sectors)</b>	IEA SDS scenario	
<b>Shipping alignment</b>	International Maritime Organisation (IMO) target	

- Description of Governance arrangement including board of directors, general management, business and service unit and frameworks

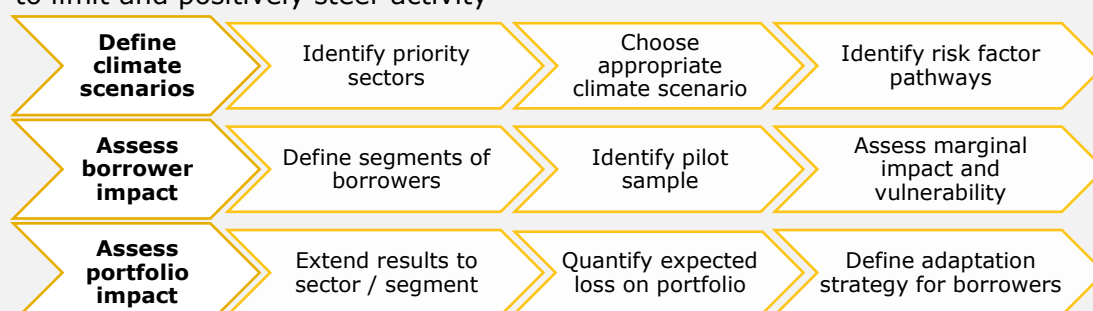
<sup>166</sup> Question: *Is ESG risk integrated within your internal risk reporting?* Please note percentage values might not add up to 100% due to rounding or incomplete answers. Sample size: 24.

<sup>167</sup> The naming of these reports can change among institutions, and their format and content is also shaped by national legislation.

- Detail on training resources and remuneration to foster ESG objectives and mitigate risks
- Explanation of approach to managing financial climate risk detailing: risk terminology, integration of climate risk into standard risk assessment and normative frameworks, process for identifying and managing risks
- High-level illustration of methodology to develop internal metrics to assess exposure to ESG risk (in particular transition risk)
- Different metrics to quantify exposure to climate risks, including:
  - o Distribution of exposures across sensitive sectors to transition risks per year
  - o Financed emissions expressed in metric tons of carbon dioxide equivalent (MT CO<sub>2</sub>e) per year
  - o Coal power share within financed energy mix portfolio (current and target)
  - o Outstanding related credit exposure to coal mining (current and target)

#### Annual Financial Report:

- Mention of ESG risks within market outlook
- High-level description of risk measurement approach for climate transition risk within sensitive sector portfolio
- Description of voluntary commitments and frameworks used with relevance for ESG Risks (e.g. Equator principles)
- Presentation of ESG risk achievements (e.g. establishment of responsibilities within first, second and third line of defence)
- Description of approach to managing climate impacts and portfolio alignment tools to limit and positively steer activity



- Detail on engagement model with clients to drive positive impact through financing solutions
- Detail on ESG-risk relevant metrics and targets (e.g. managing transition risk, credit portfolio alignment, financing targets)

#### Appendix of non-financial risk factors and emerging risks

- Document summarising in a table all ESG-risk factors, mitigation measures and indicators (however with strong focus on operational risks)

#### Integrated Report:

- Objectives for ESG risk integration within banking activity discussed alongside other group-wide strategic targets
- High-level description of the relevance of ESG risks and its identification, management and mitigation approaches

#### Consolidated excel of key ESG figures

- Grouping of all relevant KPIs and metrics monitored for ESG purposes, including relevant ones related to ESG risk management

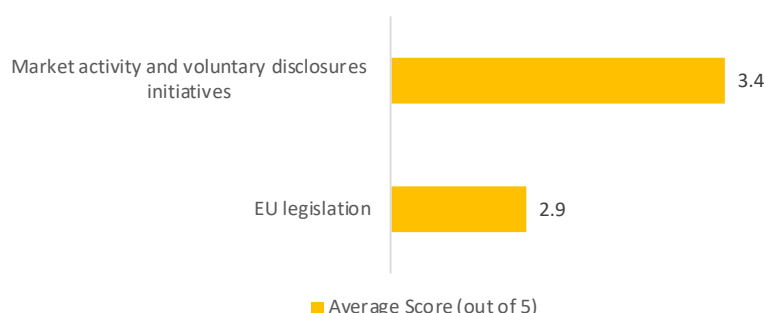
Source: Public Reports from banks and BlackRock FMA analysis

At this point in time, ESG risk-related information is less integrated within regulatory reporting. A review of banks' publications showed that only a small number of banks (10%) acknowledge the relevance of ESG risks within their Pillar 3 Reports, and this is mostly done at a high-level as a generic statement. This in line with findings from an EBA staff paper, according to which only 6% of banks acknowledge ESG risk in their pillar 3 reports.<sup>168</sup> However, this may change following the amended Capital Requirements Regulation (CRR) which includes requirements for large institutions to disclose information on ESG risks, in particular transition and physical risks from climate change.<sup>169</sup>

Nonetheless, interviews with banks showed that market activity and voluntary initiatives have so far exerted a stronger influence than the legislative context on ESG risk focused disclosures and practices (see *Figure 44*). It is worth noting that the difference in score provided for each of these elements is largely driven by G-SIBs, as they attribute a stronger focus to market activity compared to non-G-SIBs.

One of the most commonly mentioned initiatives by respondents was TCFD, due to its focus on risk management compared to other initiatives such as the Principles for Responsible Banking<sup>170</sup>, which are more strategic in nature. Other initiatives mentioned by respondents include the Carbon Disclosure Project<sup>171</sup> (CDP) and the Platform for Carbon Accounting Financials<sup>172</sup> (PCAF) – both of which support the development of standards for measuring and reporting climate-relevant information –, as well as the SASB Materiality Framework providing sector-specific guidance for a broad range of ESG topics.

**Figure 44: Influence of legislative and market context on ESG risk reporting<sup>173</sup>**



Source: BlackRock FMA analysis

<sup>168</sup> European Banking Authority (2020). *Sustainable Finance: Market Practices (Staff Paper Series)*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Sustainable%20finance%20Market%20practices.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Sustainable%20finance%20Market%20practices.pdf).

<sup>169</sup> Regulation (EU) 2019/876 Of The European Parliament And Of The Council  
REGULATION (EU) 2019/876 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2019 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012. OJ L 150/1, 7.6.2019, p. 1–225 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0876>.

<sup>170</sup> UNEP FI (n.d.) *Principles of Responsible Banking*. Available at: <https://www.unepfi.org/banking/bankingprinciples/>.

<sup>171</sup> CDP (n.d.). What we do. Available at: <https://www.cdp.net/en/info/about-us/what-we-do>.

<sup>172</sup> Platform for Carbon Accounting Financials (n.d.). *Enabling financial institutions to assess and disclose greenhouse gas emissions of loans and investments*. <https://carbonaccountingfinancials.com/>.

<sup>173</sup> Question: i) To what extent has EU legislation (e.g. Non-Financial Reporting Directive) influenced your bank's current ESG risk practices and reporting? and ii) To what extent has market activity and voluntary disclosures initiatives (e.g. TCFD) influenced your bank's current ESG risk practices and reporting? Please tick the relevant score, with 0 being not influenced and 5 being strongly influenced. Sample size: 24.

#### 4.2.5.2 Information type, granularity and transparency

Comparability of banks' disclosures is particularly important for users of information. However, ESG risk disclosure observed among banks can vary significantly in terms of depth and scope. Regulatory and legislative requirements and guidelines are also key drivers for disclosure standardisation; in particular, ESG practices have been widely influenced by the Non-Financial Reporting Directive (NFRD) (as further illustrated in section 6.2.4.3). For instance, the supplement on reporting climate-related information (2019/C 209/01)<sup>174</sup> provided banks with detailed guidance on how to report with respect to climate risk. The announcement of the European Financial Reporting Advisory Group (EFRAG) mandate to undertake preparatory work for the elaboration of possible EU non-financial reporting standards is also expected to contribute to these efforts.<sup>175</sup>

Moreover, the NFRD provided clarification on how to align disclosure practices to TCFD reporting standards, which are one of the most common frameworks referenced by banks when discussing ESG risk disclosure (specific to climate risk). In fact, as further illustrated in the remainder of the section, disclosure is more developed with respect to climate risk compared to the other ESG themes and pillars; these are, however, widely covered as part of broader disclosure practices focused on strategy and banking activity.

To coordinate and align reporting practices, five framework and standard setting entities (namely CDP, Climate Disclosure Standards Board – CDSB –, GRI, International Integrated Reporting Council – IIRC– and SASB) have recently issued a shared statement of intent to work jointly with the World Economic Forum International Business Council (IBC) and other parties, towards defining a corporate reporting system that integrates sustainability reporting with mainstream financial disclosures.<sup>176</sup>

Most banks have one or several reports containing ESG information, but so far there are no consistent standards. Guidance has been developed in the climate space with multiple standards emerging (see section 6.2.4.3). This section elaborates on the TCFD (illustrated in *Figure 45*) as it was the standard most frequently referred to by participants, and is referred to in the NFRD.

Initiatives such as the TCFD have promoted standardisation of climate-related risk disclosure by defining key focus areas and minimum disclosure requirements. As highlighted by a respondent, initiatives such as the TCFD have greatly supported and influenced banks' reporting practices, providing a more consistent, comparable, and understandable format for external stakeholders. As also found in the TCFD Status Report, following the launch of its voluntary disclosure initiative, there has been some level of improvement in disclosures between 2016 and 2018, with the banking industry providing, on average, the most comprehensive disclosures across pillars.<sup>177</sup>

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<sup>174</sup> Communication from the Commission — Guidelines on non-financial reporting: Supplement on reporting climate-related information. OJ C 209/1, 20.6.2019, p. 1–29 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019XC0620%2801%29>

<sup>175</sup> EFRAG (2020). *EFRAG mandated to provide recommendations on possible European non-financial reporting standards*. Available at: <https://www.efrag.org/News/Public-243/EFrag-mandated-to-provide-recommendations-on-possible-European-Non-Financial-Reporting-Standards>

<sup>176</sup> CDP (2020). *Statement of Intent to Work Together Towards Comprehensive Corporate Reporting - Summary of alignment discussions among leading sustainability and integrated reporting organisations CDP, CDSB, GRI, IIRC and SASB*. Available at: <https://www.cdp.net/en/articles/media/comprehensive-corporate-reporting>

<sup>177</sup> FSB TCFD (2019). *Status Report (June 2019)*. Available at: <https://www.fsb-tcf.org/publications/tcf-2019-status-report/>

Figure 45: TCFD disclosure recommendations<sup>178</sup>

Governance	Strategy	Risk Management	Metrics & Targets
Disclose the organization's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Disclose how the organization identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.
Describe the board's oversight of climate-related risks and opportunities.	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Describe the organization's processes for identifying and assessing climate-related risks.	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.
Describe management's role in assessing and managing climate-related risks and opportunities.	Describe the impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.	Describe the organization's processes for managing climate-related risks	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets

Source: TCFD (2018)

As further iterated in ShareAction's banking survey, requirement for TCFD public disclosure "has prompted work streams generating material improvements in climate-related risk management"; however, further improvements need to be made as "no bank has so far fully implemented all of the recommendations".<sup>179</sup> On the other hand, a respondent representing a civil society organisation argued that the speed with which TCFD has been adopted across banks is not sufficient, given that three years have already passed since its launch.

Analysis of ESG risk reporting among banks highlighted a substantial variety in terms of information type (i.e. metrics disclosed, scope), level of granularity, and methodology, illustrating that there are significant disclosure gaps and standardisation issues to be addressed (see Figure 46). This in line with findings from the ECB with respect to "sparse and heterogeneous [climate risk] disclosure practices", for which the comprehensiveness of disclosures is positively correlated with size of the institution.<sup>180</sup>

In particular, as found in a report by Four Twenty-Seven and Vigeo Eiris, banks are most advanced in terms of governance-related disclosures, with the majority including

<sup>178</sup> TCFD (2017). *Recommendations of the Task Force on Climate-related Financial Disclosures*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>.

<sup>179</sup> ShareAction (2020). *Banking on a Low-Carbon Future II - A ranking of the 20 largest European banks' responses to climate change*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>180</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](http://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

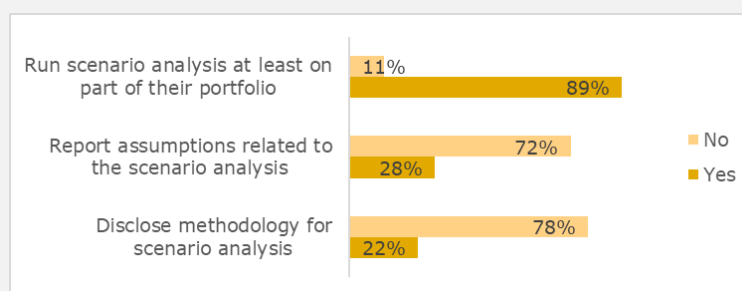
descriptions of climate change related responsibilities assigned to management level positions and processes to escalate climate related issues to the executive suite.<sup>181</sup> However, improvements in reporting have to be made, in particular concerning underlying methodologies and assumptions for risk measurement, scenario analysis, and metrics and targets.

Figure 46: Case study on climate-related disclosures among G-SIBs

As part of a review climate risk disclosures of G-SIBs among stakeholders in the Study, TCFD alignment was assessed along 29 dimensions in the four categories of the TCFD framework.

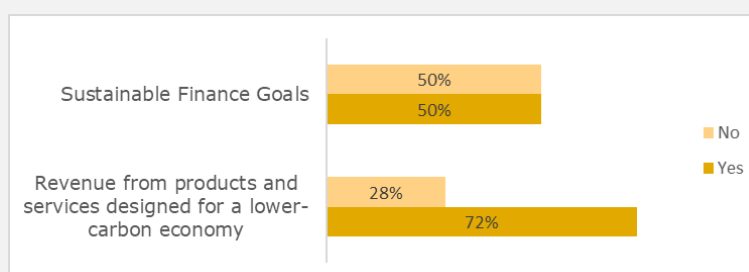
**Governance:** Reporting on Governance arrangements appears as one of the most advanced areas observed among banks on a relative basis, with almost all banks disclosing roles and responsibilities for individuals responsible to climate change, presence of committees addressing the topic and board oversight.

**Strategy:** Reporting on strategy often includes a wide range of information, however the level of detail and transparency can be improved. For instance, most banks state that they currently perform climate-related scenario analysis, however that analysis is usually performed only on part of their portfolios and few clearly disclose their methodology (i.e. 22%) or related assumptions (i.e. 28%).



**Risk Measurement:** Most banks describe how climate related risks are integrated into overall risk management and how these are managed. However, only a limited number provide details on their current exposure to physical and transition risk or provide forward looking plans to evolve their risk management practices.

**Metrics & Targets:** The majority of banks (i.e. 72%) disclose their sustainable finance goals and the amount or percentage of carbon related assets (i.e. related to high carbon sectors) relative to total assets (50%). However, there is little transparency provided on other metrics (e.g. alignment to 2° scenario, carbon physical intensity)



Source: Public reports from banks and BlackRock FMA analysis

<sup>181</sup> Four Twenty-Seven and Vigeo Eiris (2020). *Measuring TCFD Disclosures*. Available at: <http://427mt.com/wp-content/uploads/2020/09/Measuring-TCFD-Disclosures.pdf>.



As observed among banks, a significant portion of broader ESG risk reporting practices, mostly that which corresponds to the first three elements of the TCFD framework – i.e. ‘Governance’, ‘Strategy’, and ‘Risk Management’ –, is qualitative in nature. Interviews with banks show that the biggest challenges concern the TCFD pillar ‘Metrics and Targets’, as there are no clear guidelines on how to identify and calculate these metrics.

As also illustrated in a study by 2° Investing Initiative and UNEP FI,<sup>182</sup> there are a wide range of metric categories that can be used to report on banks’ climate progress; cited examples include carbon emissions accounting, sector specific energy metrics, and green / brown metrics.<sup>182</sup> In particular, carbon emissions accounting, also referred to as scope 3 accounting for banks, was repeatedly mentioned by civil society respondents as an important metric to measure and report on, hence requiring banks to go beyond the currently observed scope 1 and 2 reporting, which is related to own operations.

These various metrics are characterised by specific advantages and disadvantages, for instance, concerning the applicability of a metric, which may be relevant for the whole portfolio or for a selected segment only. Nonetheless, as argued in the same paper “there is likely no universal approach to how to best measure” them given the different stakeholder perspectives that need to be taken into account as well as the large differences in bank business lines and types of financial intermediation. Moreover, current disclosures do not support such standardisation, as only a limited number of banks provide a sufficient level of transparency on the methodology used to calculate their underlying ESG risk metrics.

There are different types of risk-relevant metrics disclosed by banks, of which selected examples and their illustration are presented in *Figure 47*. The most common metrics include: i) number of transactions subject to E&S risk review or Equator Principles (for project finance), ii) credit exposure to high ESG risk sectors or carbon-related assets, iii) carbon-emissions of financed activities or assets, and iv) financed energy-mix. Other, less common, examples of metrics disclosed include: i) average energy label mortgage portfolio, ii) total loans advances in high/medium/low flood risk postcodes, and iii) P&L contribution by ESG risk type (physical and transition), among others.

Despite the wide range of possible metrics, the majority of these are backward-looking and are mostly focused on climate. Only a limited number of banks disclose forward-looking metrics, for instance, related to future planned exposures to certain sectors (e.g. percentage of coal in electricity mix financed until 2050) or describing portfolio composition under specific scenarios. This is in line with results from the joint EBF and IIF survey, which found that assigning targets on climate risk metrics and usage of limits on certain activities is not a common practice.<sup>183</sup> As detailed in the survey findings, while 36% of the firms use metrics to identify exposure to climate-related risks (e.g. carbon foot-print, carbon physical intensity, brown share, etc), assigning targets related to these metrics and usage of limits on certain activities is not common practice. This point was further emphasised by an interviewed civil society, who argued that even metrics such as carbon-footprint are ultimately irrelevant for forecasting and planning, as they are, by nature, backward looking.

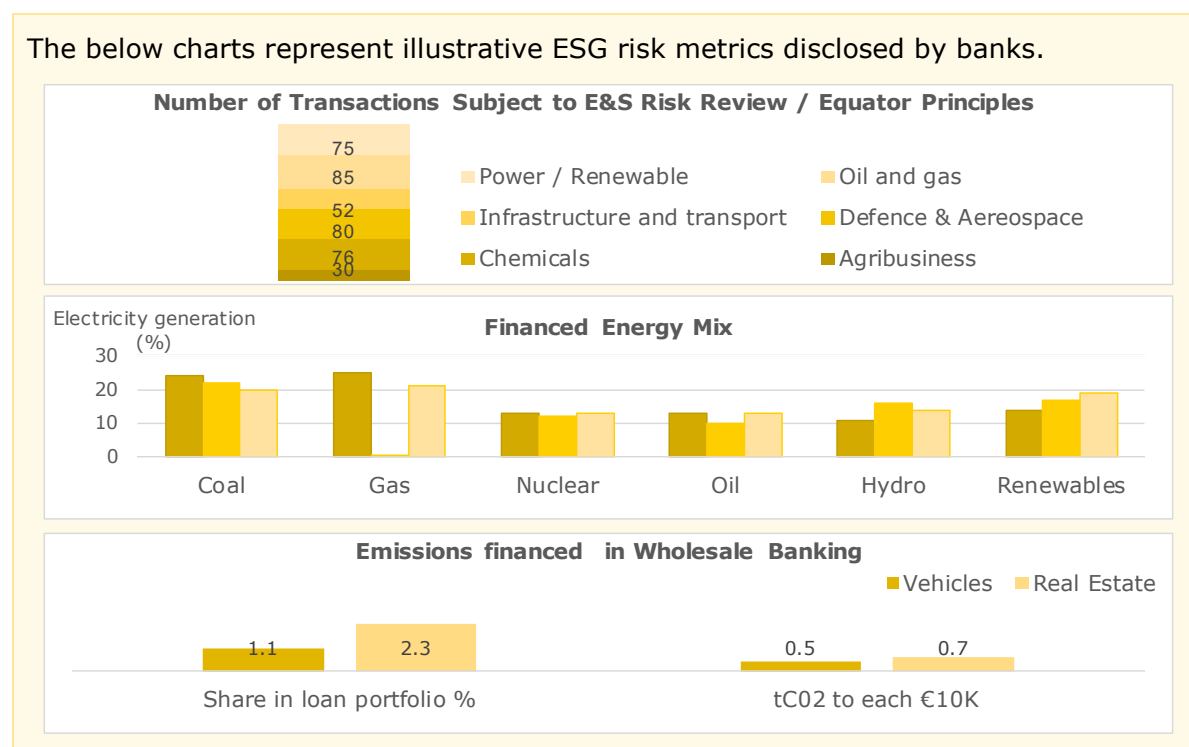
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<sup>182</sup> 2° Investing Initiative, UNEP FI, World Research Institute (n.d.). *Portfolio Carbon Initiative – Exploring metrics to measure the climate progress of banks*. Available at: <https://ghgprotocol.org/sites/default/files/standards/Exploring%20Metrics%20to%20Measure%20the%20Climate%20Progress%20of%20Banks.pdf>.

<sup>183</sup> EBF and IIF (2020). *Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure*. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

Another civil society respondent illustrated the current absence of metrics that can be used for multiple purposes and in different contexts. As argued, carbon-footprint metrics are not well suited for risk management purposes, as accurate data on emissions of financed counterparties is lacking; hence, reliance on estimation models leads to non-reliable results. Nonetheless, other respondents mentioned that backward-looking metrics, such as financed emissions, can help banks understand their current impact and hence serve as a starting point for more advanced ones.

**Figure 47: Illustrative examples of ESG risk metrics disclosed**



Source: Public reports from banks and BlackRock FMA analysis

Overall, most banks mentioned having plans to enhance their ESG risk reporting, subject to enhancing their ESG risk measurement and assessment capabilities. Some comments raised with respect to future disclosure expectations and strategies are illustrated in Figure 48. One civil society respondent suggested that the key focus for banks should be to disclose their risk management strategy and metrics chosen, providing transparency on the limitations of their chosen approach.

Most respondents mentioned having concrete plans on climate-related risks disclosure, where more quantitative metrics have been illustrated within the draft ECB Guide (e.g. weighted average carbon intensity). In contrast, no specific comments were raised by respondents with respect to metrics related to S and G; as noted by a respondent, these are dimensions which are not always quantifiable on a granular basis and are subject to cultural bias.



Figure 48: Illustrative comments on ESG risk disclosure plans

**What is your overall strategy for ESG risk disclosure and what are your plans for future reporting?**

*"Most of our reporting is qualitative except for some specific issues, such as energy mix"*

*"We will develop new metrics and KPIs as part of the ECB guidelines implementation"*

*"The plan is to expand on ESG risk disclosures as assessments mature and allow for more types of risk metrics to be disclosed"*

*[Future reporting] "will disclose carbon-related assets in the loan portfolio and the financial impacts based on the results of scenario analysis"*

### **4.3 First overview of the possible arrangements, processes, mechanisms and strategies to map, assess and manage ESG risks**

Based on the data collected during the data collection phase thus far, participants highlighted preliminary areas, as listed below, that will be used as a starting point for identifying principles / best practices. This section will be refined during the remainder of the Study, among others to expand the forward-looking perspective.

#### **1. ESG risk definition & identification**

##### ESG risk definition and perimeter

- There is no common definition of ESG risks across respondent banks, and ESG themes and risks identified usually consider the perceived relevance in specific sectors, client segments, or geographies that the respective bank is focused on. Most banks currently focus on climate risk and plan to expand to other ESG risk types.
- Stakeholders highlight a need for a flexible definition to allow for expansion of themes in scope, for instance, based on input provided by civil society organisations signalling the relative urgency of the topics, as well as geographical and cultural differences to be taken into account.
- Among ESG risks, respondents rank risks stemming from climate change and waste management / toxic emissions (under the E Pillar) as the most relevant, followed by corporate behaviour (under the G Pillar) and external stakeholder management including workers' rights (under the S Pillar).
- While banks assess governance themes as relevant, the G pillar is often seen as a traditional compliance topic rather than a focus area in the context of a broader ESG definition.
- Most respondents aim for a double materiality concept as the basis for ESG risk definition and management across ESG pillars, in line with EU disclosure standards. The double materiality concept is also applied in order to consider financial and non-financial risks to the bank on one hand, as well as the impact on society and the environment, in alignment with strategic ESG targets on the other hand.
- At the same time, the majority of respondent banks consider double materiality in the context of reputational risk, which can translate into financial risk, and hence the concepts of single and double materiality can be considered to be interlinked.
- The stated need for a double materiality concept for banks is particularly emphasised by other stakeholders such as civil society organisations, with some advocating a clear distinction between the two views in reporting and disclosure, e.g. transition risk vs. Paris pathway alignment.
- Whilst the majority of banks look at the three ESG pillars separately, some are considering the identification of ESG risks under one "ESG umbrella" as the basis for integration in risk processes, while acknowledging a different nature of the three pillars – for example, according to banks, the E pillar includes more quantifiable risks compared with the other pillars.

##### Risk identification approaches

- The starting point of banks for the identification of institution-specific and relevant ESG risks is a structured risk identification process, usually within existing (e.g. regulatory-driven) risk identification processes.

- The above approach is sometimes complemented by an outside view of perceived materiality from external stakeholders.

#### ESG risk transmission channels

- While most respondent banks aim to integrate ESG risks into their existing risk management processes rather than establishing dedicated processes, a majority of banks mentioned that this requires a clear mapping of ESG risks as drivers of existing risk types, rather than treatment as a stand-alone risk type, with most banks prioritising credit and reputational risk for now.
- A better understanding of the various transmission channels and interdependencies (incl. short- & long-term effects) was mentioned as a requirement to develop a conceptual map linking ESG themes to existing risk types
- Due to the application of the double materiality concept, some respondent banks see the need for a dedicated treatment of ESG risks – for example, by introducing metrics not linked to traditional risk types in their risk appetite framework, such as Paris pathway alignment related metrics.

## **2. ESG Risk governance and strategy**

#### ESG risk governance structures and board oversight

- Banks in the perimeter that aim to further advance the integration of ESG risks often mentioned that they refine their risk governance set-up and define clear roles and responsibilities at top management level in order to ensure that ESG risks are discussed at board and executive level.
- A sponsor at board or executive level is considered as highly beneficial for advancing ESG integration and showing commitment “at the top”. Accountability of banks’ management for ESG targets is also seen as a key enabler by other stakeholders including civil society organisations and academics, for instance via managerial-KPIs and direct incentives.
- While currently there are different models observed regarding the committee set-up for ESG risks, many banks stated that they aim for the integration of ESG risks into existing committees at the highest level in the long run – i.e. both at the board level and management level – to ensure overall integration in risk governance and management.

#### ESG risk organisational set-up

- Another practice mentioned by banks relates to the formulation of dedicated teams and allocation of additional resources to advance the ESG risk integration agenda, either within risk functions, or in a cross-functional setup as part of the broader group-level ESG strategy. However, in the long term, banks stated that they intend to make ESG risk management “mainstream”; this point was also made by civil society organisations.

#### ESG risk strategy and initiatives

- Ensuring group-wide effort and communication, supported by a clearly defined and credible strategy, responsibilities, and implementation timeline, are perceived as key success factors, as highlighted by many respondents across stakeholder groups.

### **3. ESG risk measurement and assessment**

#### **Data taxonomy, standardisation and sourcing**

- Many banks mentioned plans to improve data availability for the assessment of ESG risk profiles of counterparties and exposures, using a mix of internal and externally sourced data.
- For internal data, structured processes to actively collect data from clients is seen as a requirement to develop appropriate measurement tools, alongside data from third parties.
- Banks also highlighted that they are moving from the use of ESG ratings to the sourcing of granular client data in a structured manner, with some respondents stating that they have developed their own internal ESG ratings to overcome challenges associated with external ESG ratings, such as differences in methodologies.
- Scenario-related data for climate risk assessment exercises is also sourced from environmental agencies, international and civil society organisations, e.g. sector-based technology mix evolution on volume / price / cost, or shared socio-economic pathways.
- In order to address challenges related to data availability, comparability and reliability, collaboration with, and improved disclosures by, corporates and SMEs were mentioned as key requirements by respondents across stakeholder groups.

#### **Portfolio ESG risk measurement and scenario analysis**

- A number of banks mentioned that they are developing forward-looking assessments of their exposure to both transition and physical climate risk, as well as of the climate impact of their portfolios (e.g. Paris alignment), through scenario analysis. This is usually performed as part of a pilot – for example, on a part of the portfolio and focused on wholesale clients in carbon intensive sectors.
- Efforts to develop coordinated assessment approaches for climate risk are strongly advocated by civil society organisations and banks, both for transition and physical risk assessment as well as for Paris alignment.
- Some banks say that they are refining methodologies for industrialising and expanding these exercises to a larger part of the portfolio for group-wide scenarios. Some banks mentioned that they develop internal counterparty-level transition risk and physical risk scores and/or impairment impact assessments, as well as analyse financed emissions and physical carbon intensities per sector for an assessment of alignment with the Paris agreement, especially for carbon intensive sectors.
- Results from these exercises are often not comparable between banks and, as suggested by other stakeholders, including civil society organisations and data providers, supervisors may support banks in these portfolio measurement efforts by providing reference scenarios to be used as a starting point for these exercises.
- Although the focus of banks is on climate-related data at this stage, banks that consider themselves more advanced indicated that they intend to increasingly take into account the other pillars within ESG in order to potentially be able to quantify exposure to other ESG risks in the future.

#### **4. ESG integration into risk processes**

##### **Risk appetite framework (RAF)/statement**

- Approximately 50% of analysed banks have indicated that they have either integrated (some) ESG risk considerations within their risk appetite statement or are planning to do so; however, this is rarely done for all ESG pillars, and mostly in a qualitative manner.
- Integration is often conducted under a traditional risk type, such as reputational risk, operational or compliance risk. Respondents that mentioned integration within credit risk, described having integrated it as a reference to sectoral lending policies (e.g. restrictions on coal financing), rather than quantitative metrics such as ESG score distribution, transition / physical risk stress impairment, physical carbon intensities per sector, or concentration limits.
- Those interviewed banks that have integrated ESG into their RAF (either partially or fully) mentioned having included it as a qualitative statement, while only a limited number have integrated it with quantitative metrics or limits across selected ESG pillars, mostly on climate risk.
- Focus of integration is often on lending portfolios but rarely on capital markets businesses (Equity or Debt Capital Markets) or off-balance sheet exposures.
- Many respondents stated plans for further refinement of this integration, including quantitative metrics / limits in RAF and cascading thereof to business units and origination criteria.

##### **Lending/investment policies, processes and strategies**

- Many banks have integrated ESG factors into cross-sector standards and developed sector-specific policies to restrict financing in certain industries and geographies; however, these are often not deemed strict enough by civil society organisations as their scope may be narrow and exceptions can be made when active engagement with the customer is sought.
- Banks that consider themselves more advanced have policies covering a wide range of sectors (e.g. coal, mining, palm oil) and restrict lending activity not only for project finance transactions, where the use of proceeds is known, but also on general purpose corporate lending (e.g. based on the business revenue mix).
- Most respondent banks state they have integrated some ESG factors in their due diligence processes, with governance aspects mostly already covered under traditional KyC processes, but acknowledge that significant improvements can be achieved in such integration.
- Some banks stated that they conduct enhanced due diligence for E&S risks, seeking to screen for potential adverse impacts at counterparty level.

##### **Risk parameters and models**

- Very few respondent banks are integrating ESG factors into their internal models and pricing considerations, and when they do the focus being primarily on climate risk.
- A key concern raised by respondent banks relates to the difference in time horizons between ESG-driven risks (i.e. medium / long-term) and other financial risks; however, other stakeholders, including civil society organisations, argue that ESG risks may

materialise in shorter time frames than originally envisaged (e.g. when driven by sudden policy changes).

- Banks mentioned that they are considering ESG factors in risk parameters (e.g. PD, LGD) only to the extent that there is established clear evidence of a link to ESG risks – for example, as a qualitative factor in traditional rating models. However, such integration is often focused on select governance aspects.
- A two-step approach is currently seen as more practical by many respondents, requiring first a traditional model-driven credit rating PD/LGD assessment, and secondly an ESG overlay, often focused on climate-risk and with a longer horizon.
- However, ESG scoring, in particular for climate risk, is often differentiated from traditional credit rating assessments.
- Beyond that, ESG risks are not factored into calculations for regulatory capital requirements, and banks are awaiting further regulatory guidance.

#### Stress testing, ICAAP and ILAAP

- Explicit integration of ESG risks into internal stress testing and ICAAP is still at an early stage overall. Respondent banks are focusing mostly on climate-related risk assessments (mostly pilots on part of the portfolio), and have highlighted that methodological challenges, data, and differences in time horizons require further development work.
- Additionally, some banks see for example the PRA climate stress test methodology as guidance for building out their capabilities, as they expect some form of regulatory climate stress testing in the near future, and they also acknowledge the current lack of capabilities in this space. According to respondents, the development of stress testing approaches and capabilities is, to a large degree, driven by supervisory expectations.
- Some banks stated that they are looking for means, other than internal or regulatory capital requirements, to steer their portfolio and assess risks over long-term time horizons. For example, few banks stated that they set and monitor long-term and scenario-based KRIs for parts of their portfolio, e.g. internal scores assessing the vulnerability to transition risk or portfolio Paris pathway alignment metrics.
- The need to overcome a perceived lack of long-run views for climate-related risks in traditional risk measurement approaches (e.g. credit ratings, internal regulatory capital requirements) is also highlighted by other stakeholders, including civil society organisations. As suggested, banks could consider extending the time horizons of their risk assessment exercises like stress testing to quantify potential impacts from ESG risks, in particular climate-related risks, even if this does not result in additional capital requirements.

## **5. ESG risk reporting and disclosure**

### Reporting type and audience

- Very few banks stated that they have integrated ESG metrics into regular internal risk reports thus far.
- Most respondent banks stated that they plan to enhance their ESG-risk related disclosures and align them to both voluntary disclosure standards (e.g. TCFD) as well as to supervisory guidelines, particularly in light of increasing demands from other

stakeholders, including civil society organisations and investors. However, this is mostly focused on climate-related risk within the E pillar and it is also perceived by civil society organisations as currently insufficient in light of the wide range of guidance and support tools in this space.

- At this stage, few banks stated that they have aligned their reporting to TCFD and other standards or disclose comprehensive metrics, e.g. sector exposures, product mix, carbon footprint, financed emissions, physical carbon intensities, Paris Pathway alignment, scenario analysis for transition risk and physical risk. ESG-related Pillar 3 reporting is limited, particularly given that there are no dedicated requirements in place so far.
- The EU taxonomy was mentioned as a key future disclosure practice, although it was often seen more from a product perspective rather than a risk-focused one.
- Enhanced disclosure is also a key demand of other stakeholders, including civil society organisations, not only to assess risks within institutions, but also to incentivise banks to adapt.

#### Information type granularity and transparency

- Following the NFRD and the Commission guidelines for reporting climate-related information, banks seek to capture the ESG risk double materiality perspective in their disclosures. In addition, the NFRD review is seen by respondents as an important step towards improving the breadth and granularity of disclosure practices.
- The content and structure of banks' ESG-risk disclosure practices are also strongly driven by voluntary initiatives such as the TCFD.
- Some banks that consider themselves more advanced are developing risk-related metrics (sometimes translated into forward-looking targets) for internal and external reporting purposes, such as exposure to high-risk sectors and aggregate internal transition scores.
- The need for further standardisation among these metrics is highlighted by other stakeholders, including civil society organisations. There is also the expectation that standardisation will be fostered through disclosures, including in the context of NFRD, to the extent that banks provide transparency on the underlying methodologies. The application of the EU taxonomy on the banking book, however, in particular with respect to risk management practices, was mentioned as a challenge by many respondents.



## 5 Modalities of integrating ESG risks into EU prudential supervision<sup>184</sup>

This section includes an overview of the results of the stocktake exercise on national supervisory frameworks and practices for the integration of ESG risks into prudential supervision. Furthermore, it includes a first preliminary overview of the tools and mechanisms for the integration of ESG risks into the EU prudential supervision.

### 5.1 Overview of focus areas for research

For the purpose of this Study, the following key elements of the integration of ESG risks into EU prudential supervision were analysed, as further illustrated below:

- ESG risk definition & identification;
- ESG governance and strategy;
- Supervisors' assessment of ESG risks; and
- ESG requirements, guidelines & engagement initiatives.

This list of focus areas serves as a structure to systematically gather input and data during the research. The key focus areas analysed under this objective are illustrated in *Figure 49* and the following sections present the preliminary results of the stocktake exercise along the key identified themes.

Figure 49: Objective 2 focus areas and their respective themes (illustrative)

<b><u>Focus Area</u></b>	<b><u>Themes</u></b>	<b><u>Illustrative description</u></b>
<b>ESG risk definition &amp; identification</b>	<b>ESG risk definition</b>	Definition of ESG risks and their sub-pillars from a bank supervision standpoint, including focus on double vs. single materiality <sup>185</sup>
	<b>ESG risk transmission channels</b>	Relevance of ESG risk to traditional risk types of banks (e.g. the impact of ESG risks on credit, market operational, reputational risk, among others) and transmission channels (e.g. lower corporate profitability, changes in consumer demand), as seen by supervisors
	<b>ESG risk indicators</b>	Quantitative KPIs used by supervisors to monitor and assess supervised banks' exposure to ESG risks
	<b>Qualitative assessment of supervised banks</b>	Qualitative elements considered by supervisors, for example to assess whether supervised banks have a sound risk management process in place to manage ESG risks (e.g. definition, integration into risk processes, integration in business strategy)

<sup>184</sup> In line with the Tender Specifications, the focus of this section is on microprudential supervision. Systemic risk assessments and macroprudential policies are not considered.

<sup>185</sup> As defined in section 4.2.2.

<b>ESG governance and strategy</b>		<b>ESG risk prudential supervision strategy</b>	Strategic objectives of supervisors & regulators to foster ESG integration within supervised banks, as well as efforts to promote ESG-related capabilities
		<b>Internal ESG risk capabilities</b>	In-house expertise of supervisors & regulators, including dedicated resources, subject matter experts, models and data, as well as training and development
<b>Supervisors' assessment of ESG risk</b>	<b>Measurement &amp; assessment</b>	<b>ESG risk measurement and scenario analysis methodology</b>	Definition of approaches and related expectations for how banks and/or supervisors measure banks' exposure to ESG risks, including scenario analysis considerations
		<b>Categorisation of assets based on ESG risk</b>	Approaches to categorise banks' assets based on their risk profile (e.g. 'green' vs. 'grey' vs. 'brown')
	<b>ESG integration into supervisory/regulatory Processes</b>	<b>Pillar 2 review processes and onsite supervision</b>	Integration of ESG risk considerations into Pillar 2 processes such as SREP and other supervisory review processes, including current initiatives and forward-looking plans
		<b>Supervisory stress testing</b>	Integration of ESG risk considerations into supervisory stress testing, such as development of climate stress tests, including current initiatives and forward-looking plans
<b>ESG requirements, guidelines &amp; engagement initiatives</b>		<b>Regulatory requirements</b>	Regulatory requirements for supervised institutions, e.g. for ESG-related disclosure or capital requirements
		<b>Supervisory guidance and expectations</b>	Guidance and expectations on banks' ESG-related risk management, strategy and disclosure
		<b>Supervisory engagement activities</b>	Activities and methods with the aim of fostering capacity building, increasing awareness, and building know-how related to ESG risk management within supervised banks

## **5.2 Stocktake of current ESG practices**

The following first key takeaways represent the results of the stocktake exercise conducted on the previously defined perimeter of external stakeholders, and is based on a first analysis of the data collected so far.

### **5.2.1 First key takeaways**

#### **ESG risk definition & identification:**

All supervisors included in the Study mention the importance of ESG risks for prudential supervision. Nevertheless, a clear definition of themes and risks on a granular level is often not in place, and no common definition of ESG exists. ESG risks in scope of supervision generally vary across supervisors, although there is a focus on climate-related risk at this point at most supervisors. The different pillars of ESG are often considered separately. At this point, the governance component is primarily focused on banks' (as opposed to clients') governance, and topics related to compliance.

A majority of supervisors (72%) acknowledge the importance of the double-materiality concept, which is consistent with feedback from most banks and other stakeholders including civil society organisations. At the same time, they see difficulties in integrating this into the supervisory framework due to the traditional focus of the impact of financial and non-financial risk on banks, as set within their mandate. Many supervisors state that they typically treat ESG risks as drivers of traditional risk types like credit, market and operational risk, rather than as its own distinct risk type. Several participants in EU-jurisdictions indicated the intention to await further developments at a national and international level, for example the mandates of the EBA which will i) consider the potential inclusion of ESG risks in the supervisory review and evaluation process (SREP), ii) assess how ESG disclosures should be considered in CRR 2 Pillar 3 disclosures, and iii) determine whether a dedicated prudential treatment of ESG risks would be appropriate.<sup>186</sup>

A significant part of supervisors' assessments of whether sound processes to manage ESG risks are in place is based on qualitative elements. To this end, the integration of ESG risks in a bank's business strategy, as well as risk governance and risk strategy, were mentioned as being among the most important elements by respondents. The majority of supervisors interviewed do not yet have any quantitative indicators in place to monitor and assess the exposure of supervised banks to ESG risks.

#### **ESG risk governance and strategy:**

The majority of interviewed supervisors expect an increasing emphasis on the integration of ESG risks into prudential supervision in the near future, although few supervisors have communicated an explicit ESG strategy. Notable differences exist in terms of ambition, prioritisation, and scope. While some supervisors approach the topic from a holistic standpoint across the three pillars of E, S & G, others have decided to focus on the E pillar for now, and often on climate specifically. Only a minority of interviewed supervisors have a formalised internal ESG risk strategy in place with an ambition to actively drive the integration of ESG risk further.

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<sup>186</sup> EBA (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

### **Supervisors' assessment of ESG risk:**

A limited number of supervisors (14%) state that they have explicitly integrated ESG risk considerations in Pillar 2 processes, although some respondents highlighted that ESG risks are often drivers of traditional risk types and hence, should be considered by banks if deemed material. Across the researched jurisdictions, only a minority of supervisors (23%) have integrated ESG risks explicitly into day-to-day and on-site prudential supervision. Going forward, a large proportion of interviewed supervisors plan to integrate ESG considerations into the SREP and will expect supervised institutions to consider ESG risks in their ICAAP/ILAAP. A number of respondents expressed the view that Pillar 2 processes were the most appropriate tool within the supervisory toolkit to address ESG risks from a supervisory standpoint, and capital requirements should remain risk-based.

The identification of suitable quantitative ESG risk indicators is a key challenge, with no supervisory authority having an established set of indicators in place at this point. However, a majority of respondents agree on the relevance of a quantitative assessment of banks' risk management practices. Risk measurement approaches for ESG risks in general appear to be still in their infancy, mirroring the early stage of quantitative ESG metrics.

A minority of participating supervisors (14%) state that they have integrated ESG risks into supervisory stress testing, although many have indicated that they are planning to do so within the next three years; work in this area is currently almost entirely focused on climate change related risk. All interviewed supervisors, and many civil society organisations, highlighted the importance of scenario analysis, especially in the context of climate change-related risk, given the associated uncertainty and long-term time horizons. The NGFS climate scenarios were frequently referenced in this context as being useful for providing a common starting point.

EU-based supervisors consistently state that the categorisation of assets based on their ESG risk profile makes use of – or will make use of – the EU taxonomy. However, many supervisors believe that a more granular taxonomy – i.e. including 'brown' and 'grey' (i.e., neither green nor brown) sectors – will ultimately be required. While respondents believe that the current taxonomy represents a step in the right direction towards the provision of a common standard and heightened comparability, several supervisors expressed the view that the EU taxonomy, in its current form, may need to be enhanced and expanded.

### **ESG requirements, guidelines & engagement initiatives:**

According to interviewed civil society organisations, any regulation and guidance must encourage sector participants to take a proactive approach to incorporate ESG risks in business strategies and internal processes, as it can provide an effective mitigation tool for such risks, especially over the long-term.

As of yet, according to EU-based respondents, environmental and social risk considerations are not explicitly integrated in regulatory requirements but implicitly captured as drivers for existing risk types. In the EU, supervisors intend to await the outcome of the EBA mandate to assess whether a dedicated prudential treatment of ESG exposures is justified. Outside of the EU, and particularly in emerging markets – for example, in Brazil –, supervisory authorities have begun using the existing regulatory framework to address these risks.

As to the question of whether capital requirements are a possible way to address climate-related risks – e.g. through a green or brown factor for RWA calculation –, there are

differing opinions among respondents. Most supervisors are of the view that any capital requirements should be risk-based, and hence sufficient evidence of a risk differential is important. Here, respondents referred to the potential impact of ESG on traditional risk types, and on credit risk in particular. Some other stakeholders see the increase of capital requirements for 'brown' exposures as a key tool to incentivise banks to re-direct capital, and would therefore advocate, for example, the adoption of a brown penalising factor as a precautionary measure.

All interviewed supervisors agree that consistent disclosures by banks on ESG risks are increasingly important – a view also shared by other stakeholders, including civil society organisations and academics. Beyond any mandatory disclosure requirements, almost all respondents indicated that, for climate-related risks specifically, they expect supervised institutions to adhere to TCFD disclosure standards.

All interviewed supervisors mention the need to increase awareness of ESG risks and foster capacity building for the proper treatment of ESG risks in supervised institutions. A number of supervisors have already published guidance on the integration of climate-related risk or broader ESG themes in banks' risk management practices. According to interviewed supervisors, and as seen in some published guidance, governance aspects are covered in existing supervisory frameworks. However, this is mostly limited to governance practices and processes of the institutions themselves.

The following sections present the detailed preliminary findings along the key research focus areas and themes.

## 5.2.2 ESG risk definition & identification

### 5.2.2.1 ESG risk definition

The starting point for discussing the integration of ESG risks into EU prudential supervision is to understand how supervisors define ESG risks and each of the subcomponents, or indeed, whether supervisors recognise ESG risks at all. To the end, it was determined that 42% of analysed supervisors referenced the term “ESG risk”, “sustainability risk”, or “climate risk” in their annual report. Typically, such terms were mentioned infrequently, with few supervisors having sections of the report dedicated to the topic. This reflects the relatively early stage of the recognition of these risks in the supervisory sphere.

At this point, there is no common definition that could be observed among supervisors for the themes and risks underlying the E, S, and G pillars. This is a view shared by the EBA; a recent discussion paper on the management and supervision of ESG risks highlights that “most international frameworks and standards have refrained from establishing a single definition of ESG factors. While there is general agreement that ESG factors represent the main three pillars of sustainability, the lack of a single definition of ESG factors complicates its understanding and management in a consistent way”.<sup>187</sup>

The majority of interviewed supervisors stated that they have not yet decided whether to explicitly define ESG risks. EU-based supervisors indicated their intention to await progress being made in this space, for instance, by the EBA, who was instructed to assess the development of uniform definition of ESG risks including physical risks and transition risks as part of the mandate set out in Article 98(8) of CRD 2, which calls on the EBA to assess the potential inclusion of ESG risks in the supervisory review and evaluation process performed by competent authorities.<sup>188</sup>

The discussion paper published by the EBA on the management and supervision of ESG risks first sets out a definition of ESG factors as “environmental, social or governance characteristics that may have a positive or negative impact on the financial performance or solvency of an entity, sovereign or individual”, and subsequently defines ESG risks as the negative materialisation of these factors; that is, “ESG risks materialise when the ESG factors affecting institutions’ counterparties have a negative impact on the financial performance or solvency of such institutions.”<sup>189</sup> The paper sets out a detailed, though non-exhaustive, list of ESG factors, as well as associated indicators and metrics. Other supervisors have published their own ESG-related non-binding guidelines – e.g. ECB (currently under consultation), Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), and Österreichische Finanzmarktaufsichtsbehörde (Austrian FMA) – which also include guidance with respect to ESG risk definition.

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<sup>187</sup> European Banking Authority (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

<sup>188</sup> In this context, in October 2020, the EBA published a discussion paper on the management and supervision of ESG risks. The paper outlines common definitions of ESG factors and risks, provides an overview of current evaluation methods, outlines recommendations for the integration of ESG risks into business strategies, governance and risk management, as well as supervision, and invites feedback from interested stakeholders by 3 February 2021. Given the significant overlap between the aims of Objective 2 of this Study and those of the EBA discussion paper, this Study seeks to convey the core messages of the discussion paper only, while inviting readers to peruse the discussion paper for more in-depth details.

<sup>189</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

Of those supervisors that provide guidance or state that they have a definition in place, some have high-level and comprehensive definitions of ESG risk, which focus on all three pillars based on the expectation that all areas should be addressed. Other supervisors have definitions in place that focus on one particular element within ESG risk – usually climate-related risk, as further detailed below. Some respondents highlighted that focusing on a specific ESG risk has certain benefits given the different nature of the themes (e.g. time horizons over which they manifest) and their different transmission channels. In addition, given that most banks are at an early stage of ESG risk integration, some respondents believe that a definition and focus on a certain risk type (e.g. climate-related risk) might be more feasible and easier for banks and supervisors alike to implement. According to one participant, focusing on climate-related risk for now allows them to build capacity and capabilities which could then potentially be transferred to other ESG risks.

Figure 50 highlights some illustrative comments by supervisors on the definition of ESG risks.

Figure 50: Illustrative comments on ESG risk definition

***How do you define ESG risks?***

*"ESG risks are not a homogenous category and each pillar will need to be tackled separately"*

*"While we believe that the S and G are also two relevant risks in the area of sustainable finance, for the time being, we have focused on the environmental risk and climate change risk"*

*"E, S and G risks are interconnected and interrelated. They are therefore in our supervision generally treated as a full package"*

*"Sustainability risks are environmental, social or governance events or conditions, which, if they occur, have or may potentially have significant negative impacts on the assets, financial and earnings situation, or reputation of a supervised entity"*

*"Guidance and information from European institutions / regulators would be welcome"*

*"We intend to follow the EBA recommendations and apply an ESG definition which will be consistent with the one proposed by the EBA"*

*"Key drivers of ESG risk are multiple and this is a non-exhaustive list: climate changes, policy changes, technological advances, shift in public sentiment"*

Similarly to the question posed to banks, and as described in section 4.1, supervisors were asked to assess the relevance of identified macro-themes of ESG risks, as well as the most common ESG themes falling under each macro-theme. Many supervisors felt they were unable to rank the ESG macro-themes. Reasons given for this included i) the view that all macro-themes should be considered equally important, and therefore ranking these elements would be inappropriate, and ii) it is not within the remit of a supervisor to prioritise such elements, as this decision and prioritisation should be left to the discretion of banks themselves, as the relevance of the elements can depend upon the business model or portfolio composition of the bank. This sentiment is echoed in the aforementioned EBA ESG discussion paper, which states that "the relevance of ESG factors for institutions depends on their business activities and on the type of assets (e.g., sectors and geographic



location of counterparties, issuers of invested financial instrument) and liabilities (e.g., issuance of financial instruments, funding profile) that the institutions hold.”<sup>190</sup>

Overall, climate change was most frequently ranked as the most relevant ESG macro-theme by interviewed supervisors, followed by natural resources & pollution. Within the E pillar, climate change was mentioned as the core focus by supervisors in multiple jurisdictions, which is also in line with the responses provided by banks. This has also manifested in various publications over the past years. One of the first guidance documents was issued by the PRA, in its Supervisory Statement (SS 3/19), which provides a definition of climate-related risks, and their decomposition into physical and transition risks.<sup>191</sup> Another example is the draft ECB Guide on climate-related and environmental risks, which also identifies the two main drivers of these risks as physical and transition risk.<sup>192</sup>

Natural resources and pollution was mentioned as the second most relevant macro-theme by supervisors, in contrast to the views provided by interviewed banks which ranked it as the third least relevant theme. For instance, biodiversity is increasingly being discussed in terms of how it relates to prudential supervision. For example, in June 2020, De Nederlandsche Bank (DNB) published a report exploring biodiversity risks in the Dutch financial sector, which recommended that financial institutions should identify the physical, transition, and reputational risks associated with biodiversity loss, as well as the development of consistent standards for measurement and reporting on these risks.<sup>193</sup>

The two next most highly ranked macro-themes fall under the G pillar, namely board quality and corporate behaviour. Interviewed supervisors consider the G pillar relatively well understood, with underlying key drivers being regulation and legislation. That said, the focus of supervisory definitions and guidance has been on banks’ own governance practices, rather than on the governance of borrowers.

Macro-themes falling under the S pillar – external and internal stakeholder management – received the lowest scores from supervisors in terms of relative ranking. External stakeholder management was ranked lowest, in contrast to the perception from banks, where it was ranked as third most relevant. These topics are currently not highlighted as a major area of further focus in prudential supervision by most respondents. As a contrast to this, the Central Bank of Brazil has historically placed emphasis on the S pillar – as well as on the E pillar beyond climate – which was evidenced in the enactment of Resolution no. 4,327 in 2014, which assigned guidelines for financial institutions that must be observed in the establishment and implementation of the Social and Environmental Responsibility.<sup>194</sup>

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<sup>190</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at:

[https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>191</sup> Bank of England (2019). *Enhancing banks’ and insurers’ approaches to managing the financial risks from climate change*. Available at: <https://www.bankofengland.co.uk/prudential-regulation/publication/2018/enhancing-banks-and-insurers-approaches-to-managing-the-financial-risks-from-climate-change>.

<sup>192</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](http://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

<sup>193</sup> De Nederlandsche Bank (2020). *Indebted to nature: Exploring biodiversity risks for the Dutch financial sector*. Available at: [https://www.dnb.nl/en/binaries/Indebted%20to%20nature%20\\_tcm47-389172.pdf](https://www.dnb.nl/en/binaries/Indebted%20to%20nature%20_tcm47-389172.pdf).

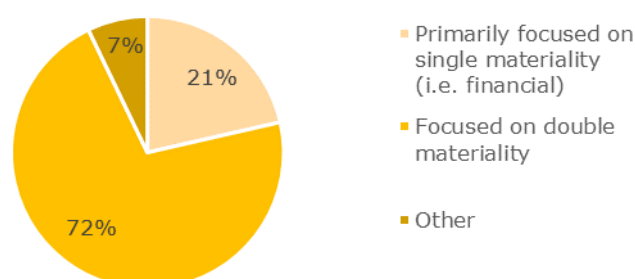
<sup>194</sup> Banco Central Do Brasil (n.d.). *Social and environmental responsibility*. Available at: <https://www.bcb.gov.br/en/about/socialresponsibility>.

The majority of interviewed supervisors stated that they define ESG risks through the double materiality perspective, which takes into account the impact of banking activities not only on the bank itself but also on the external environment and societal context. Most interviewed banks stated that this is the approach they abide by, as well as being the one advocated by many civil society and international organisations (as described in section 4.2). In their recent EBA discussion paper, the EBA has also acknowledged the identification of said double materiality perspective, which includes:

- i. “financial materiality, which may arise from such economic and financial activities throughout their entire value chain, both upstream and downstream, affecting the value (returns) of such activities and therefore typically of most interest to institutions; and
- ii. environmental and social materiality, stemming from the external impact of those economic and financial activities, typically of most interest to citizens, consumers, employees, business partners, civil society organisations and communities.”<sup>195</sup>

However, while most respondent supervisors acknowledged the relevance of the double materiality perspective, as shown in *Figure 51*, they also mentioned that it would not necessarily be taken into account in all aspects of prudential supervision given their stated mandated focus on traditional financial and non-financial risk.

**Figure 51: ESG definition by materiality approach**<sup>196</sup>



Source: BlackRock FMA analysis

Of the 21% of supervisors who focus on single materiality, most stated that, while they acknowledge the importance of double materiality from a holistic societal perspective, their mandate is to focus on financial materiality. One interviewed civil society noted that the CRR currently focuses mostly on financial materiality, and it would require a substantial legislative change for the double materiality perspective to be considered in regulation. It was also remarked that the NFRD could be used to complement the CRR disclosure requirements, to enhance the double materiality view. Change Finance believes that it is

<sup>195</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>196</sup> Question: *Does your above definition of ESG risk focus on single or double materiality?* Sample size: 14  
 “Other” relates to the following answer: The respondent believes that more clarification on the need for banks to monitor their portfolios from the angles of both the financial risk and impact of their activities would be justified in light of potentially elevated transitional and reputational risks going forward.

a responsibility of central banks to focus on the societal context, stating that they “should play a more active role by aligning their policy with long-term society needs.”<sup>197</sup>

Some respondent supervisors also raised the question as to what double materiality should, or would, entail for a supervisor’s role. As mentioned by one respondent, it may be seen as a way for supervisors to dictate the way banks should orientate their business models – which could be seen as going beyond the mandate of a supervisor – and may be better addressed via other measures, such as fiscal and legislative measures. One interviewed bank remarked that it will be interesting to see how supervisors will position themselves in this context, and believes that a balance needs to be struck between traditional analysis and integration of ESG risks into supervisory processes, such as the ICAAP, and any attempt to help define the end goal for the economy and society.

Overall, according to several European supervisors, the extent to which the concept of double materiality will be addressed by supervisors is dependent on guidance provided by European institutions, such as the EBA and the Commission. That said, most European supervisors expect that the double materiality view on banking activities will increasingly be adopted by both supervisors and banks, given regulatory developments at national and EU level, including the NFRD. For instance, the NFRD requires banks to change reporting to focus more on the impact of their lending, underwriting and investing activity rather than the impact on their own operations. One interviewed civil society stated that the purpose of financial regulation is not only to stabilise the financial system but also to safeguard societal interests and, therefore, a double materiality perspective must be applied.

Several supervisors mentioned that they consider the concepts of single and double materiality to be interlinked. For example, if a bank grants credit to a counterparty contributing in a negative way to an ESG issue, this can translate into financial risk – for example, through reputational risks that may materialise for the bank.

Although interviewed participants acknowledged the impact ESG risks can have on financial and non-financial risks – as opposed to considering ESG risk as a standalone risk type – the magnitude of this impact is unclear and, in general, this discussion is still at an early stage. Double materiality adds an additional impact – i.e. on broader society – which is not covered via traditional risk types.

All respondent supervisors agree that financial risks from climate change fall under the remit of regulation and supervision. This is also recognised in other reports, such as the NGFS report, whereby it is stated that NGFS members acknowledge that “climate-related risks are a source of financial risk. It is therefore within the mandates of central banks and supervisors to ensure the financial system is resilient to these risks.”<sup>198</sup> Regarding other ESG issues, some supervisors stated that these cannot be considered as within the remit of supervision as long as they are not considered to imply direct financial risks.

Among civil society organisations, there are ongoing discussions on the topic, with some proposing that the European Commission should renew and link the mandates of the European Supervisory Agencies (ESAs) to enable a co-ordinated approach to climate-

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<sup>197</sup> Change Finance (n.d.). *Saving our planet*. Available at: <https://www.changefinance.org/it/solution/saving-our-planet-2/>.

<sup>198</sup> Network for Greening the Financial System (2019). *A call for action – Climate Change as a source of financial risk*. Available at: <https://www.banque-france.fr/en/financial-stability/international-role/network-greening-financial-system/first-ngfs-progress-report>.

related risk.<sup>199</sup> As specified in a paper by the Centre for Research on Multinational Corporations (SOMO), while some supervisors deem ESG risk supervision as relevant for financial stability, and thus as already included in their current supervisory mandate, many supervisors regard an explicit mandate necessary to “actually go and apply ESG supervision”.<sup>200</sup> As further detailed in the paper, current proposals to review EU laws on establishing the ESAs may not be sufficient; amendments of supervisory “tasks, powers, activities and functioning” would also be useful.

#### 5.2.2.2 ESG risk transmission channels

Understanding the transmission channels of ESG risks is the basis for analysing the relevance of ESG risks for prudential supervision, and how they impact the financial system and banks in particular.

According to respondent supervisors, these risks typically materialise through traditional risk types, such as credit, market and operational risks. *Figure 52* provides an overview of the relevance of ESG risks for traditional risk types based on responses from supervisors. Credit risk was considered the risk type for which ESG risks are perceived as most relevant, with respondents noting that financial institutions are being exposed to credit risk from environmental issues in particular. This was followed by concentration risk and reputational risk, which were deemed by supervisors as equally relevant. Next follows market risk, legal risk / conduct / compliance risk, and strategic risk, which, on average, were also scored quite highly and considered as equally relevant. Lastly, operational risk, and liquidity risk were perceived as least relevant.

Comparing the responses from supervisors with those from banks (see section 4.2.2.3), two observations stand out. Both supervisors and banks consider ESG risks as most relevant to credit risk. One notable difference is that supervisors consider ESG risks, on average, as being more relevant for each risk type. This is reflected in supervisors’ scores, which range from 3.1 to 4.9, whereas respondent bank scores range from 1.7 to 4.0.<sup>201</sup>

Figure 52: ESG relevance to risk types<sup>202</sup>

Risk Relevance	Score	Description	Illustration (not exhaustive)
<b>Credit risk</b>	4.9/5	Loss due to the failure of a counterparty to meet its agreed obligations to pay the bank	ESG component may affect PG/LGD calculation (e.g. damages to borrowers’ assets may reduce their collateral value / ability to pay loans)
<b>Concentration risk</b>	4.3/5	Potential for loss in a bank’s portfolio due to concentration to a single counterparty, sector or country	Rapid increase in risk exposure across certain ESG friendly asset classes through thematic investments lacking diversification (e.g. renewables)

<sup>199</sup> See for example: E3G (2020). *A vision for sustainable finance in Europe*. Available at: <https://www.e3g.org/wp-content/uploads/E3G-A-Vision-for-Sustainable-Finance-in-Europe-Full-Report.pdf>.

<sup>200</sup> Centre for Research on Multinational Corporations (SOMO) (2018). *Supervising the environmental, social and governance impact of Finance - How to reinforce the role of European and national supervisory authorities?* Available at: <https://www.somo.nl/wp-content/uploads/2018/08/ESAs-and-national-supervisors-role-for-sustainability-final-version.pdf>.

<sup>201</sup> It should be noted that a number of respondents declined to score the relevance of the various risk types, as no quantitative analysis has been conducted to back up such an assessment.

<sup>202</sup> Question: Where do you consider ESG as a significant driver of risk among traditional risk types? Please provide a score on ESG relevance to each risk type on a scale from 0 to 5, with 0 being not relevant and 5 being very relevant). The score illustrated is the average score provided by respondents. Sample size: 11. Please note not all respondents scored all risk types.

<b>Reputational risk</b>	4.3/5	Loss of earnings or market capitalisation as a result of stakeholders taking a negative view of the organisation	Decrease in corporate valuation due to scandals / increased scrutiny by clients and customers on ESG issues (e.g. pollution, investments in controversial sectors, etc)
<b>Market risk</b>	4.0/5	Loss of earnings or economic value due to adverse changes in financial market rates or prices	Asset valuations as well as risk-returns across equity, bonds, commodity affected by ESG (e.g. energy and commodity prices by low-carbon transition)
<b>Legal risk / Conduct / Compliance Risk</b>	4.0/5	Loss due to the breach of contractual obligations or loss due to a breach of regulatory practices and/or code of conduct and result into civil fines, sanctions, etc	Incurrence of fines due to lack of consideration on compliance with "E&S international standards and regulation on G"
<b>Strategic Risk</b>	4.0/5	Loss due to poor business decision management or from pursuit of an unsuccessful business plan	Failure to factor in rising ESG themes, leading to misalignment of business model to market best practice (e.g. not being able to finance the environmental transition)
<b>Operational, IT &amp; Cyber Security</b>	3.3/5	Loss resulting from inadequate procedures, systems or policies and/or from a breach of confidentiality, integrity of information systems	Fraudulent activity within the bank and/or fraud in relation to improper utilisation of financing, originally granted for the ESG scope support.
<b>Liquidity risk</b>	3.1/5	Loss due to the failure of a bank to meet short term financial demands	ESG asset classes/instruments may be prioritised above traditional asset classes and / instruments affecting the bank's liquidity or funding

Source: BlackRock FMA analysis

Figure 53 lists some comments provided by supervisors in relation to transmission channels for ESG risks. Overall, respondent supervisors repeatedly highlighted that scores and opinions shared in relation to these topics are based on judgement rather than empirical evidence. In addition, some supervisors declined to score these transmission channels, citing a lack of sufficient work in this area to establish a coherent viewpoint.

Figure 53: Illustrative comments on ESG relevance for risk types

**What approach is your organisation taking to map ESG topics and their relevance to traditional financial and non-financial risk types?**

Credit Risk: "We have assessed the mortgage performance linked to energy efficiency and flood risk. Both LGDs and PDs are likely to be impacted by ESG"

Concentration Risk: "The more an institution is exposed to specific vulnerable sectors and counterparties, the higher the impact from ESG risks will be if these materialise"

Market Risk: "Increased volatility and abrupt corrections of market prices of bonds and equities of issuers due to the impact of ESG issues may lead to market losses"

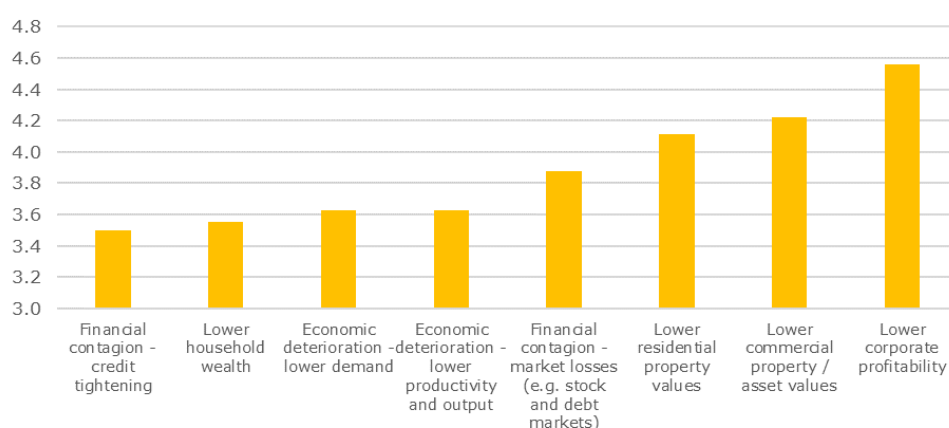
*Strategic Risk: "We see the strategic response to climate change as the key mitigant to the future crystallisation of risk. It is vital that firms respond by adjusting their business models appropriately, both from a single and double materiality perspective"*

*Operational Risk, IT & Cyber Security: "Financing carbon intensive industries may cause adverse publicity, leading to damages in the institution's premises and disruption of its operations from activists movements and stakeholders' protests"*

ESG risks may impact individual banks balance sheets and the broader economy through various transmission channels. As shown in *Figure 54*, on average, respondent supervisors consider lower corporate profitability to be the most important transmission channel for ESG risks, which is in line with banks' perceptions (see section 4.2.2.3). In addition, lower commercial property / asset values, as well as lower residential property values were identified by interviewed supervisors as the most relevant transmission channels for ESG risks.

An example provided by a respondent illustrated that individuals subject to physical and transition risks (e.g. those working in carbon-intensive sectors) may likely face higher unemployment due to structural changes, which ultimately may lead to higher credit default risk. In addition, supervisors mentioned that regulation related to energy efficiency – which could result in stranded assets –, or physical damages to buildings from weather events, may result in lower commercial asset values, ultimately increasing LGDs. In this context, one of the interviewed academics highlighted that stranded assets are likely to pose a major threat to banks and to the financial sector going forward, given that ESG risks – and climate-related risks, in particular – are not yet sufficiently reflected in existing risk management models. In addition, the former governor of the Bank of England, Mark Carney, has warned of a climate 'Minsky moment', whereby a disorderly transition towards decarbonisation could bring about the sudden recognition of the scale of stranded assets.<sup>203</sup>

**Figure 54: Main transmission channels of ESG risks mentioned by supervisors<sup>204</sup>**



Source: BlackRock FMA analysis

<sup>203</sup> Bank of England (2020). *The road to Glasgow*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/speech/2020/the-road-to-glasgow-speech-by-mark-carney.pdf?la=en&hash=DCA8689207770DCBBB179CBADBE3296F7982FDF5>.

<sup>204</sup> Question: *What do you believe to be the main transmission channels for ESG risks? Please provide a score on the relevance of these transmission channels on a scale from 0 to 5, with 0 being not relevant and 5 being very relevant.* Scores were aggregated to calculate averages. Sample size: 9.



At the same time, many respondents highlighted the challenges of understanding and assessing transmission channels for ESG risks. Several supervisors stated that no quantitative analysis had been conducted on this matter so far with reasons given as, among others, the complexity of the topic given the high interconnectedness of the mentioned transmission channels. From a prudential supervision standpoint, it was highlighted that the materiality and transmission of ESG risks depend strongly on individual institution's circumstances, including balance sheet composition and geographical exposure.

In addition, respondents stated that the relative importance of transmission channels may vary across the E, S, and G pillars, and that any predictions on the way ESG factors manifest in transmission channels would be hard to predict, given that the consequences of ESG factors are uncertain due to their long-term nature. Finally, many respondents mentioned that there may be additional, yet unidentified, transmission channels.

### 5.2.2.3 ESG risk indicators

An assessment of the exposure of supervised banks to ESG risks by supervisors should typically include quantitative and qualitative elements. Many supervisors mentioned that there is a need for robust metrics and methodologies by which financial institutions can measure and disclose on their sustainability related information. This need for commonly adopted quantitative indicators and methodological tools is also noted in the EBA discussion paper on the management and supervision of ESG risks, which recognises their importance for the "incorporation of sustainability-related aspects into financial decision-making and supervision as well as to ensure a level-playing field, prevent the risks of 'green washing' and enhance transparency, customer protection and disclosures".<sup>205</sup>

However, the majority of interviewed supervisors do not yet have any quantitative indicators in place to monitor and assess the exposure of supervised banks to ESG risks. More specifically, many supervisors stated that developments on the E pillar, while advancing in particular for climate, are still at an early stage, whereas those related to the S and G pillar are more qualitative in nature and thus more difficult to quantify from a risk perspective. To this end, despite the relatively early stage of advancement, the findings of the Basel Committee on Banking Supervision (BCBS) survey on current initiatives in relation to climate-related financial risks show that an "overwhelmingly large share of members have conducted research related to the measurement of climate-related financial risks".<sup>206</sup>

Moreover, data quality and availability issues prevail. Several European supervisors emphasised that they are currently involved in working groups at an international and European level to identify and develop quantitative risk indicators for the assessment of ESG risks, with the work performed by the NGFS and BCBS repeatedly referenced. For example, in its guide on climate-related and environmental risk, the ECB "acknowledges that the management and disclosure of climate-related and environmental risks, and also the methodologies and tools used to address them, are currently evolving and are

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<sup>205</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>206</sup> Basel Committee on Banking Supervision (2020). *Climate-related financial risks: a survey on current initiatives*. Available at: <https://www.bis.org/bcbs/publ/d502.pdf>.



expected to mature over time”.<sup>207</sup> In this respect, the ECB is currently in the process of expanding its quantitative risk indicators to include climate-related and environmental risks, for example, by trying to translate aspects, such as intensity of carbon emissions or exposure to transition risk, into risk indicators.<sup>207</sup> Examples of climate-related and environmental KPIs used by banks include the carbon intensity of assets or the average energy label of their mortgage portfolios.

Various supervisors also highlighted the importance of the NGFS within this context, whose stocktake exercise conducted among supervisors provides a general understanding of the type of indicators looked at by supervisors. As illustrated in the NGFS study<sup>208</sup>, there are currently three main types of indicators used by supervisors: i) Metrics related to sector exposure, ii) metrics related to country exposure, and iii) metrics related to ESG standards achievement. Examples of these include: i) The carbon-intensive sectors to which regulated financial institutions are exposed; ii) the countries vulnerable to climate change<sup>209</sup> in which their activities are located; iii) the energy label distribution within the commercial real estate portfolio of a financial institution; and iv) the exposure of financial institutions and households to flood.

The conducted interviews and research indicate that, while supervisors are currently experimenting with the underlying methodologies, for instance assessing vulnerability based on exposure to sectors with different levels of GHG emissions intensity and location of collateralised household exposures, there is no established standard at this point, and according to many respondents, the identification of risk indicators is still at an early stage.

#### 5.2.2.4 Qualitative assessment of supervised banks

A significant part of supervisors’ assessment of banks is based on qualitative elements, which are needed to assess whether sound processes to manage ESG risks are in place. To this end, the integration of ESG risks in a bank’s business strategy, as well as risk governance and risk strategy, were mentioned as being among the most important elements by respondents<sup>210</sup>, which is consistent with guidelines from the EBA<sup>211</sup>, according to which institutions should take into account material factors when determining their business strategy. This is further reiterated in the ECB Guide on climate-related and environmental risks which states that, when determining and implementing their business strategy, “institutions are expected to integrate climate-related and environmental risks that materially impact their business environment in the short, medium or long term.”<sup>212</sup>

Another area being assessed by supervisors relates to the definition and identification of ESG risks by supervised banks. For example, according to the draft ECB Guide, when

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<sup>207</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

<sup>208</sup> Network for Greening the Financial System (2020). *Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_guide\\_for\\_supervisors.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf).

<sup>209</sup> According to, for example, the Notre Dame Global Adaptation Initiative (ND-GAIN) Index or Standard & Poor’s methodology.

<sup>210</sup> Question: *What are the key elements you consider in order to assess whether supervised entities have a sound risk management in place to manage ESG risks? Please provide a score on the relevance of these elements on a scale from 0 to 5, with 0 being not relevant and 5 being very relevant.*

<sup>211</sup> EBA Guidelines on internal governance (EBA/GL/2017/11).

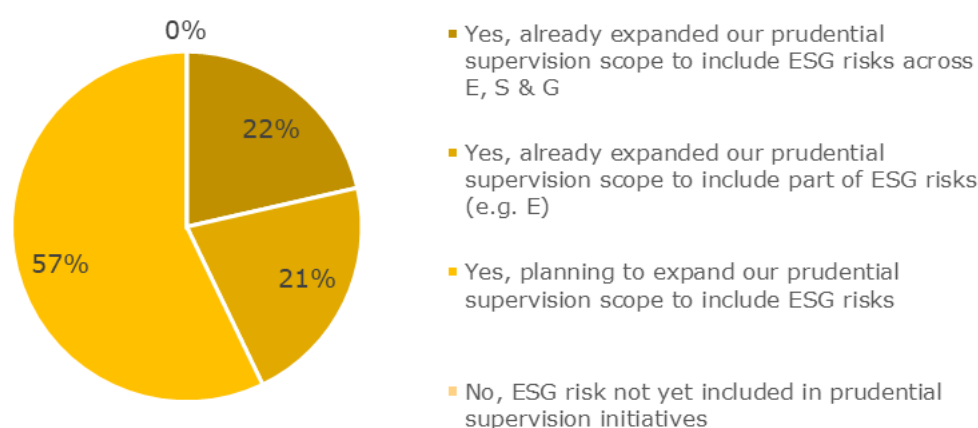
<sup>212</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

evaluating their business environment, institutions are expected to identify risks arising from climate change and environmental degradation.<sup>213</sup>

In their qualitative assessment of supervised banks, some supervisors plan to take into account current measurement, assessment, and risk management approaches of ESG risks. For instance, one supervisor stated to assess whether climate-related risk has been included in the risk processes, including risk appetite, and whether specific scenario analyses are being conducted for climate-related risk. One supervisor specified that it undertakes the ESG risk assessment in a qualitative manner using the institutions' ICAAP reports and the disclosures in the annual reports on Corporate Social Responsibility.

As shown in *Figure 55*, 22% of interviewed supervisors stated that they have expanded the scope of their prudential supervision to explicitly include ESG risks all three pillars – with another 21% having expanded the scope to include one pillar specifically – and accordingly they will increase expectations of banks in the coming years in this context. The remainder stated that they plan to expand the scope of their prudential supervision to cover ESG risks, although they did not specify associated time horizons. Within the expansion, several supervisors describe the ambition to increase engagement with the industry to raise awareness, build knowledge, and formulate supervisory expectations, particularly on environmental issues. Others, who already incorporate climate-related risks, mentioned plans to potentially expand their prudential risk work to cover broader environmental issues such as biodiversity. Whilst most respondents have started with a qualitative assessment, several supervisors plan to introduce more quantitative elements and conduct stress tests.

**Figure 55: Ongoing initiatives to expand scope of prudential supervision**<sup>214</sup>



Source: BlackRock FMA analysis

<sup>213</sup> European Central Bank (2018). *ECB Guide to the internal capital adequacy assessment process (ICAAP)*. Available at: [https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.icaap\\_guide\\_201811.en.pdf](https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.icaap_guide_201811.en.pdf).

<sup>214</sup> Question: *What sub-categories (of E/S/G) do you focus on? Please tick E/S/G themes considered relevant from a risk management perspective and rank from 1 (highest focus) to 6 (lowest focus) the ESG thematic pillars.* Sample size: 14.

### 5.2.3 ESG governance & strategy

#### 5.2.3.1 ESG risk prudential supervision strategy

As described in the NGFS guide for supervisors published in May 2020, supervisors' own governance and setup in order to adequately address climate-related and environmental risks is an important element of supervisory advancement of ESG topics.<sup>215</sup>

All respondent supervisors mentioned the increasing importance of ESG risks, and the need to further integrate ESG risks into prudential supervision, although few have communicated an explicit strategy. Consequently, all interviewed supervisors stated that they have plans to further integrate ESG risks within the scope of their definition (as outlined in section 5.2.2.1), within prudential supervision in the future. Despite differing approaches adopted, and varying levels of advancement on the path of ESG integration, most supervisors stated that further improvements are required, as prudential supervision in the context of ESG risk is in the early stages of the process. One supervisor noted that supervisors, regulators, and supervised banks alike are all learning by doing. Of the sample of analysed supervisors, 33% have indicated plans to integrate ESG risk into their prudential supervision strategy.

In terms of the approach adopted towards integration of ESG risks into prudential supervision, broadly two groups seem to exist. The first group comprises supervisors that have an ESG strategy, specific initiatives, and explicit timelines in place, and who strive to drive the topic of ESG integration within prudential supervision as well as other elements of their remit more actively, where relevant. Within the EU, these tend to be mostly supervisors from larger jurisdictions. Rationales provided for this approach include i) the belief that addressing the topic rather sooner than later allows one to influence developments on a wider scale, ii) the need to address specific ESG risks – such as risk from climate change – in the short term, as well as iii) a need to address an increasing number of requests or expectations from major stakeholders, including governments and civil society organisations in the context of ESG. Outside of the EU, for example, the Monetary Authority of Singapore (MAS) is currently working on a comprehensive, long-term strategy. Part of this is a 'Green Finance Action Plan', where one of the aims is to provide environmental risk management guidelines to the banking sector.<sup>216</sup>

The other group maintains a 'wait and see approach' for now and intend to take more action once further guidance and regulation has been published. Reasons for this approach mentioned by respondents include limited resources to dedicate to the topic, and concerns around the need for potential revisions of their strategic approach in the future given the various differing developments on the treatment of ESG risks that may arise for example on EU level. This group entails mostly supervisors from smaller EU jurisdictions. For example, many EU supervisors indicated the intention to await further EU legislative and regulatory developments, specifically the EBA mandates in the context of the revision of

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<sup>215</sup> The paper also provides an overview of recommended approaches to governance for supervisors; in particular, the report recommends that "a supervisors' board of directors is fully on board and provides a clear steering", and also advocates for dedicated organisational structures, giving examples as networks, internal hubs, and dedicated units. See: Network for Greening the Financial System (2020). *Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_guide\\_for\\_supervisors.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf).

<sup>216</sup> Monetary Authority of Singapore (n.d.). Webpage: *Sustainable Finance*. Available at: <https://www.mas.gov.sg/development/sustainable-finance>.

the CRR 2<sup>217</sup> and CRD 5<sup>218</sup>. As part of this mandate, the EBA will assess the potential inclusion of ESG risks in the supervisory review and evaluation process performed by competent authorities”, “specify ESG risks’ disclosures as part of the comprehensive technical standard on Pillar 3”, and “assess whether a dedicated prudential treatment of exposures related to assets or activities substantially with environmental and/or social objectives would be justified (as a component of Pillar 1 capital requirements).”<sup>219</sup>

There are notable differences in terms of scope and prioritisation of ESG risks among the supervisors who expressed that they have a formalised ESG risk strategy in place. Some supervisors approach this topic from a holistic view, and this can often be observed via guidance or ‘good practice’ publications. Examples include the BaFin guidance on sustainability risks<sup>220</sup>, and the Austrian FMA cross-sector guide for handling sustainability risks<sup>221</sup>. Other supervisors are prioritising the ‘E’ pillar for now, and within that pillar there is often an emphasis on climate. Examples include the ECB’s guide on climate-related and environmental risks<sup>222</sup>, the ACPR guide on good practices for the governance and management of climate-related risks<sup>223</sup>, the UK PRA supervisory expectations which sets out how firms should manage the financial risks from climate change<sup>224</sup>, and MAS’ proposed guidelines on environmental risk management for banks.<sup>225</sup>

Some supervisors currently have a climate-related risk strategy, with a plan to translate this into a more granular supervisory strategy at a later point. One stated reason for this approach is that tackling climate-related risk and or environmental issues alone is already a challenge for supervised institutions, and that it might be more effective for supervised institutions to develop capabilities in one area, such as climate, before broadening and extending the coverage to other ESG areas. Another reason stated by supervisors for focusing on environmental issues is that they see key differences in the characteristics of the different ESG pillars. For example, climate-related risk is seen as comparably easier to quantify than others at this point. One supervisor stated that, as ESG risks are not a homogenous category, each pillar will need to be tackled separately, and that the way to

<sup>217</sup> European Banking Authority (n.d.) *Interactive Rulebook - Capital Requirements Regulation 2 (CRR 2)*, Available at: <https://eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/100427>.

<sup>218</sup> Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures. OJ L 150/253, 7.6.2019, p. 253–295 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L..2019.150.01.0253.01.ENG&toc=OJ:L:2019:150:TOC>.

<sup>219</sup> EBA (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

<sup>220</sup> BaFin (2019). *Guidance Notice on Dealing with Sustainability Risks*. Available at: [https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2019/meldung\\_191220\\_MB\\_Nachhaltigkeitrisiken\\_en.html](https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2019/meldung_191220_MB_Nachhaltigkeitrisiken_en.html).

<sup>221</sup> Österreichische Finanzmarktaufsichtsbehörde (2020). *FMA guide for managing sustainability risks*. Available at: <https://www.fma.gv.at/en/fma/fma-guides/>.

<sup>222</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

<sup>223</sup> ACPR (2020). *Governance and management of climate-related risks by French banking institutions: some good practices*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/20200525\\_synthese\\_gouvernance\\_anglais.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20200525_synthese_gouvernance_anglais.pdf).

<sup>224</sup> Prudential Regulation Authority (2019). *Supervisory Statement | SS3/19 Enhancing banks’ and insurers’ approaches to managing the financial risks from climate change*. Available at: <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf?la=en&hash=7BA9824BAC5FB313F42C00889D4E3A6104881C44>.

<sup>225</sup> Monetary Authority of Singapore (2020). *Proposed Guidelines on Environmental Risk Management (Banks)*. Available at: <https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Consultation-Papers/2020/Consultation-Paper-on-Proposed-Guidelines-on-Environmental-Risk-Management-for-Banks.pdf>.

address each pillar will probably require more regulatory and supervisory emphasis going forward.

Overall, respondent supervisors mentioned, for example, the following areas as priorities in the context of ESG integration into banking supervision: i) Understanding the impact of ESG risks on supervised institutions, ii) developing know-how within the supervisory institutions, as well as banks, and participating in standard setting, iii) enhancing supervision & supervisory guidance, reporting and disclosure, and iv) conducting engagement activities, both with supervised banks in order to raise awareness, as well as with international bodies and working groups.

#### 5.2.3.2 Internal ESG risk capabilities

When asked about their assessment of their own internal ESG capabilities, approximately half of the interviewed supervisors stated that they have sufficient capabilities, but often commented that the needs and requirements could change significantly once ESG becomes more integrated within supervisory processes. In this context, supervisors highlighted three main areas for required capabilities: i) more (and more specialised) resources ii) additional and higher quality data, and iii) new methodologies for ESG risks.

Currently, most supervisors do not have dedicated teams or individuals allocated to ESG, but rather use existing setups and resources to address the topic. It was also stated by some respondents that even if there is a sufficient number of employees involved in ESG topics, they are often in different teams across the organisation, with dual roles and no direct lines of reporting. Another supervisor emphasised the need for ESG specialists (e.g. climate scientists), which are not too numerous and usually not employed in the financial sector. Another respondent believes that, although capabilities and resources might currently be sufficient, as activities in relation to ESG risks are still considered at a more conceptual and design level, resources will quickly turn out to be insufficient once ESG risks become further integrated into day-to-day supervisory approaches. Many respondents expressed the benefits of having an internal senior sponsor for the topic.

Another obstacle related to internal ESG capabilities, which affects supervisors and supervised institutions alike, is the lack of ESG-related data. Most supervisors mentioned that consolidation of ESG-related data, and identifying and addressing data gaps, would be a key element in developing internal capabilities. To do so, one supervisor has decided to develop an internal bespoke sustainable finance hub. Another supervisor proposed the central and public pooling of raw sustainability data, which could be contributed to by all relevant stakeholders.

An example of a data availability challenges for supervisors is outlined in the NGFS guide for supervisors on integrating climate-related and environmental risks, where it is stated that in order to measure transition risks accurately, there is a “need for firm-by-firm carbon data” but that “carbon-emissions data are available only for some of the larger listed companies.”<sup>226</sup>

The importance of the development of new methodologies for ESG risks was highlighted by most respondents, although the focus remains mostly on climate-related risk at this point in time. For example, one respondent stated that it is difficult to adapt frameworks which have previously been applied to other topics – such as the conventional stress test

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<sup>226</sup> Network for Greening the Financial System (2020). *Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_guide\\_for\\_supervisors.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf).

framework – to a topic like climate change due to the associated long-term time horizons and other methodological challenges. The time horizon of a conventional stress test is typically two to three years<sup>227</sup>, whereas proposed climate stress tests span decades (see section 5.2.4.2.2 for further details on proposed climate stress tests).

To enhance ESG capabilities, supervisors consider two key enablers as relevant: i) In-house ESG knowledge development and associated trainings, as well as ii) international cooperation. With respect to the former, many supervisors have formed internal working groups in order to enhance and consolidate knowledge on ESG topics, while others are providing specialised trainings focused on supervisory, regulatory and financial stability topics related to ESG to their employees.

All respondents agree that international cooperation such as membership and interaction with other organisations, including national and international working groups (e.g. via NGFS, EBA, SSM, FSB, or the Basel task-force, to name a few) is important for driving the integration of ESG risk into prudential supervision, and harmonising various views and approaches. Most supervisors referenced the NGFS in this context, which currently consists of 72 members and 13 observers.<sup>228</sup>

Collaboration between supervisors and regulators, as well as between supervisors and their supervised banks, is seen as an important element of a successful supervisory strategy in relation to ESG. For example, the non-binding recommendations of the NGFS for supervisors “aim to contribute to developing an international approach that is as harmonised as possible”.<sup>229</sup> Respondent banks and supervisors alike seem to agree that harmonisation and collaboration in this developing field is critical for its success.

Many participants stated that they already see evidence of a good level of collaboration between supervisors and banks, something which is not always observed to a similar extent in the context of other supervisory initiatives. One supervisor mentioned that a cooperative stance is frequently encountered with the aim to collectively solve the challenges of this difficult topic. For instance, the PRA and Financial Conduct Authority (FCA) jointly established the Climate Financial Risk Forum (CFRF) – including banks, insurers, and asset managers, as well as trade bodies – in order to “build capacity and share best practices to advance financial sector responses to the financial risks from climate change.”<sup>230</sup>

## **5.2.4 Supervisors’ assessment of ESG risk**

### **5.2.4.1 Measurement & Assessment**

#### **5.2.4.1.1 ESG risk measurement and scenario analysis methodology**

Based on supervisors’ responses, ESG Risk measurement approaches prescribed by supervisors are at an early stage, with reasons given being, among others, a lack of a shared definition of ESG risk and a simultaneous lack of quantitative and qualitative metrics in this field. All interviewed supervisors indicated that, apart from a general expectation that supervised institutions adequately measure their exposure to ESG risk,

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<sup>227</sup> Bank for International Settlements (2017). *Supervisory and bank stress testing: range of practices*. Available at: <https://www.bis.org/bcbs/publ/d427.pdf>.

<sup>228</sup> As of 18 September 2020.

<sup>229</sup> Network for Greening the Financial System (2020). *Guide for Supervisors Integrating climate-related and environmental risks into prudential supervision*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_guide\\_for\\_supervisors.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_for_supervisors.pdf).

<sup>230</sup> Prudential Regulation Authority (n.d.). Webpage: *Climate Financial Risk Forum*. Available at: <https://www.bankofengland.co.uk/climate-change/climate-financial-risk-forum>.



there is little prescribed guidance, with methodological freedom advocated by most respondents at this point.

Instead, many supervisors intend to guide supervised institutions on elements to be considered in their risk management approach. Such factors to be considered are typically communicated through supervisory expectations, guidelines, or good practice publications, and some supervisors indeed have issued such publications (see section 5.2.5). Others have chosen not to publish bespoke guidance, and in the EU specifically await the outcome of the EBA mandates (see section 5.2.5).

As an example, the BaFin Guidance Notice on Dealing with Sustainability Risks sets out some indicative examples of methods which could be considered by banks for managing sustainability risks.<sup>231</sup> These methods include:

- i. Exclusion criteria/limits – i.e. the identification of certain companies, sectors, etc., excluded as investments or subject to investment limits due to not meeting certain sustainability criteria;
- ii. Positive lists – i.e. the identification of certain companies, sectors, etc., preferred for investment due to the fulfilment of certain sustainability criteria;
- iii. Best-in-class approach – i.e. similar to positive lists, but with a focus on the identification of certain companies, sectors, etc., who outperform their peer group on the basis of certain sustainability criteria;
- iv. Standards based screening/ESG integration – i.e. similar to items (i)-(iii), except the sustainability criteria utilised are not developed in-house but correspond to internationally recognised standards; and
- v. Engagement – i.e. the encouragement of companies, sector organisations, etc. to adopt a more sustainable approach by, for example, exercising voting rights or engaging in dialogue with said companies or sector organisation.

The guidance emphasises that the methods constitute potential examples only, and the ultimate decision as to the application of methods used by an entity should depend on relevance to the business model of the entity.

Some EU supervisors indicated that banks should follow the recommendations of the EBA Action plan, meaning, in the context of sustainable finance, that strategies and risk management, disclosure of key metrics, and scenario analysis should already be factors under consideration by banks prior to the completion of the EBA mandates. Furthermore, supervisors in the EU highlighted the expectation that banks follow the final EBA Guidelines on loan origination and monitoring, whereby institutions are required to include ESG factors in their risk management policies, including credit risk policies and procedures.<sup>232</sup> The EBA discussion paper on the management and supervision of ESG risks delineates three core tools for the assessment and evaluation of ESG risks: i) portfolio alignment method (see section 4.2.4.1.2), ii) risk framework method (including climate-stress testing) (see later in this section and section 5.2.4.2.2), and iii) exposure method, which

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<sup>231</sup> BaFin (2019). *Guidance Notice on Dealing with Sustainability Risks*. Available at: [https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2019/meldung\\_191220\\_MB\\_Nachhaltigkeitsrisiken\\_en.html](https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2019/meldung_191220_MB_Nachhaltigkeitsrisiken_en.html).

<sup>232</sup> EBA (2020). *Guidelines on loan origination and monitoring*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Guidelines/2020/Guidelines%20on%20loan%20origination%20and%20monitoring/884283/EBA%20GL%202020%2006%20Final%20Report%20on%20GL%20on%20loan%20origination%20and%20monitoring.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/Guidelines%20on%20loan%20origination%20and%20monitoring/884283/EBA%20GL%202020%2006%20Final%20Report%20on%20GL%20on%20loan%20origination%20and%20monitoring.pdf).

is “a tool that banks can apply directly to the assessment of individual clients and individual exposures”.<sup>233</sup> This section focuses on the risk framework method.

All interviewed supervisors identified scenario analysis and stress testing as core components of an effective ESG risk measurement strategy, as these tools assist supervisors and supervised institutions in their understanding of vulnerabilities of supervised institutions to ESG risks, and how they affect a bank’s business model, strategy and risk management. Considerations relating to the integration of ESG risks into supervisory stress testing are addressed in section 5.2.4.2.2. Scenario analysis was seen by respondents as particularly important in the context of ESG, as a forward-looking perspective is deemed to be essential. It was stated that, given the distinct nature of climate change, historical data are of limited use to predict the future. The NGFS guide to climate scenario analysis for central banks and supervisors also mentions that distinct characteristics of climate change “are not captured by risk assessment approaches that rely on top down modelling and historical trends”.<sup>234</sup> As such, some supervisors stated that at this point, scenario analysis is the most appropriate tool to quantify the impact of climate change on banks. Indeed, some supervisors have included – or plan to include – scenario analysis considerations in supervisory guidelines or expectations.

As an example, the PRA, in its supervisory expectations on banks’ and insurers’ approaches to managing the financial risks from climate change, explicitly sets scenario analysis apart from risk management as one of the four key expectations. Specifically, where proportionate, firms are expected to use scenario analysis to inform business strategy setting, and risk assessment and identification. Supervised institutions must assess a range of different scenarios associated with the transition to a low-carbon economy, as well as a path where no transition occurs. Analysis is expected to be conducted via a short-term assessment – i.e. the financial impact from climate change within a firm’s existing business planning horizon – as well as via a long-term assessment; this latter assessment should consider a range of climate-related scenarios – for example, an average global temperature increase in excess of 2°C, as well as the impact of a disorderly transition to a low-carbon economy – and should span a period of decades. The PRA expects this to be a qualitative exercise to “inform strategic planning and decision making”.<sup>235</sup>

Other supervisors have similarly set out specific expectations in relation to scenario analysis and stress testing, including the ECB<sup>236</sup> and BaFin<sup>237</sup>, and the EBA has been

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<sup>233</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at:

[https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>234</sup> Network for Greening the Financial System (2020). *Guide to climate scenario analysis for central banks and supervisors*. Available at:

[https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_guide\\_scenario\\_analysis\\_final.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_guide_scenario_analysis_final.pdf).

<sup>235</sup> Prudential Regulation Authority (2019). *Supervisory Statement | SS3/19 Enhancing banks’ and insurers’ approaches to managing the financial risks from climate change*. Available at:

<https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2019/ss319.pdf?la=en&hash=7BA9824BAC5FB313F42C00889D4E3A6104881C44>.

<sup>236</sup> “Institutions with material climate-related and environmental risks are expected to evaluate the appropriateness of their stress testing, with a view to incorporating them into their baseline and adverse scenarios”. European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related%20risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related%20risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).

<sup>237</sup> “Stress tests may include specific sensitivity and scenario analyses to examine the entity’s ability to withstand adverse events or scenarios caused by physical and transition risks. Stress tests should therefore also take account of scenarios reflecting plausible future developments, and make greater use of long-term scenario analyses”. BaFin (2020), *Guidance Notice on Dealing with Sustainability Risks*. Available at:



mandated to develop a dedicated climate stress test and scenario analyses.<sup>238</sup> One interviewed civil society, while welcoming guidelines on the use of scenario analysis, believes these should be more stringent. The participant stated that some banks are using a below 2-degree scenario to test how physical risks will impact their activities – which they deem insufficient –, and believes that scenarios representing a 3 to 4-degree rise in global temperature should be adopted. The use of these scenarios in the context of climate stress testing is explored in section 5.2.4.2.2. *Figure 56* provides insight into the climate scenarios developed by the NGFS.

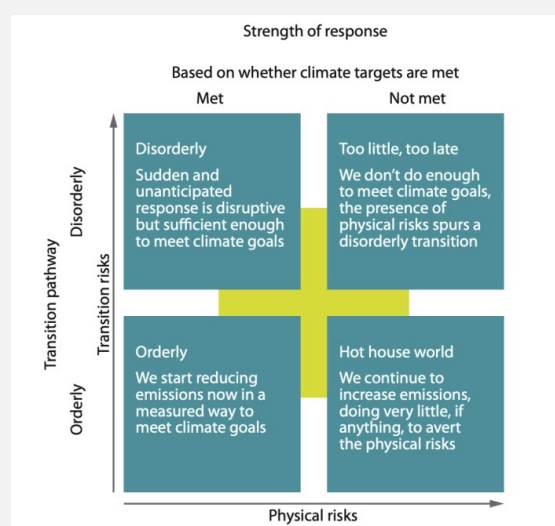
**Figure 56: Case study on NGFS climate scenarios**

The NGFS developed the NGFS Climate scenarios, based on existing research literature, to provide a common starting point for the analysis of climate-related risks. This first set of climate scenarios for forward-looking climate-related risk assessment was developed primarily for the use of supervisors and central banks, although they may be useful for a wider set of stakeholders.

Two key dimensions were identified for the formulation of these scenarios:

- i. whether the transition occurs in an orderly or disorderly manner (transition pathway);
- ii. the level of action taken to limit greenhouse gas emissions (strength of response).

This is presented in the below climate scenario framework.



Three reference scenarios were selected from the confluence of these dimensions:

- **An orderly transition:** assumes climate policies are introduced early and become gradually more stringent. Net zero CO<sub>2</sub> emissions are achieved before 2070, giving a 67% chance of limiting global warming to below 2°C. Physical and transition risks are both relatively low;
- **A disorderly transition:** assumes climate policies are not introduced until 2030. Since actions are taken relatively late and limited by available technologies, emissions

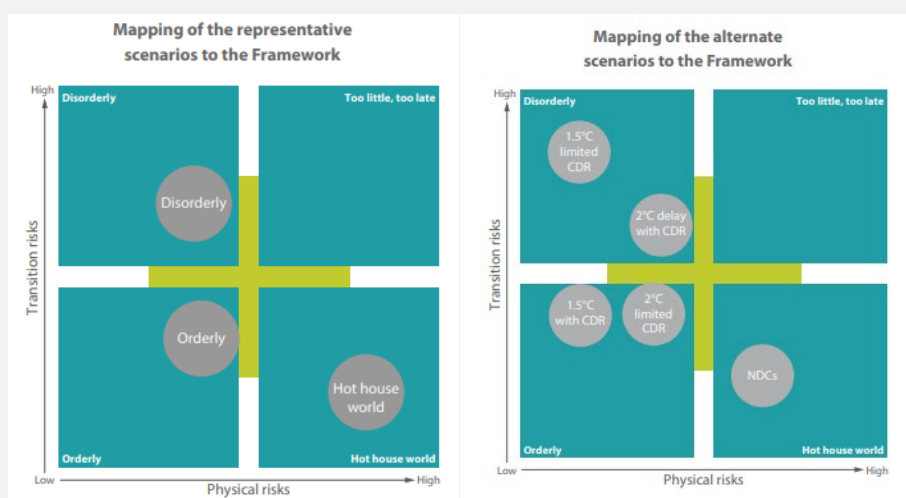
[https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/dl\\_mb\\_Nachhaltigkeitsrisiken\\_en.html;jsessionid=D10C4B8BE5EB1B0B694E6C712CC988D5.2\\_cid393?n9866146](https://www.bafin.de/SharedDocs/Downloads/EN/Merkblatt/dl_mb_Nachhaltigkeitsrisiken_en.html;jsessionid=D10C4B8BE5EB1B0B694E6C712CC988D5.2_cid393?n9866146).

<sup>238</sup> "The mandate in Article 98 of CRD 5 also requires from the EBA to develop appropriate qualitative and quantitative criteria, such as stress testing processes and scenario analyses, to assess the impact of ESG risks under scenarios with different severities". EBA (2019). Action Plan on Sustainable Finance. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

reductions need to be sharper than in the Orderly scenario to limit warming to the same target. The result is higher transition risk;

- **A “Hot house world” scenario:** assumes that only currently implemented policies are preserved. Nationally Determined Contributions are not met. Emissions grow until 2080 leading to 3°C+ of warming and severe physical risks. This includes irreversible changes like higher sea level rise.<sup>239</sup>

Five alternate scenarios were also produced to explore different underlying assumptions, such as different temperature targets, policy responses and/or technology pathways. All eight scenarios are presented within the NGFS climate scenario framework below.



Source: Network for Greening the Financial System

Observations relevant for the banking sector can also be drawn from the insurance industry<sup>240</sup>, as stress testing and scenario analysis have long been considered important aspects of the work of insurers.<sup>241</sup> In recent years, the European Insurance and Occupational Pensions Authority (EIOPA) has published two discussion papers in relation to methodological considerations of bottom-up insurance stress testing.<sup>242</sup> <sup>243</sup> In addition, in October 2020, EIOPA launched a consultation on the supervision of the use of climate change scenarios in insurer’s own risk and solvency assessment (ORSA).<sup>244</sup> An issues paper jointly published by the International Association of Insurance Supervisors (IAIS) and the Sustainable Insurance Forum (SIF) highlighted that views diverge as to how best to engage with the industry to develop robust approaches for climate-related scenario analysis. The study highlighted that there could be benefits for supervisors in coming up

<sup>239</sup> Network for Greening the Financial System (2020). *NGFS Climate Scenarios for central banks and supervisors*. Available at:

[https://www.ngfs.net/sites/default/files/medias/documents/820184\\_ngfs\\_scenarios\\_final\\_version\\_v6.pdf](https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf).

<sup>240</sup> Only topics directly covered via banking regulation have been covered for the purposes of this Study; this excludes insurance industry perspectives.

<sup>241</sup> Moody’s Analytics (2013). *Moody’s Analytics Risk Perspectives | Stress Testing European Edition | Volume I*. Available at: <https://www.moodyanalytics.com/-/media/article/2013/2013-01-09-risk-perspectives-v01-stress-testing-european-edition.pdf>.

<sup>242</sup> EIOPA (2019). *Methodological principles of insurance stress testing*. Available at: [https://www.eiopa.europa.eu/content/methodological-principles-insurance-stress-testing\\_en](https://www.eiopa.europa.eu/content/methodological-principles-insurance-stress-testing_en).

<sup>243</sup> EIOPA (2020). *Second Discussion Paper on Methodological Principles of Insurance Stress Testing*. Available at: [https://www.eiopa.europa.eu/content/second-discussion-paper-methodological-principles-insurance-stress-testing\\_en](https://www.eiopa.europa.eu/content/second-discussion-paper-methodological-principles-insurance-stress-testing_en).

<sup>244</sup> EIOPA (2020). *Consultation Paper on draft Opinion on the supervision of the use of climate change risk scenarios in ORSA*. Available at: [https://www.eiopa.europa.eu/sites/default/files/publications/consultations/eiopa-bos-20-561-cp\\_draft\\_opinion\\_climate\\_scenarios\\_in\\_orisa.pdf](https://www.eiopa.europa.eu/sites/default/files/publications/consultations/eiopa-bos-20-561-cp_draft_opinion_climate_scenarios_in_orisa.pdf).

with a harmonised view on the core elements of scenario analysis, such as clear expectations and guidance, e.g. “on how to consider climate risk impacts across different types of business areas”.<sup>245</sup>

A selection of comments in relation to supervisors’ assessment on the importance of scenario analysis is presented in *Figure 57*.

Figure 57: Illustrative comments on scenario analysis

**To what extent and how do you think supervised entities should use scenario analysis to quantify the impact of ESG risks on their portfolio?**

*“The use of scenario analysis by supervised entities is a key element in the process of including the ESG risks”*

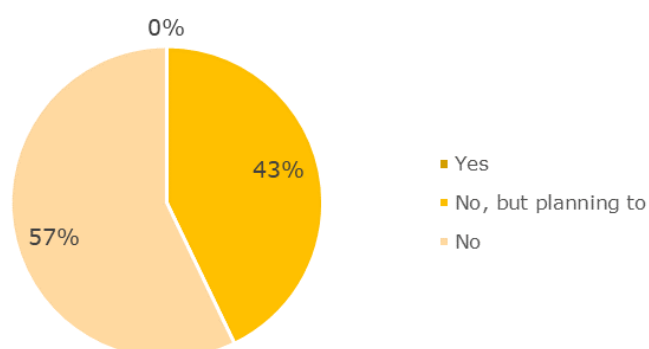
*“Stress testing and scenario planning are essential parts of the general risk management framework”*

*“As past data will not be representative of the future, due to the unprecedented nature of climate change, scenario analysis is the only realistic approach to quantify the impact of climate change on financial risks”*

#### 5.2.4.1.2 Categorisation of assets based on ESG risk

Although the categorisation of assets based on their ESG risk profile is considered an important task, respondent EU supervisors have not yet developed their own approach for this categorisation. However, as shown in *Figure 58*, 43% of interviewed supervisors intend to do so in the future.

Figure 58: Development of approach to categorise assets based on ESG risk<sup>246</sup>



Source: BlackRock FMA analysis

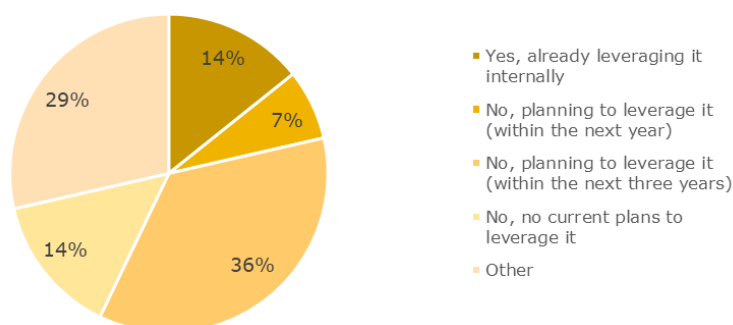
All EU based supervisors made reference to the EU taxonomy, with 57% either already utilising it in some form, or planning to use it within the next one to three years to inform their approach to the categorisation of assets, as shown in *Figure 59*. In particular, participants also from other stakeholder groups welcomed the work towards the provision of a common standard in the identification of environmentally sustainable activities, as

<sup>245</sup> IAIS & SIF (2020). *Issues Paper on the Implementation of the Recommendations of the Task Force on Climate-related Financial Disclosures*. Available at: [https://b9ea8c1e-dc19-4d5f-b149-9b1ea4b8d050.filesusr.com/ugd/eb1f0b\\_365cc83062254d509c20d79313143868.pdf](https://b9ea8c1e-dc19-4d5f-b149-9b1ea4b8d050.filesusr.com/ugd/eb1f0b_365cc83062254d509c20d79313143868.pdf).

<sup>246</sup> Question: Have you developed an approach to categorise assets based on their ESG risk profile? Sample size: 14.

well as the heightened comparability offered by the taxonomy. One supervisor has commenced an internal mapping exercise, i.e. a preliminary analysis applying the criteria of the taxonomy to their own internal database to assess to which extent the exposure of the banking sector is concentrated in 'green' sectors.

Figure 59: Planned usage of EU taxonomy for categorisation of assets<sup>247</sup>



Source: BlackRock FMA analysis

Nonetheless, several supervisors expressed that the taxonomy, in its current form, may need further refinements. A reason given for this is that the current taxonomy is focused on green sectors only, and supervisors believe that a more granular taxonomy, including 'grey' and 'brown' sectors, is required. Some supervisors stated that a 'brown' taxonomy would provide significant value in addition to only a 'green' taxonomy, which would facilitate the assessment of ESG risk as well as improve the understanding of the potential risk differentials between different types of assets. Furthermore, it was stated that, even if a taxonomy was to exist which covers all sectors, the resulting taxonomy may not be suitable as it would not appropriately account for transition risk, and therefore may only be relevant for classification purposes at a given point in time. It should be noted that one of the tasks of the Commission-mandated Platform on Sustainable Finance is to advise the Commission on the review of the Taxonomy Regulation, and specifically to address whether it should be expanded to "social objectives and activities that significantly harm the environment".<sup>248</sup>

In addition to the issue of the scope of a taxonomy, the majority of supervisors stated that a major concern is a lack of bank exposure data, as well as the reliability and comparability of such data. One supervisor, while welcoming the taxonomy and acknowledging that it is expected to be introduced into the way exposures are assessed, believes that supervised institutions will find it difficult to apply in practice.

Finally, some supervisors, while welcoming the development of the taxonomy within the EU, stated the importance of any classification being internationally adopted, due to potential issues with comparability across jurisdictions. Figure 60 presents a selection of

<sup>247</sup> Question: *Are you planning to leverage the EU taxonomy for categorisation of assets?* Sample size: 14. "Other" relates to the following answers: One respondent awaits governmental guidance; one respondent stated they will use the taxonomy once finalized, and awaits further guidance from the EBA; one respondent stated that no specific work is envisaged beyond ongoing work at the EBA under CRDV / CRR2 mandates; one respondent stated that financial companies and banks will have an obligation to use the taxonomy in any analysis which categorises assets, but that the responsibility of doing this is on the banks, and the role of the supervisor is to see to it that this is done.

<sup>248</sup> European Commission (n.d.). *Platform on sustainable finance*. Available at: [https://ec.europa.eu/info/publications/sustainable-finance-platform\\_en](https://ec.europa.eu/info/publications/sustainable-finance-platform_en).

comments from supervisors in relation to the categorisation of assets based on their ESG profile.

Figure 60: Illustrative comments on categorisation of assets

**Have you developed an approach to categorise assets based on their ESG risk profile?**

*"The green taxonomy regulation is a key parameter for this work"*

*"These categorisations are most efficient if done internationally. If not, then there are issues with comparability"*

**Are you planning to leverage the EU taxonomy for categorisation of assets?**

*"A brown taxonomy would be needed in order to properly differentiate between asset classes and their risk profiles"*

*"To identify exposures of banks, a clear way of knowing what is within brown sector is needed"*

*"... green exposures are an alternative source of profitability for banks. Yet, although green assets seem to grow more than brown, supervisors are mostly interested in classification of the latter to inform their bank risk assessments"*

#### 5.2.4.2 **Integration into Supervisory / Regulatory Processes**

##### 5.2.4.2.1 **Pillar 2 review processes and onsite supervision**

Pillar 2 – the supervisory review process – of the Basel Framework is designed to ensure that banks have adequate capital to support risks they are exposed to, as well as to ensure that banks develop and use appropriate risk management processes and tools to monitor and measure these risks.<sup>249</sup> Under this framework, a bank's management bears the responsibility of ensuring that the bank is adequately capitalised to support its risks beyond minimum requirements – e.g. via the ICAAP<sup>250</sup> –, while the supervisory authority bears the responsibility of assessing whether the bank has adequately executed this task – e.g. in the SREP, which may then also be the basis for supervisory measures. In the EU, this is reflected in the Capital Requirement Directive (CRD).<sup>251</sup>

As shown in *Figure 61*, only 14% of interviewed supervisors stated that they currently have explicitly integrated ESG risk considerations into supervisory review processes. Two main reasons were given for this. The first relates, for EU supervisors, to the mandate included in Article 98(8) of the CRD 5 that requires the EBA to assess the potential inclusion

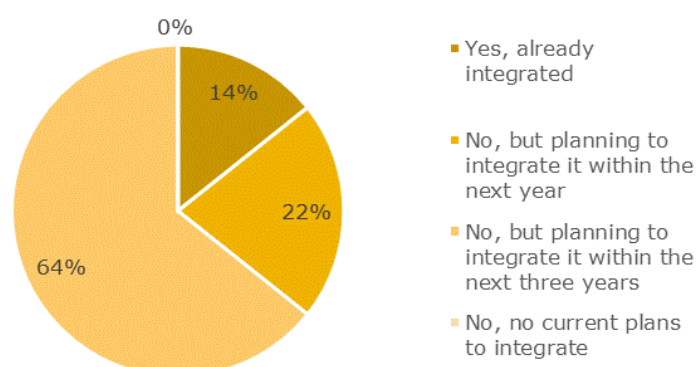
<sup>249</sup> Bank for International Settlements (2019). *Overview of Pillar 2 supervisory review practices and approaches*. Available at: <https://www.bis.org/bcbs/publ/d465.pdf>.

<sup>250</sup> Internal capital adequacy assessment process.

<sup>251</sup> Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC. OJ L 176, 27.6.2013, p. 338–436 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0036>.

of ESG risks in the supervisory review and evaluation process by June 2021.<sup>252</sup> Several EU supervisors indicated their intention to await further developments and the finalisation of the EBA mandate before taking action. The second key reason mentioned is that Pillar 2 already requires that all material risks are covered in a bank's approach, regardless of the respective risk type. A number of interviewed supervisors argue that, therefore, ESG risks are already covered and need to be taken into consideration by banks to the extent these risks are considered material.

Figure 61: Integration of ESG risks in Pillar 2 processes<sup>253</sup>



Source: BlackRock FMA analysis

As such, given the due date of the aforementioned EBA mandate, all EU-based respondents are planning to integrate ESG considerations into the SREP within at least the next three years, although no precise details were provided as to the mechanics of the integration of ESG risks. However, as stated by the EBA, the existing SREP framework may not be adequate for capturing the long-term nature and impact associated with ESG risks.<sup>254</sup> Accordingly, the EBA sees a need "to introduce a new area of analysis in the supervisory assessment, evaluating whether credit institutions sufficiently test the long-term resilience of the business model against the time horizon of the relevant public policies or broader transition trends". Time horizons in this context tend to span from three to five years; this would need to be substantially broadened.<sup>254</sup> This view is also held by various civil society organisations, with one respondent remarking that current risk management tools are often too short-term in nature, failing to recognise longer-term vulnerabilities.

Concurrently, most supervisors expect supervised institutions to consider ESG risks in their risk management processes already, or in the near future. As shown in Figure 62, most respondents expect supervised banks to consider ESG risks in their ICAAP/ILAAP<sup>255</sup> within at least the next three years, with 29% of respondents expecting this development within the next year, and 21% expecting these risks to be already considered. Many EU

<sup>252</sup> EBA (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

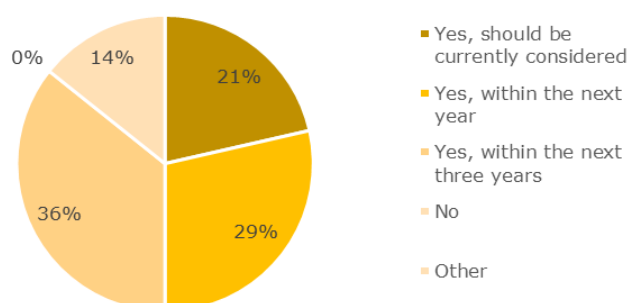
<sup>253</sup> Question: Have you integrated ESG risks in Pillar 2 processes (e.g. into SREP)? Sample size: 14.

<sup>254</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>255</sup> Internal liquidity adequacy assessment process.

supervisors are also awaiting the direction of the described EBA developments to define the scope of ESG risks, which is expected to include references to ICAAP/ILAAP.

Figure 62: Consideration of ESG risks in ICAAP/ILAAP<sup>256</sup>



Source: BlackRock FMA analysis

Based on supervisors' responses, the current focus of supervisory expectations is largely on the E pillar, where expectations from supervisors on supervised institutions are comparatively higher. The rationale usually provided is that significant institutions in the SSM will be expected to include climate and environmental issues in their ICAAP/ILAAP based on the SSM guidance on climate and environmental risk management and disclosures, applicable as of its date of publication.<sup>257</sup>

As seen in Figure 63, 23% of respondents have begun the process of ESG risk integration into day-to-day and on-site prudential supervision, with most respondents planning to integrate it within the next three years. Single Supervisory Mechanism (SSM)-based respondents intend to follow developments at ECB-level which they will then adapt for the day-to-day and on-site prudential supervision for less significant institutions. Of those who have already begun incorporating ESG risks into their supervisory examinations, one supervisor mentioned that they had conducted an on-site inspection specifically focused on climate-related risk management, and another supervisor now generally includes climate-related risk in the agendas for continuous assessment meetings with firms.

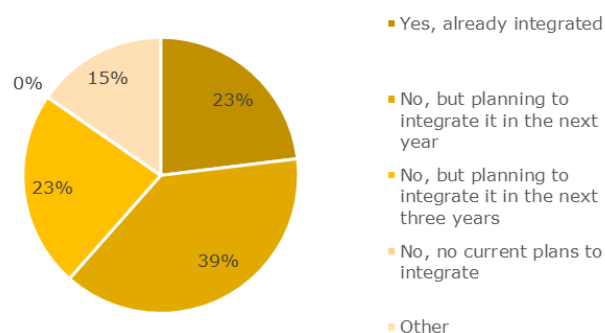
A number of respondents remarked that Pillar 2 processes are the most appropriate tool within the supervisory toolkit to address ESG risks from a supervisory standpoint, whilst capital requirements should remain risk-based. This is further analysed in section 5.2.5.1. In addition, it was commented by some respondents that the focus areas for Pillar 2 processes should be governance structures and risk appetite frameworks. Finally, interviewed supervisors made no reference to the existence of dedicated measures for institutions that do not meet supervisory expectations in the context of ESG integration into supervisory processes.

<sup>256</sup> Question: *Do you expect supervised entities to consider ESG in their ICAAP/ILAAP?* Sample size: 14. "Other" relates to the following answers: One respondent plans to be compliant if/when guidelines for ESG risk are implemented; one respondent has no formal plans at this stage.

<sup>257</sup> European Central Bank (2020). *Guide on climate-related and environmental risks*. Available at: [https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related\\_risks/ssm.202005\\_draft\\_guide\\_on\\_climate-related\\_and\\_environmental\\_risks.en.pdf](https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/climate-related_risks/ssm.202005_draft_guide_on_climate-related_and_environmental_risks.en.pdf).



Figure 63: Integration of ESG risks into day-to-day and onsite prudential supervision<sup>258</sup>

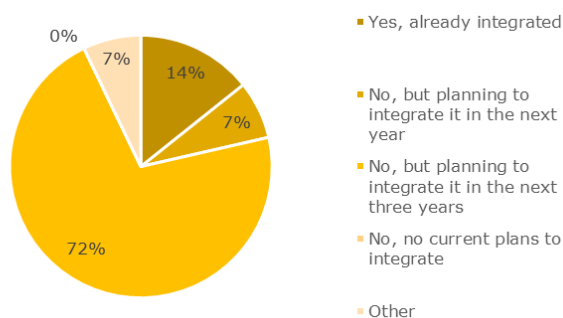


Source: BlackRock FMA analysis

#### 5.2.4.2.2 Supervisory stress testing

The primary aim of traditional micro-prudential supervisory stress testing is to evaluate the capital adequacy of banks. Typically, capital ratios are stressed under a number of scenarios – including an adverse scenario – and the results of this exercise feed into capital and liquidity assessments.<sup>259</sup> As shown in *Figure 64*, most participating supervisors have not yet integrated ESG risks into supervisory stress testing, although many have indicated that they are planning to do so within the next three years. Notable exceptions to this include, for example, the PRA and ACPR, who have both publicly announced the intention to conduct a climate stress within the next year. According to interviewed civil society organisations, climate scenario provision and climate-related risk stress testing should play a core prudential role in the ESG context. Further details on this topic are presented in section 4.2.4.2.4.

Figure 64: Integration of ESG risks into supervisory stress testing<sup>260</sup>



Source: BlackRock FMA analysis

<sup>258</sup> Question: *Have you integrated / do you plan to integrate ESG risks into day-to-day and onsite prudential supervision? And if so, how would you do so?* Sample size: 13. "Other" relates to the following answers: one respondent has no formal plans at this stage; another respondent stated that the topic of sustainable finance is currently being integrated into ongoing supervision and, as a next step, they intend to integrate the assessment of ESG risks in offsite supervision. Depending on the further developments, the assessment of ESG risks will be integrated in the day-to-day onsite prudential supervision as well.

<sup>259</sup> Bank for International Settlements (2017). *Supervisory and bank stress testing: range of practices*. Available at: <https://www.bis.org/bcbs/publ/d427.pdf>.

<sup>260</sup> Question: *Have you integrated / plan to integrate ESG risks into supervisory Stress Testing?*

Sample size: 14. "Other" relates to the following answer: the respondent has published a bottom-up exercise and participation is voluntary.



The ACPR is launching a voluntary climate stress test pilot exercise, which will be conducted in the second half of 2020, with results expected to be published in April 2021.<sup>261</sup> The exercise will be based on an analytical framework jointly produced by the ACPR and Banque de France<sup>262</sup>. Similarly, the Bank of England (BoE) announced in 2019 that it will conduct a climate stress test within their climate Biennial Exploratory Scenario (BES).<sup>263</sup> Originally due to be conducted in 2020, the launch of this exercise was postponed until at least mid-2021 due to the impact of COVID-19. The BoE climate BES has been designed to test the resiliency of firms' business models not only to transition risks but also to physical risks associated with climate change. In addition, MAS<sup>264</sup> has publicly indicated their intention to test banks' resiliency to climate-related risks. The EBA also plans to develop a dedicated climate stress test "with the main objective of identifying banks' vulnerabilities to climate-related risk and quantifying the relevance of the exposures that could be potentially hit by physical risk and transition risk."<sup>265</sup> In the short term, however, the EBA has encouraged institutions to participate in the voluntary sensitivity analysis for climate-related risks, being carried out in the second half of 2020; this exercise will focus on transition risks only.<sup>265</sup>

To date, climate stress testing exercises have been posed in the form of pilot exercises, given the varied and numerous challenges associated with their execution, including assumptions made about climate scenarios, the requisite longer-term time horizons – compared with those applied in traditional stress testing exercises –, uncertainties about the nature of climate developments and environmental policies, data availability, and more.<sup>266</sup>

As of yet, no respondent supervisor mentioned plans to use a climate stress test to set capital requirements for banks. This stance has been subject to criticism from some civil society organisations, including during the public consultation process for the ACPR pilot exercise.<sup>267</sup> The PRA intends to use the BoE climate BES to assess the overall UK financial system's exposure to climate-related risks and therefore "the scale of adjustment that will

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<sup>261</sup> ACPR (2020). *Scenarios and main assumptions of the ACPR pilot climate exercise*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717\\_main\\_assumptions\\_and\\_scenarios\\_of\\_the\\_acpr\\_climate\\_pilot\\_exercise.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717_main_assumptions_and_scenarios_of_the_acpr_climate_pilot_exercise.pdf).

<sup>262</sup> Banque de France (2020). *Climate-Related Scenarios for Financial Stability Assessment: an Application to France*. Available at: <https://publications.banque-france.fr/en/climate-related-scenarios-financial-stability-assessment-application-france>.

<sup>263</sup> Bank of England (2019). *The 2021 biennial exploratory scenario on the financial risks from climate change*. Available at: <https://www.bankofengland.co.uk/paper/2019/biennial-exploratory-scenario-climate-change-discussion-paper>.

<sup>264</sup> Monetary Authority of Singapore (2020). *Reply to Parliamentary Question on including climate change-related risk in MAS' annual industry-wide stress test*. Available at: <https://www.mas.gov.sg/news/parliamentary-replies/2020/reply-to-parliamentary-question-on-including-climate-change-related-risk-in-mas-annual-iwst>.

<sup>265</sup> European Banking Authority (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

<sup>266</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>267</sup> ACPR (2020). *Scenarios and main assumptions of the ACPR pilot climate exercise*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717\\_main\\_assumptions\\_and\\_scenarios\\_of\\_the\\_acpr\\_climate\\_pilot\\_exercise.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717_main_assumptions_and_scenarios_of_the_acpr_climate_pilot_exercise.pdf).

need to be undertaken in coming decades for the system to remain resilient”.<sup>268</sup> Similarly, ACPR intends to use its climate pilot exercise to raise awareness for supervised institutions related to the risks posed by climate change, by asking them to measure the physical and transitional risks to which these institutions are exposed by 2050.<sup>269</sup> It is worth noting that this is an approach advocated by the EBA, which states that the objective of a climate stress test “should be to inform on the resilience of institutions’ own business model and investment strategies” and that “the results of stress tests (quantitative and qualitative) should be used to determine the effectiveness of new and existing business strategies from an ESG risks perspective and the possible impact from transition and physical risk.”<sup>270</sup> Figure 65 provides further insight into the climate stress test exercises proposed by both ACPR and the Bank of England.<sup>271</sup>

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<sup>268</sup> Bank of England (2019). *The 2021 biennial exploratory scenario on the financial risks from climate change*. Available at: <https://www.bankofengland.co.uk/paper/2019/biennial-exploratory-scenario-climate-change-discussion-paper>.

<sup>269</sup> ACPR (2020). *Scenarios and main assumptions of the ACPR pilot climate exercise*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717\\_main\\_assumptions\\_and\\_scenarios\\_of\\_the\\_acpr\\_climate\\_pilot\\_exercise.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20200717_main_assumptions_and_scenarios_of_the_acpr_climate_pilot_exercise.pdf).

<sup>270</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>271</sup> The Bank of England climate Biennial Exploratory Scenario methodology is in draft form at the time of publication of this paper.

Figure 65: Case study on climate stress test exercises proposed by ACPR and BoE

The figure below outlines the climate stress test exercises proposed by the ACPR and Bank of England, including objectives, methodological considerations, descriptions of selected scenarios, and outcome metrics of the exercises.

	ACPR	Bank of England
Objectives	<ul style="list-style-type: none"> <li>• <b>Raise awareness</b>, within the French banking and insurance sector, of climate change-related risks and their financial consequences</li> <li>• <b>Assess the exposures and vulnerabilities of the French financial sector</b> against the background of various climate change scenarios</li> <li>• <b>Develop and improve the institutions' capacity to integrate climate risk</b> in their financial risk measurement, assessment and day-to-day management</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Size firms' financial exposures to climate risk</b>, as well as the financial system more broadly</li> <li>• <b>Understand the challenges to participants' business models</b> from these risks, and understand their likely responses and associated implications on the provision of financial services</li> <li>• <b>Assist participants in enhancing their management</b> of climate-related financial risks</li> </ul>
Methodological considerations	<ul style="list-style-type: none"> <li>• Transition and physical risks are evaluated (with focus on transition risk)</li> <li>• <b>Time horizon</b>: 30 Years</li> <li>• <b>Balance sheet assumption</b>: Participants would assume a <b>static balance sheet for the first 5 years</b> of the time horizon of the scenario. A <b>dynamic balance sheet</b> assumption would be adopted from t=5</li> </ul>	<ul style="list-style-type: none"> <li>• Transition and physical risks are evaluated</li> <li>• <b>Time horizon</b>: 30 Years</li> <li>• <b>Balance sheet assumption</b>: Participants would assume a <b>fixed balance sheet over the time horizon of the scenario</b>. The exercise would test the resilience of t=0 balance sheets to climate-related financial risks at different points in each scenario</li> </ul>
Scenario description	<p>The scenarios build on the reference scenarios currently being developed by the NGFS. Three scenarios were selected from the period 2020 to 2050: one reference and two adverse scenarios (also referred to as variants 1 and 2)</p> <ul style="list-style-type: none"> <li>• <b>Reference scenario (baseline scenario)</b>: "the representative scenario of the NGFS corresponding to an "orderly" transition including reduced transitional and physical risks"</li> <li>• <b>Late reaction scenario (Variant 1)</b>: "The scenario of a late transition presupposes that the greenhouse gas emission reduction objective is not reached in 2030 and thus requires the implementation of more proactive measures. This scenario reproduces exactly the same emission, GDP and carbon pricing trajectories, at the aggregated level, of the NGFS's scenario that is representative of a "disorderly" transition. Additionally, the included carbon sequestration strategies are presupposed to lack the level of maturity sufficient to offer compensation options."</li> <li>• <b>Scenario of a swift and abrupt transition (Variant 2)</b>: "The second adverse variant associated a revision of carbon prices with a productivity shock (with respect to the reference scenario) from 2025. In this scenario, it is assumed that renewable energy production technologies are not as mature as expected in the reference scenario, which translates into higher energy prices requiring new investments.... Simultaneously, the trajectory of carbon price is unexpectedly revised and calibrated on the data from the alternative scenario for a "disorderly" transition of the NGFS."</li> </ul>	<p>The scenarios build on the reference scenarios currently being developed by the NGFS. Three scenarios were selected from the period 2020 to 2050: early policy action, late policy action, and no additional policy action.</p> <ul style="list-style-type: none"> <li>• <b>Early policy action scenario</b>: "In this scenario, there is early and decisive action to reduce global emissions in a gradual way, with clearly signposted government policies implemented relatively smoothly. Companies and consumers align their behaviour with a carbon-neutral economy gradually over the scenario. Financial markets price in the transition in an orderly fashion and take advantage of the opportunities that the transition provides"</li> <li>• <b>Late policy action scenario</b>: "Under this scenario, action to address climate change is delayed by ten years. To compensate for the delayed start a deeper adjustment is required, as evidenced in a steeper increase in global carbon prices in a late attempt to meet the climate target. Companies and consumers change their behaviour in response to these dramatic shifts, and asset prices see a sharp repricing as a result, leading to a macroeconomic shock"</li> <li>• <b>No additional policy action scenario</b>: "Under this scenario, governments fail to introduce policies to address climate change other than those already announced. Companies and consumers do not change their behaviour to reduce emissions compared to current trends. There is also limited technological transition. As a result, the climate target is not met and the global average temperature increases substantially by 2080. This scenario tests financial firms' resilience to both chronic changes in weather (e.g. rising sea levels), as well as more frequent and extreme weather events (e.g. flash floods). Therefore, under this scenario, there are limited transition risks, but physical risks are significant."</li> </ul>
Outcome metrics (for banks)	<ul style="list-style-type: none"> <li>• The <b>impact of scenarios on banking risks</b>, specifically credit and market risk, will be assessed: <ul style="list-style-type: none"> <li>○ For credit risk, the results metric will be the impact of scenarios on expected credit losses (ECL)</li> <li>○ For market risk, metrics looked at will be i) the revaluation of portfolios at fair value, ii) counterparty risk</li> </ul> </li> <li>• Institutions which already report certain climate metrics / indicators (i.e. "measuring the temperature of their portfolio, their degree of alignment with the Paris Agreement or the carbon intensity of their portfolio"), are also asked to provide the evolution of said metrics / indicators</li> </ul>	<ul style="list-style-type: none"> <li>• The <b>change in value of bank assets due to the impact of scenarios</b> will be assessed: <ul style="list-style-type: none"> <li>○ For the banking book, the results metric will be the impairment charge</li> <li>○ For the trading book, the results metric will be change in fair value of the assets</li> </ul> </li> </ul>

Source: ACPR and Bank of England

Lack of data, as well as a lack of comparability and reliability of data, were highlighted by a number of respondents as obstacles to the successful execution of a climate stress test exercise. Nevertheless, a number of supervisors, while acknowledging this data challenge, indicated that there should be sufficient data to at least perform an initial stress test, with one supervisor suggesting that banks find suitable proxy data or come up with high level assumptions to assist them in this task. As this perceived data challenge also impacts

various other elements of prudential supervision – most notably, disclosure and reporting – this is discussed in more detail in section 5.2.5.1.

Although some supervisors are working on the development of their own climate stress test scenarios, the majority of respondents plan to use or build on scenarios developed at EU and international levels, such as the published NGFS Climate Scenarios (see section 5.2.4.1.1), adjusting them to take into account national specificities where appropriate.<sup>272</sup>

One interviewed civil society stated that it is critical that supervisors reference climate scenarios when defining climate stress testing exercises for banks. This view is also reiterated by the EBA in their recent discussion paper, where it is stated that “institutions could leverage on reference scenarios provided by international organisation (i.e. NGFS) as a starting point”.<sup>273</sup> Most respondents perceive that the development of a set of plausible common scenarios will be an important factor in setting common international standards. Indeed, one respondent supervisor noted that, given the complexity of the topic, rather than developing their own scenarios, the most efficient way is to work together with other authorities to develop these tools, and the next step will be to integrate this into their own ongoing work. Another participant stated that regulators should focus on scenarios, as it would lead to more comparability and aggregate information across banks.

As an example, the NGFS workstream on macrofinancial was mandated to publish a set of reference scenarios for use by central banks and supervisory authorities. Respondents also referred to ESRB work on this topic, specifically the report “Positively Green”.<sup>274</sup> The report focuses on transition risks and is based on the transition risk stress test framework of DNB, combined with the banking model of the ECB. The exploratory scenario focuses on two severe scenarios: “The first emphasises the risks of an abrupt policy response in order to meet the goals set in the Paris Agreement, and the second anticipates rapid adaptation to asymmetric technological innovation”.

One interviewed data provider highlighted the role that supervisors could play in creating clarity on economic policy given the complexity and uncertainty of future scenarios. This would enable the comparison of results and provision of aggregate information at various levels. However, the respondent noted the potential trade-off between a very granular scenario definition approach – which would allow for ease of data comparability and aggregation – and a broader approach – which would allow for local idiosyncrasies pertaining to, for example, geography and business model.

## **5.2.5 ESG requirements, guidelines & engagement initiatives**

### **5.2.5.1 Regulatory requirements**

Supervisory and regulatory requirements represent a key supervisory tool and, as such, are an important element in the discussion around supervisory approaches for ESG, which

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<sup>272</sup> Network for Greening the Financial System (2020). *NGFS Climate Scenarios for central banks and supervisors*. Available at:

[https://www.ngfs.net/sites/default/files/medias/documents/820184\\_ngfs\\_scenarios\\_final\\_version\\_v6.pdf](https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf).

<sup>273</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at:

[https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

<sup>274</sup> ESRB (2020). *Positively green: Measuring climate change risks to financial stability*. Available at:

[https://www.esrb.europa.eu/pub/pdf/reports/esrb.report200608\\_on\\_Positively\\_green\\_-\\_Measuring\\_climate\\_change\\_risks\\_to\\_financial\\_stability~d903a83690.en.pdf?c5d033aa3c648ca0623f5a2306931e26](https://www.esrb.europa.eu/pub/pdf/reports/esrb.report200608_on_Positively_green_-_Measuring_climate_change_risks_to_financial_stability~d903a83690.en.pdf?c5d033aa3c648ca0623f5a2306931e26).

is also reflected by their inclusion in objective 8 of the Commission's Action Plan. According to interviewed civil society organisations, regulation and guidance must encourage sector participants to take a proactive approach to incorporate ESG risks in business strategies and internal processes as it can provide an effective mitigation tool for such risks, especially over the long-term.

Most EU-based respondents intend to await the outcomes of the EBA mandates on the assessment of a dedicated prudential treatment of exposures related to assets or activities associated with environmental and social objectives, and specification of ESG risks' disclosures as part of the comprehensive technical standard on Pillar 3. Both mandates are elucidated further in this section. Indeed, many supervisors stated that they would consider it premature to attempt any such integration into national or EU-wide regulatory requirements prior to the conclusion of these mandates. Other respondents mentioned that it is too early to define any requirements, given the early stage of data collection and methodology development. Likewise, the BCBS survey on current initiatives in relation to climate-related financial risks indicates that "the majority of members have not factored, or have not yet considered factoring, the mitigation of such risks into the prudential capital framework".<sup>275</sup>

A number of national authorities, particularly in emerging markets are "already acting to use the existing regulatory framework to address these links".<sup>276</sup> In 2014, the Central Bank of Brazil enacted Resolution no. 4,327 – in accordance with the National Monetary Council's (CMN) –, thereby assigning guidelines for financial institutions that must be observed in the establishment and implementation of the Social and Environmental Responsibility Policy.<sup>277</sup> This regulation requires supervised institutions to assess their exposure to social and environmental risks, as well as to assess the compatibility of the afore-mentioned policy with their business profile, whilst adhering to the principles of proportionality and relevance – i.e. the degree of exposure to the social and environmental risk of the activities and transactions of the institution.

There is consensus among interviewed supervisors that consistent disclosures on ESG risks are increasingly important to support an effective market. According to respondents, the supervisory approach remains predominantly focused on guidance from the EBA, although disclosure initiatives such as the TCFD and NFRD are also important. Some supervisors also believe that the scope the entities subject to NFRD reporting should be expanded. This view was also held by other stakeholders: one interviewed academic believes that further regulation for banks would not significantly enhance the status quo; rather, disclosure regulation for banking clients should be increased, which consequently would impact the entities to which banks would provide financing in the future.

Supervisors naturally expect all supervised institutions to adhere to all mandatory regulation in relation to disclosure, i.e. Pillar 3. The mandate outlined in the revised CRR 2/CRD 5 package relates to Article 449a of CRR 2, which requires large institutions with publicly listed issuances to disclose information on ESG risks, physical risks and transition

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<sup>275</sup> Basel Committee on Banking Supervision (2020). *Climate-related financial risks: a survey on current initiatives*. Available at: <https://www.bis.org/bcbbs/publ/d502.pdf>.

<sup>276</sup> CISL & UNEP FI (2014). *Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III?* Available at: <https://www.cisl.cam.ac.uk/resources/publication-pdfs/stability-and-sustainability-basel-iii-final-repor.pdf/view>.

<sup>277</sup> Banco Central Do Brasil (n.d.). Webpage: *Social and environmental responsibility*. Available at: <https://www.bcb.gov.br/en/about/socialresponsibility>.



risks.<sup>278</sup> In this context, the EBA has the mandate to develop draft implementing technical standards (ITS) to facilitate these disclosure requirements. As part of this work, the EBA plans to specify uniform disclosure formats with an aim to “provide sufficiently comprehensive and comparable information for users of that information to assess the risk profiles of institutions”. In September 2020, a survey was launched to collect input from credit institutions as to their practices and views in this area.<sup>279</sup> The application of ESG-related disclosures is expected from June 2022.<sup>278</sup> Beyond any mandatory disclosure requirements, almost all respondents indicated that they expect supervised institutions to adhere to TCFD. One participant expressed a hope that this requirement would one day move from voluntary to mandatory status.

Data and methodologies are mentioned by respondent supervisors as a key obstacle to consistent and transparent disclosures. As part of the Study, respondents were asked to score a variety of elements which are important to them when considering disclosure initiatives. Consistently, the factors scored as most important were data availability and reliability, data comparability, as well as standardisation of data and methodologies.<sup>280</sup> Proportionality of disclosure requirements was also highlighted by a number of supervisors as something they would support in any adopted disclosure initiative – for both financial and non-financial institutions. This, according to respondents, does not mean that proportionality should be structured in a way that would exempt smaller firms from reporting at all.

One question currently under discussion is whether capital requirements are an appropriate way to address climate-related risks. As outlined in a report by the Institute for Climate Economics, the debate around this topic – contributed to by banks, supervisors, civil society and experts – has gained more attention since 2019 when the European Commission instructed the EBA to consider the prudential treatment of environmental and social objectives.<sup>281</sup> In particular, under article 501c of the CRR, the EBA has been mandated to assess whether “a dedicated prudential treatment of exposures related to assets or activities associated substantially with environmental and/or social objectives would be justified”.<sup>282</sup> In particular, the EBA will assess:

- Methodologies for the assessment of the effective riskiness of exposures related to assets, i.e. understanding any difference in the level of risk for the asset based on the ESG classification;
- Development of appropriate criteria for the assessment of physical risks and transition risks, i.e. risk measurement approach;
- Potential effects of such dedicated prudential treatment, e.g. potential bank responses / actions relating to the change, unforeseen losses and other causes of instability.

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<sup>278</sup> EBA (2019). *Action Plan on Sustainable Finance*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/EBA%20Action%20plan%20on%20sustainable%20finance.pdf).

<sup>279</sup> EBA (2020). *EBA seeks input from institutions on their ESG disclosure practices*. Available at: <https://eba.europa.eu/eba-seeks-input-institutions-their-esg-disclosure-practices>.

<sup>280</sup> Question: *How important are the following factors for you when considering disclosure initiatives?*

<sup>281</sup> Institute for climate economics (I4CE) (2020). *Integrating Climate-related Risks into Banks’ Capital Requirements*. Available at: [https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate\\_EtudeVA.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf).

<sup>282</sup> European Banking Authority (2020.). *Article 501c, Capital Requirements Regulation 2 (CRR2)*. Available at: <https://eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/101647>.

Although this mandate is due to be delivered by 2025, one interviewed civil society – who opines that ESG should be considered within Pillar 1 – believes that this deadline is too late; indeed, the respondent believes that supervisors must move with more speed in this space, and cited supervisors’ relatively slow pace, particularly given that the United Nations Framework Convention on Climate Change<sup>283</sup> was signed almost 30 years ago.

Many supervisors, banks, and civil society organisations are actively discussing the potential incorporation of ESG risks into capital requirements, for example in the form of green supporting factor (to apply lower capital requirements to environmental- or climate-friendly lending), or a brown penalty factor to act as a deterrent to lending to more ‘brown’ activities or sectors such as coal or oil. A considerable amount of research has been conducted on this topic. The Institute for Climate Economics, in conjunction with WWF, seeks to contribute to the debate around this topic with their report “Integrating Climate-related Risks into Banks’ Capital Requirements”.<sup>284</sup> The report outlines two distinct approaches to the integration of climate-related risks into capital requirements: The “risk approach”, which aims to increase banks’ resiliency to these risks and hence safeguard financial stability, and the “economic policy approach”, which advocates the use of capital requirements as a policy tool to direct financial flows to a low-carbon economy.

During interviews, several supervisors indicated a preference for the first approach, i.e. a risk-based approach, as this is way the capital framework was originally designed. As an example, the ECB response to the Commission survey on climate-related risk strategy stated that any approach taken should be purely risk-based. That said, several supervisors highlighted that at this point there is little evidence for an inherent difference in risk level between ‘green’ and brown assets. This is consistent with the findings of a technical document published by the NGFS in May 2020 based on the results of a survey conducted on a select group of financial institutions, which sought to assess whether a risk differential exists between ‘green’, ‘non-green’ and ‘brown’ assets.<sup>285</sup> It concluded that “the institutions have not established any strong conclusions on a risk differential between green and brown” – an element many supervisors would like to see proven before considering the use of any such factor in the current risk-based framework.

Some interviewed respondents believe that the introduction of a green supporting factor is a political decision, with one stating that there could be unintended consequences for financial stability of such a course of action. A 2018 report by 2° Investing Initiative argues that “the analysis suggests that a Green Supporting Factor would have an overall limited effect” on overall capital requirements of banks.<sup>286</sup> Conversely, a 2017 white paper published by Finance Watch points to the SME supporting factor – introduced into EU policy in 2014 to incentivise lending to small and medium sized businesses – as precedent for the introduction of some form of a supporting factor.<sup>287</sup>

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<sup>283</sup> UN Climate Change (n.d.). *What is the United Nations Framework Convention on Climate Change?* Available at: <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change>.

<sup>284</sup> Institute for climate economics (I4CE) (2020). *Integrating Climate-related Risks into Banks’ Capital Requirements*. Available at: [https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate\\_EtudeVA.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2020/03/IntegratingClimate_EtudeVA.pdf).

<sup>285</sup> Network for Greening the Financial System (2020). *A Status Report on Financial Institutions’ Experiences from working with green, non green and brown financial assets and a potential risk differential*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_status\\_report.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf).

<sup>286</sup> 2° Investing Initiative (2018). *The Green Supporting Factor*. Available at: <https://2degrees-investing.org/wp-content/uploads/2018/04/The-Green-Supporting-Factor.pdf>.

<sup>287</sup> Finance Watch (2017). *New pathways: Building blocks for a sustainable finance future for Europe*. Available at: <https://www.finance-watch.org/wp-content/uploads/2018/08/New-Pathways-Building-Blocks-for-a-sustainable-finance-future-for-Europe-GABV-Finance-Watch-M2020.pdf>.

A number of stakeholders, mostly civil society organisations, said that they would welcome the adoption of a brown penalising factor into the prudential treatment of exposures. One interviewed stakeholder stated that, while the use of a green supporting factor should be treated with caution, a brown penalising factor should be introduced as a precautionary measure as it could help to reflect underlying risk on banks' balance sheets. In other words, a brown penalising factor could be a method of accounting for the longer time horizon of climate and environmental-related risks by "bringing risks back to now". Some supervisors raised concerns that the introduction of a brown penalising factor might lead to a double counting of capital requirements; although banks are currently factoring climate-related risks in their risk analyses to a limited extent only, this double counting could become an issue in the future. While most supervisors stressed their preference for a traditional risk-based approach, respondents expressed that they would rather opt for a brown penalising factor as opposed to a green supporting one. Similarly, an interviewed civil society cautioned against a trade-off between green incentives and financial stability or societal well-being, and highlighted a growing interest from stakeholders in an increase of capital risk weights for high-carbon sectors as a more relevant solution.

A recent report from Finance Watch advocates the setting of higher capital requirements for fossil fuel reserves within the existing regulatory framework. The report urges immediate action and defines actionable recommendations to policy makers. For instance, policymakers are advised to: i) calibrate risk weight for banks' exposure to existing fossil fuel reserves at 150%, in line with Article 128 of the CRR<sup>288</sup>, ii) calibrate those for new reserves to 1250%, in order to make new financing entirely equity financed to reflect both micro-prudential and macro-prudential risks, and iii) ensure modified risk weights are reflected in banks' internal models.<sup>289</sup> As suggested further in the paper, to implement this the European Commission should: i) activate Article 459 of the CRR, allowing it to take action to implement the modified risk weights, ii) amend the risk weights for banks' existing fossil fuel exposures in Article 128 of CRR and for new exposures in Article 501 of CRR, and iii) promote the adoption of similar requirements by engaging the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Board (FSB).<sup>290</sup>

Several supervisors noted during the interviews that an impact of ESG risks on capital requirements may already indirectly manifest itself through the impact on other risks. In other words, ESG risks may already be reflected in internal models applied by a bank, such as models for the probability of default, which will affect risk-weights and, ultimately, capital levels. One supervisor stated that regulatory tools are not the appropriate way to tackle this issue and argued that, if taxes or incentives, for example, were to instead be used this would ultimately end up being reflected in risk weights.

A paper by the University of Cambridge Institute for Sustainability Leadership (CISL) and UNEP FI published as early as 2014 highlights that in the context of Pillar 1 "it is thought that lowering capital and liquidity requirements to benefit environmentally sustainable

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<sup>288</sup> Article 128 of the CRR sets out the requirements for classifying an exposure as an item associated with particularly high risk, which results in an assignment of a 150% risk-weight for the considered exposure.

<sup>289</sup> Finance Watch (2020). *EU has the tools to break the climate-finance doom loop*. Available at: [https://www.finance-watch.org/wp-content/uploads/2020/06/Breaking-the-climate-finance-doom-loop\\_Finance-Watch-report.pdf](https://www.finance-watch.org/wp-content/uploads/2020/06/Breaking-the-climate-finance-doom-loop_Finance-Watch-report.pdf).

<sup>290</sup> In September 2020, the EBA finalised guidelines on the appropriate subsets of exposures in the application of the SyRB. "The guidelines recommend a common framework in which relevant authorities can define subsets specific to their needs. This is done by employing three dimensions: type of debtor or counterparty sector, type of exposure and type of collateral. In addition, if deemed appropriate, duly justified and proportionate when targeting systemic risk, the relevant authorities may supplement these dimensions with three sub-dimensions: economic activity, risk profile and geographical area."



economic activities may create an undesirable trade-off between financial stability and environmental sustainability” and that instead using Pillar 2 (the supervisory review process) and Pillar 3 (market discipline, including disclosure requirements) of the Basel Framework may “offer some promising avenues”.<sup>291</sup>

Another supervisor noted that climate-related risk appears to affect economic sectors in different ways. This kind of sectoral risk is not factored in current regulation, and additional tools could be considered to address this – an example given of a prospective tool is a sectoral macroprudential systemic risk buffer (SyRB). Finally, although this section is focused on micro-prudential topics, it is worth noting that some participants are of the opinion that this is a systemic issue. One interviewed civil society stated that, at this stage, it is not clear whether micro- or macro- prudential treatment is more relevant or feasible for the topic of sustainability, but that both recourses should be continued to be explored.

Figure 66 provides illustrative comments from respondents with respect to the integration of ESG risk considerations into regulatory requirements.

Figure 66: Illustrative comments on the integration of ESG risk into regulatory requirements

**Are you currently integrating ESG risk considerations into regulatory requirements (including capital and liquidity requirements) to supervised entities?**

*"Due to the ongoing developments in terms of understanding and assessing ESG risks, as well as the ongoing development of the relevant EU prudential framework, we consider [it] premature to integrate ESG risk considerations in our national regulatory and supervisory requirements"*

*"As a prudential supervisor, we expect supervised entities to adhere to all disclosure and reporting requirements that they are legally obliged to adhere to. We encourage supervised entities to voluntarily implement additional (inter)national disclosure initiatives on climate and environmental issues, as well as on other issues"*

*"Business model issues should not be solved via regulation; other tools, i.e. fiscal, tax, subsidies, should play a role as well"*

*"Green and brown factors are used to provide incentives, but they are not related to risks. Up to now, there has been a risk-based approach; that's the way the capital framework was designed"*

#### 5.2.5.2 Supervisory guidance and expectations

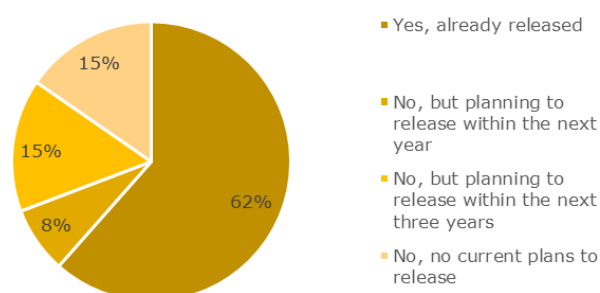
The issuance of guidance and setting of expectations was mentioned as an important tool for supervisors to facilitate the integration of ESG risks into prudential supervision by several respondents.

Supervisors who have already published guidance or good practices, or set out expectations, tend to be those with a strategy that focuses on actively driving the topic of ESG integration, as described in section 5.2.5.2. As mentioned above, this set of supervisors tends to be based in larger jurisdictions. As seen in Figure 67, 62% of

<sup>291</sup> CISL & UNEP FI (2014). *Stability and Sustainability in Banking Reform: Are Environmental Risks Missing in Basel III?* Available at: <https://www.cisl.cam.ac.uk/resources/publication-pdfs/stability-and-sustainability-basel-iii-final-repor.pdf/view>.

supervisors interviewed have already released guidelines around ESG risk considerations, while 8% plan on releasing guidance within the next year, and 15% within the next three years. Those EU-based supervisors with no current plans to release any form of specific guidance mentioned that they expect supervised banks to refer to the EU prudential framework, as well as work by the EBA as set out in their action plan and the EBA Guidelines on loan origination and monitoring. Given the heterogeneity of institution's practices in this area, it was noted by civil society organisations that clarity on supervisory expectations should lead to more consolidated practices.

Figure 67: Publication of guidance on ESG risks<sup>292</sup>



Source: BlackRock FMA analysis

Of the entire sample of analysed supervisors, 40% have published some form of guidance related to ESG risk. *Table 4* outlines a selection of published guidelines, consultations, supervisory expectations, and good / best practices among analysed supervisors. Amongst these, there is an almost equal split between those which focus on ESG (or sustainability) across the three pillars, and those who focus on the environmental pillar, with climate-related risk being a particular focus. Core topics addressed relate to governance & strategy, risk management, scenario analysis & stress testing, and disclosure.

Table 4: Examples of published guidance on ESG risks

Entity	Title	Description
<b>Austrian Financial Market Authority (FMA)</b>	Guide for Handling Sustainability Risks	<u>Guide</u> : Outlines guidance for handling sustainability risks under the categories of i) risk management, ii) strategy & governance, and iii) disclosure.
<b>Autorité de contrôle prudentiel et de résolution (ACPR)</b>	Governance and management of climate-related risks by French banking institutions: some good practices	<u>Good practices</u> : Outlines good practices for the governance and management of climate-related risks
<b>China Banking Regulatory Commission (CBRC)</b>	Guiding Opinions of the China Banking and Insurance Regulatory Commission on Promoting the High-quality	<u>Guidance</u> : In particular, calls for China-based banks and non-banking financial institutions to: i) establish and improve environmental and social risk

<sup>292</sup> Question: Have you released guidelines around ESG risk governance structure, strategy, risk management and disclosure of ESG risks and related metrics/KPIs? Sample size: 13.

	Development of the Banking and Insurance Industry	management systems, ii) incorporate environmental, social, and governance (ESG) requirements into their entire credit granting process, and iii) strengthen ESG-related information disclosure, reporting and interaction with stakeholders.
<b>De Nederlandsche Bank (DNB)</b>	Good Practice: Integration of climate-related risk considerations into banks' risk management	<u>Good practices</u> : Sets out how climate-related risks may be integrated into banks' practices under i) governance, ii) risk management, and iii) disclosure
<b>European Banking Authority (EBA)</b>	EBA Action plan on sustainable finance	<u>Action plan</u> : In particular, Action 8: "Incorporating sustainability in prudential requirements"
	Guidelines on loan origination and monitoring	<u>Guidelines</u> : Sets out guidelines with the "aim to ensure that institutions have robust and prudent standards for credit risk taking, management and monitoring, and that newly originated loans are of high credit quality". In particular, institutions are required to include the ESG factors in their risk management policies and procedures.
<b>European Central Bank (ECB)</b>	Guide on climate-related and environmental risks	<b><i>Under consultation</i></b> <u>Supervisory expectations</u> : Outlines how banks should integrate climate and environmental risks in business strategy, governance, risk management and disclosure
<b>Federal Financial Supervisory Authority (BaFin)</b>	Guidance Notice on Dealing with Sustainability Risks	<u>Guidance notice</u> : Provides a detailed description of possible risk identification, management and control processes together with traditional methods and procedures related to sustainability risks.
<b>Monetary Authority of Singapore (MAS)</b>	Proposed Guidelines on Environmental Risk Management (Banks)	<b><i>Under consultation</i></b> <u>Guidelines</u> : Outlines guidelines to enhance financial institutions' resilience to and management of environmental risk
<b>Prudential Regulation Authority (PRA)</b>	Enhancing banks' and insurers' approaches to managing the financial risks from climate change	<u>Supervisory statement</u> : Sets out how firms should consider climate change in their governance, risk management, scenario analysis, and disclosures.

Figure 68 provides further insight into the ECB draft guide on climate-related and environmental risks.

Figure 68: Case study on draft ECB guide on climate-related and environmental risks

In May 2020, the ECB published its draft guide on climate-related and environmental risks with consultation on the draft inviting comments from industry and stakeholders.

### **Scope and Applications**

The guide is developed jointly by the ECB and the national competent authorities (NCAs) and covers significant Institutions under the supervision of ECB. The guide is applicable as of its date of publication. From end-2020, significant institutions will be asked to inform ECB of any divergence from the guidelines.

### **Climate-related and Environmental Risk**

The ECB distinguishes transition and physical risks – and under these risks distinguishes climate-related and environmental risks – as drivers of prudential risk, i.e. credit risk, operational risk, market risk and liquidity risk.

### **Supervisory Expectations**

Thirteen expectations are delineated across four areas:

Business model & strategy	<p>i. Institutions are expected to understand the impact of climate-related and environmental risks on the business environment in which they operate, in the short, medium and long term, in order to be able to make informed strategic and business decisions.</p> <p>ii. When determining and implementing their business strategy, institutions are expected to integrate climate-related and environmental risks that materially impact their business environment in the short, medium or long term.</p>
Governance & risk appetite	<p>iii. The management body is expected to consider climate-related and environmental risks when developing the institution's overall business strategy, business objectives and risk management framework and to exercise effective oversight of climate-related and environmental risks.</p> <p>iv. Institutions are expected to explicitly include climate-related and environmental risks in their risk appetite framework.</p> <p>v. Institutions are expected to assign responsibility for the management of climate-related and environmental risks within the organisational structure in accordance with the three lines of defence model.</p> <p>vi. For the purposes of internal reporting, institutions are expected to report aggregated risk data that reflect their exposures to climate-related and environmental risks with a view to enabling the management body and relevant sub-committees to make informed decisions.</p>
Risk management	<p>vii. Institutions are expected to incorporate climate-related and environmental risks as drivers of established risk categories into their existing risk management framework, with a view to managing and monitoring these over a sufficiently long-term horizon, and to review their arrangements on a regular basis. Institutions are expected to identify and quantify these risks within their overall process of ensuring capital adequacy.</p> <p>viii. In their credit risk management, institutions are expected to consider climate-related and environmental risks at all stages of the credit-granting process and to monitor the risks in their portfolios.</p> <p>ix. Institutions are expected to consider how climate-related events could have an adverse impact on business continuity and the extent to which the nature of institutions' activities could increase reputational and/or liability risks.</p> <p>x. Institutions are encouraged to monitor on an ongoing basis the effect of climate-related and environmental factors on their current market risk positions and future investments, and to develop stress-testing scenarios that incorporate climate-related and environmental risks.</p> <p>xi. Institutions with material climate-related and environmental risks are expected to evaluate the appropriateness of their stress testing, with a view to incorporating them into their baseline and adverse scenarios.</p> <p>xii. Institutions are expected to assess whether material climate-related and environmental risks could cause net cash outflows or depletion of liquidity buffers and, if so, incorporate these factors into their liquidity risk management and liquidity buffer calibration.</p>
Disclosures	<p>xiii. For the purposes of their regulatory disclosures, institutions are expected to publish meaningful information and key metrics on climate-related and environmental risks that they deem to be material, as a minimum, in line with the European Commission's Guidelines on non-financial reporting: Supplement on reporting climate-related information.</p>

### 5.2.5.3 Supervisory engagement activities

All interviewed supervisors mentioned the need to increase awareness of ESG risks and foster capacity building for the proper treatment of these risks in supervised institutions. Many remarked that banks are willingly embarking on this journey alongside supervisors. Although the range of engagement activities varies, usually depending upon the size of the banking sector under supervision, all respondents mentioned that they are actively engaging with their supervised banks. Typically, engagement activities include dialogue, publication of ESG related guidelines and requirements – which have been described above –, participation in industry fora and working groups, as well as the establishment of and participation in committees.

An active dialogue with supervised banks is mentioned by many respondent supervisors as one of the initial building blocks in order to raise awareness of the importance of ESG issues. Some supervisors consider themselves still in the initial dialogue phase, and are sensitising their supervised banks to ESG issues and ensuring they are prepared for upcoming regulation.

This dialogue is further evolved by supervisors through normal supervisory activities, for example in continuous assessment meetings with key individuals from banks. Concurrently to establishing a dialogue with supervised banks, supervisors also mentioned the active contribution to research in the ESG area, and the associated publication of studies and reports on the topic of ESG risk by supervisors and central banks. Many respondents expressed the aim of first developing expertise in the ESG field, with a view to then incorporating ESG risks into prudential supervision.

As set out in the previous section, some supervisors have published guidelines or good practices on the management of ESG risks. Engagement with supervised banks is a large element of this process. Good practices published by supervisors also evidence a high level of engagement between market players. The ACPR good practices, for example, are partly derived from a survey of nine banking institutions conducted in 2018.<sup>293</sup>

Participation in industry fora and working groups, as well as interactions with banking associations, were frequently highlighted by respondents as a useful method of advancing engagement. Interaction with the industry in this manner often manifests in the form of workshops, conferences or round tables. An example of this is the EBA & EBF workshop on sustainable finance, held in April 2019 in Brussels which aimed “to shed some light on institutions, regulators and supervisor’s practices and thinking on how best to incorporate sustainability considerations”.<sup>294</sup> Some supervisors see the establishment of industry or inter-disciplinary committees or forums as a critical element in encouraging capacity building and developing awareness.

For example, the PRA and Financial Conduct Authority (FCA) co-convened the Climate Financial Risk Forum (CFRF) with the aim of building capacity and sharing best practice “across financial regulators and industry to advance our sector’s responses to the financial risks from climate change”.<sup>295</sup> Since inception, the CFRF has set up four technical working

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<sup>293</sup> ACPR (2020). *Governance and management of climate-related risks by French banking institutions: some good practices*. Available at: [https://acpr.banque-france.fr/sites/default/files/medias/documents/20200525\\_synthese\\_gouvernance\\_anglais.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20200525_synthese_gouvernance_anglais.pdf).

<sup>294</sup> EBA & EBF (2019). *Joint EBA & EBF Workshop on Sustainable Finance*. Available at: <https://www.ebf.eu/wp-content/uploads/2019/04/EBA-EBF-Workshop-on-Sustainable-Finance-Highlights-and-summary.pdf>.

<sup>295</sup> Bank of England (n.d.). Webpage: *Climate Financial Risk Forum*. Available at: <https://www.bankofengland.co.uk/climate-change/climate-financial-risk-forum>.

groups on: i) disclosure, ii) scenario analysis, iii) risk management, and iv) innovation. In June 2020, they published a guide designed to help the financial industry approach and address the financial risks associated with climate change.<sup>296</sup> The CFRF aims to build on this guide “by developing new materials that progress the management of climate-related financial risks”, and will further engage with firms on the issues they face in this context, as well as to understand their perspectives in order to further develop recommendations.<sup>296</sup>

<sup>295</sup>The Bank of Greece established the Climate Change Impacts Study Committee (CCISC) with experts from various domains of knowledge, which studies the economic, social and environmental impact of climate change, conducts research, provides policy-relevant expertise, and holds public events such as seminars and round-table discussions.<sup>297</sup> Finally, almost all supervisors mentioned speeches as a powerful tool in fostering engagement with supervised banks.

Most interviewed supervisors mentioned that feedback from significant institutions on their ESG engagement has generally been positive. Supervisors observe that banks are becoming more and more aware of ESG issues as a topic which goes beyond the CSR department, and is understood as an inherent driver of risks; this perception has now shifted for a large majority of banks, especially when it comes to climate-related risks. One supervisor stated that their interaction with supervised banks regarding ESG has contributed to sustainability becoming a topic that is discussed and handled more broadly in the organisation.

### **5.3 First overview of the tools and mechanisms for the integration of ESG risks into the EU prudential supervision**

Based on the data collected during the data collection phase thus far, participants highlighted preliminary areas, as listed below, that will be used as a starting point for identifying principles / best practices. This section will be refined during the remainder of the Study, among others to expand the forward-looking perspective.

#### **1. ESG risk definition & identification**

##### ESG risk definition

- Supervisors globally mentioned the need to develop definitions of ESG risks and underlying themes in order to provide transparency and guidance on their expectations to supervised banks, foster the building of capabilities, and serve as basis for the integration of ESG considerations into prudential supervision.
- Supervisors often highlighted a trade-off between providing standardised ESG definitions and leaving room for banks to adopt to their own definitions, tailored to specific business models.
- Whilst financial materiality is an area of focus for respondent supervisors by virtue of their mandate, a majority stated that they focus, or plan to focus, on double materiality. The double materiality concept is also seen as being in line with disclosure standards and requirements for institutions, such as the NFRD. Other stakeholders, such as civil society organisations, also highlighted that supervisory or regulatory

<sup>296</sup> Climate Financial Risk Forum (2020). *Climate Finance Risk Forum Guide 2020 – Risk Management Chapter*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-risk-management-chapter.pdf>.

<sup>297</sup> Bank of Greece (n.d.). Webpage: CCISC. Available at: <https://www.bankofgreece.gr/en/the-bank/social-responsibility/sustainability-and-climate-change/ccisc>.

requirements should take a broader perspective and, in particular, address the double materiality perspective whilst drawing a distinction between the two perspectives.

- One civil society noted that the CRR currently focuses predominantly on financial materiality, and that it would require substantial legislative changes for the double materiality perspective to be considered in banking regulation.

#### ESG risk transmission channels

- There are differing views among respondent supervisors on whether the E, S and G pillars should be treated in an integrated way or separately, and to what extent ESG (or its pillars) is driving traditional risk types (e.g. credit, market and operational risk) vs. being standalone risk types.
- A majority of supervisors indicated that any integration in supervisory processes focuses on the impact of ESG themes and risks on traditional risk types, and that a link to the double materiality concept can be established via, for example, reputational or strategic risk.
- Respondent supervisors repeatedly highlighted that many opinions shared in relation to transmission channels are based on judgement rather than empirical evidence. Some supervisors noted a lack of sufficient work in this area to establish a coherent viewpoint on the relevance of various transmission channels.

#### ESG risk indicators

- Supervisors highlighted that they are currently not performing any quantitative assessments of ESG risks in supervised banks. The need for commonly adopted indicators and methodological tools was frequently highlighted by respondents.

#### Qualitative assessment of supervised banks

- ESG risk management within supervised institutions is planned to be assessed by respondent supervisors applying a holistic approach covering, for example, ESG risk governance and strategy, ESG risk definition and identification, as well as ESG risk measurement and assessment, as is similarly done for other risk types.

## **2. ESG governance & strategy**

#### ESG risk prudential supervision strategy

- Some supervisors stated that they have defined, or are currently defining, strategies to integrate ESG risks into supervisory frameworks and practices (e.g. SREP, ICAAP, Pillar 2). Some more advanced authorities define explicit and, in some cases public, strategic plans including priorities and timelines for their deployment.
- In the EU, the deliverables of the EBA under their action plan are seen by supervisors as important building blocks to inform concrete supervisory strategies in relation to prudential approaches and requirements.
- Most supervisors mentioned that they start their ESG strategy with selected themes – in particular, with climate risk – to first gather knowledge and establish capabilities. This in turn can allow banks to adapt and take changing practices and standards into account. In other jurisdictions, some authorities defined other initial focus areas, e.g. other environmental and social aspects.



### Internal ESG risk capabilities

- Membership in international fora and associated working groups is seen as key to harmonisation and joint development of supervisory approaches to ESG in the EU as well as globally.

### **3. ESG risk measurement & assessment**

#### ESG risk measurement and scenario analysis methodology

- Most supervisors mentioned a preference for some methodological freedom in respect to supervised banks' risk measurement practices for ESG risk whilst good and best practices are being established. However, it was noted by other stakeholders, including civil society organisations, that the development of good practices can be fostered by heightened regulatory expectations.
- Internal scenario analysis by banks, in particular for climate change related risk, is seen by respondents as an important tool for supervised institutions to inform ESG risk assessment and identification, as well as banks' business strategy setting. The importance of the use of reference scenarios – such as the NGFS Climate scenarios – in the definition of a common starting point was frequently indicated by participants from all stakeholder groups.

#### Categorisation of assets based on ESG risks

- Most supervisors mentioned that they have not yet begun a categorisation of assets based on their ESG risk profile, although most EU-based supervisors intend to make use of the EU Taxonomy for this purpose (for environmental themes). Numerous participants across stakeholder groups raised the question as to whether it might have to be amended by a more granular taxonomy – i.e. including 'brown' and 'grey' sectors. Accordingly, supervisors stated that the EU taxonomy, would need to be expanded to be more useful for risk management purposes.
- Furthermore, it was highlighted that such a broader taxonomy may only be relevant for classification purposes at a given point in time, as it would not appropriately factor in transition considerations.

### **4. Integration into supervisory processes**

#### Pillar 2 review processes and onsite supervision

- All supervisors stated that ESG risks should be integrated within Pillar 2 and be considered by banks in their ICAAP. Some supervisors believe that ESG risks should already be explicitly or implicitly covered since banks are required to analyse all relevant risk types in the ICAAP/ILAAP and assess their materiality.
- Correspondingly, most supervisors plan on providing additional explicit guidance regarding the integration of ESG risks in banks' risk management within Pillar 2. Some supervisors have already published such guidance, e.g. ECB (in consultation), BaFin, Austrian FMA, and the PRA.
- However, there are contrasting views among supervisors as to what extent Pillar 2 processes already implicitly cover ESG risks through their impact on traditional risk types (e.g. credit risk or reputational risk). The proposed scope of ESG risk integration varies, with most authorities focusing on climate-related risks for now.



- A number of respondents remarked that Pillar 2 processes are the most appropriate tool within the supervisory toolkit to address ESG risks from a supervisory standpoint, whilst capital requirements should be risk-based.
- The EBA has highlighted that the existing SREP framework may not be adequate for capturing the long-term nature and impact associated with ESG risks, and that a mechanism for dealing with a long-term time horizon within the supervisory assessment is warranted.<sup>298</sup> This view is also held by civil society organisations, with one respondent remarking that current risk management tools are often too short-term in nature, failing to recognise longer-term vulnerabilities.
- Most supervisors refer to the principle of proportionality in this context.

#### Supervisory stress testing

- Supervisors generally mentioned the need to carry out scenario analyses for climate-related risks and integrate ESG risks within the supervisory stress testing framework, especially as the short-term or backward-looking approach using historical data is less useful for assessing climate-related risks. In addition, many interviewed civil society organisations believe that climate scenario provision and climate-related risk stress testing should play a core prudential role in context of ESG supervision.
- The development of plausible common scenarios, as well as the establishment of methodologies, for the banking sector is considered by most interviewed stakeholders, including civil society organisations, to be an important step towards enhancing comparability and consistency of scenario analyses.
- As of yet, climate stress testing is mostly in the form of pilot exercises, with the aim of raising awareness and informing on the resilience of institutions' own business models and strategies in the face of climate change related risks. At this point, the setting of capital requirements based on the results of these exercises is not foreseen, a decision challenged by some civil society organisations.

### **5. ESG requirements, guidelines & engagement initiatives**

#### Regulatory requirements

- Many respondent supervisors describe a stepwise approach to addressing ESG risk topics, engaging with supervised institutions by first raising awareness, followed by the issuance of guidance, and finally the potential introduction of concrete requirements and regulation.
- Supervisors in the EU are awaiting guidance from the EBA on Pillar 3 disclosures of ESG-related risks, with an expected application date from June 2022.
- Debate among participants exists as to whether the capital requirements are an appropriate tool to address ESG risks and objectives. Most respondent supervisors believe that any approach taken should be risk-based. This stands in contrast to other stakeholders' views who see, for example, the increase of capital requirements for 'brown' exposures as a key tool to incentivise banks to re-direct capital. Among interviewed civil society organisations both viewpoints were held.

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<sup>298</sup> European Banking Authority (2020). *EBA Discussion paper on management and supervision of ESG risks for credit institutions and investment firms*. Available at:

[https://eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Publications/Discussions/2021/Discussion%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

### Supervisory guidance and expectations

- In addition to mandatory disclosure requirements, a majority of respondent supervisors expect larger supervised institutions to adhere to relevant voluntary disclosure initiatives, e.g. TCFD.
- The issuance of supervisory guidance (i.e. guidelines, good practices) and expectations on ESG topics is supporting the dialogue with, and the advancement of good practices at, supervised institutions.
- Supervisory guidance typically covers topics such as governance and strategy, risk management, scenario analysis and stress testing, and disclosure in line with the existing supervisory assessment of institutions.
- Civil society organisations, in particular, noted that, given the heterogeneity of institution's practices in the context of ESG, clarity on supervisory expectations should lead to enhanced practices and more harmonisation.

### Supervisory engagement activities

- Although most supervisors believe that the general awareness on ESG topics – and climate specifically – has increased at supervised institutions, they mention that this awareness should be maintained and further increased through continued supervisory engagement.

## 6. Modalities of integrating ESG objectives into EU banks' business strategies and investment policies

This section represents an overview of the stocktaking exercise on current banks' strategies to integrate ESG factors and foster long-termism in their lending and investment activity in response to green / sustainable funding needs. For the avoidance of doubt, the term investment / investment activity in this report is used to indicate capital markets activity (e.g. Equity Capital Markets and Debt Capital Markets underwriting, sales and trading activity) as well as treasury portfolio. It does not include investments on behalf of clients (e.g. asset management or private banking activities) and associated products.

This includes an analysis of the state of play of green finance and of the market for responsible / sustainable investment at EU and global level, including a mapping of all available green / sustainable financial instruments, products and services and their impact on EU banks' balance sheets.

Furthermore, it provides a first overview of the impediments to the development of a well-functioning EU market for green finance and for responsible investment, a preliminary overview of the appropriate instruments and strategies to promote the scaling-up of green finance and the market for sustainable financial products, as well as a preliminary overview of how to enhance the ability of banks in understanding how ESG objectives can translate into financial opportunities.

### 6.1 Overview of focus areas for research

For the purpose of this Study, the following key elements of banks' integration of ESG objectives into their lending and investment activities were analysed, as further illustrated below:

- ESG financial products, services and markets in relation to banks' lending and investment activity;
- Banks' ESG strategy & governance;
- Banks' ESG measurement, monitoring and disclosure; and
- Banks' ESG portfolio steering & 'business as usual' processes.

This list of focus areas serves as a structure to systematically gather input and data during the research. The key focus areas analysed as part of the preliminary stocktake under each of these elements are illustrated in *Figure 69*.

Figure 69: Objective 3 focus areas and their respective themes (illustrative)

<b><u>Focus Area</u></b>	<b><u>Themes</u></b>	<b><u>Illustrative description</u></b>
<b>ESG financial products, services and markets</b>	<b>Definition of ESG products</b>	Definition for different categories of ESG products by banks
	<b>Overview of market for green and sustainable financial instruments, products and services<sup>299</sup></b>	Overview of green and sustainable products and services that are currently available / offered by banks in corporate & SME lending, retail businesses, and capital markets

<sup>299</sup> Only products directly covered via banking regulation have been covered for the purposes of this Study; this excludes, for example, insurance and investment management products.

	<b>Debt and Equity Capital Markets</b>	Capital markets activities of banks covering for example bonds, securitisation and derivatives
	<b>Corporate and SME Lending</b>	Corporate and business banking, covering for example corporate and SME loans, project finance, asset finance and leasing
	<b>Lending to individuals and microbusinesses</b>	Retail banking, covering, for example, consumer finance, mortgages, credit cards, and small- & micro-businesses
<b>ESG strategy &amp; governance</b>	<b>ESG strategy and public commitments</b>	Overall level of ambition and strategy of the bank, including qualitative and/or quantitative targets on ESG related activities
	<b>ESG governance structures, board oversight, and organisational set-up</b>	Dedicated ESG governance and organisational structures to develop and implement banks' ESG strategies
<b>ESG measurement, monitoring and disclosure</b>	<b>ESG business profile classification, measurement and monitoring methodology</b>	Classification methodologies and data sources used for classification, measurement, and assessment of the bank portfolio's ESG profile
	<b>ESG impact on funding and banks' balance sheet</b>	Impact of ESG products and activities on a bank's balance sheet in terms of, for example, funding or capital, as well as riskiness, compared to other assets
	<b>ESG activity disclosure<sup>300</sup> and impact of legislation</b>	Disclosure practices of banks on ESG activity, and impact of legislation and regulation on current ESG disclosure
<b>ESG portfolio steering &amp; 'business as usual' processes</b>	<b>ESG lending &amp; Investment policies and strategies</b>	ESG lending and investment strategies and policies of banks
	<b>Business planning and steering</b>	Commercial planning and steering deployed by banks to achieve ESG related business targets
	<b>Client engagement</b>	Engagement of banks with clients to advance ESG related objectives

<sup>300</sup> ESG risk reporting and disclosure is mentioned in section 4.2.5.

## **6.2 Stocktake of current ESG practices**

The following first key takeaways represent the results of the stocktake exercise conducted on the previously defined perimeter of external stakeholders, and is based on a first analysis of the data collected so far.

### **6.2.1 First key takeaways**

#### **ESG financial products, services and markets:**

Despite the development of international voluntary principles for some products (e.g. green bonds, social bonds, green loans), respondent banks, as well as other stakeholders including civil society organisations, mentioned a lack of standards with respect to the definition of ESG products, services, and their respective markets. According to these respondents, there is no consistent approach across banks in terms of their ESG product labelling, and the assessment of any market volumes is highly dependent on the exact definition of products beyond their label. However, other market participants, including civil society organisations, argue that although voluntary principles exist, they have not been sufficiently implemented by banks. To address this, some civil society organisations advocate that compliance with certain standards – such as the EU Green Bond Standard<sup>301</sup> –, should be made compulsory. Study participants would expect the EU taxonomy to facilitate product labelling standardisation, provided it is expanded to banking instruments. It was also mentioned by civil society organisations that an expanded EU taxonomy, which includes and defines 'grey' and 'brown' activities, could further standardise the classification of ESG activities and facilitate a common product labelling.

The products that are most commonly offered or developed across interviewed banks include green bonds, sustainable bonds and social impact bonds for capital markets (mostly provided by G-SIBs)<sup>302</sup>, green project finance and green loans for corporate and SME lending, and green / energy efficiency mortgages for lending to individuals and microbusinesses.

The areas where respondents see most emerging business opportunities for ESG offerings are green loans, sustainability-linked bonds, transition bonds, electric car loans, and green mortgages across business segments. Overall, and according to study participants, market demand for ESG offerings is considered to be increasing across all client segments. However, demand for ESG products from retail clients is currently seen by responding banks as relatively low compared to other segments. One reason for this, as referenced by respondents, is that corporates are more pressured by investors and civil society organisations to become more sustainable, compared to retail customers.

Civil society organisations and other stakeholders highlighted the importance of integrating ESG factors across all products and services offered by banks, including off-balance sheet exposures, in order to capture a comprehensive view on banking activity.

#### **ESG strategy & governance:**

The majority of interviewed banks (83%) stated that strategies are in place for the integration of ESG into lending and investments. However, the strategies set are usually at a high level and there are seldom comprehensive KPIs or processes in place to monitor their implementation at an in-depth level. While ambition levels, detailed priorities, and

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<sup>301</sup> EU Technical Expert Group (2019). *Report on EU Green Bond Standard*. Available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard_en.pdf).

<sup>302</sup> Respondents did not explicitly mention any equity products for ESG offerings.

underlying initiatives vary in nature, these strategies are typically applied to parts of the portfolio only. To this end, while some banks state that they tend to align their ESG strategy with international agreements, such as the UN Sustainable Development Goals or the Paris Agreement, few banks have publicly specified concrete action plans to achieve those aims and disclose their progress towards it. Civil society organisations and some banks which consider themselves more advanced also emphasised the importance of setting science-based targets to align banks' strategies with the Paris Agreement.

Most interviewed banks stated that they have established centralised sustainability teams and/or functions to drive group-wide integration and implementation of their ESG strategy. Limited internal capabilities and know-how, as well as the need for top management alignment, were mentioned as key enablers for the development of ESG products and services.

### **ESG measurement, monitoring and disclosure:**

The majority of interviewed banks stated that they are able to classify and measure the ESG business profile of their lending and investment portfolios at sectoral (83%) and loan-purpose (79%) level, although often only for parts of the portfolio. Other more granular methodologies, such as classification by counterparty and ESG product – which could support transparency –, are not commonly in place. Overall, portfolio measurement seems to be limited to parts of the book. Hence, some respondents stated that they face the challenge of systematically identifying green assets on their balance sheet. To address this challenge, some interviewed banks have started to develop internal taxonomies, along with the EU taxonomy, to allow ESG measurement along multiple dimensions and at different levels of granularity.

An area that has received attention from all stakeholder groups, including civil society organisations, is the alignment of a bank's portfolio to international agreements or goals, such as the Paris Agreement. Some financial institutions have undertaken commitments to align their activities with the goals agreed by international agreements, as well as those set by their national governments. However, only one interviewed bank stated that a framework is in place to measure the alignment of their entire portfolio to the Paris Agreement, via the use of a proxy approach. In this context, civil society organisations and some banks which consider themselves more advanced stressed the importance of setting science-based targets on large parts of banks' portfolios and using sector-specific approaches, including physical carbon intensities by sector.

According to respondents, there are limitations in terms of understanding the ESG impact on their funding, and most interviewed banks stated that they have not yet collected comprehensive evidence on the risk / return profile of their ESG lending or investment activities. Similarly, few banks mentioned having a deeper understanding of the ESG impact on their overall asset composition and quality.

In relation to banks' ESG reporting practices, most banks publish their ESG strategy, public sustainability commitments, and high-level targets to scale up green finance – where applicable –, whereas the publication of detailed disclosures on the share of banks' ESG-related business activity, as well as detailed quantitative commitments, is still an exception. In the context of these disclosures, given the lack of common product labelling standards coupled with the lack of independent assessments, a risk of potential green washing by banks was noted by civil society organisations and academics in particular. Civil society organisations also pointed out that disclosure standards could serve as one of the stimulating factors to push companies towards more sustainable practices. Therefore,

some participants, including civil society organisations, call for guidance and regulatory requirements to improve transparency and consistency of disclosures.

**ESG portfolio steering & 'business as usual' processes:**

Many banks lack a holistic and granular approach to measure and monitor the ESG business profile of their lending and investment activity. While most interviewed banks (84%) have policies in place which set assessment criteria for socially and environmentally sensitive industries, these usually apply to a limited set of prioritised sectors only, and often not to the extent expected by civil society organisations. Despite most interviewed banks having begun the integration of ESG considerations into their client screening and credit approval process, few banks cascade sectoral policies further into business origination guidelines / criteria and procedures to actively steer the commercial planning process. Moreover, approximately half of interviewed banks (52%) stated that they did not have an internal framework in place for relationship managers to capture ESG-related information from clients.

The following sections present the detailed findings along the key research focus areas and themes.



## 6.2.2 ESG financial products, services and markets

Market demand for financial instruments, products, and services geared towards sustainability objectives is increasing. In order to bring global economic growth in line with the Sustainable Development Goals<sup>303</sup> and the Paris Agreement, the OECD estimates that infrastructure investments alone would have to come to USD 6.9 trillion a year up to 2030.<sup>304</sup> For the EU, it is estimated that in the period 2021-2030, compared to the previous decade for example, an additional EUR 350 billion of energy-related investment will be necessary each year to meet the target of reducing greenhouse gas emissions by 55% in 2030 compared to 1990.<sup>305</sup> Since banks are one of the main sources of external finance for the European economy, they are considered to play a vital role in closing the investment gap for the transition to a more sustainable economy by providing adequate financial instruments, products, and services.<sup>306</sup>

Given that current ESG product offerings focus mostly on the E and S pillars and less on the G pillar, this section focuses predominantly on environmental and social aspects.

### 6.2.2.1 Definition of ESG products

A challenge in relation to offerings of ESG-related (or sustainable) financing products is the lack of standards with respect to the definition of ESG products, services, and respective markets. Many market participants and civil society organisations noted that there is currently no agreed definition of what counts as 'green' or 'sustainable' in financial markets.<sup>307</sup> This lack of standards is causing concerns in the market, as mentioned in a recent discussion paper by Imperial College Business School, which states that "without more holistic standards, green finance is simply cutting the same pie into different slices".<sup>308</sup>

Different terms and definitions are used – e.g. offerings related to 'sustainable finance', 'responsible finance', 'ESG offerings', and 'green finance' –, oftentimes interchangeably. According to the European Commission, sustainable finance generally refers to the process of taking due account of ESG considerations when making investment or financing decisions<sup>309</sup>, which is broader than the concept of 'green finance' that is confined to climate and environmental protection issues such as natural resource conservation, biodiversity conservation, and pollution prevention and control.<sup>310</sup> Despite the lack of a common standard, key high-level definitions under sustainable finance and their sources are compared and summarised by international organisations and associations (e.g. the

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<sup>303</sup> UN (2015). *Sustainable Development Goals*. Available at: <https://sdgs.un.org/goals>.

<sup>304</sup> OECD (2017). *Technical note on estimates of infrastructure investment needs*. Available at: <https://www.oecd.org/env/cc/q20-climate/Technical-note-estimates-of-infrastructure-investment-needs.pdf>.

<sup>305</sup> European Commission (2020). *Stepping up Europe's 2030 climate ambition*. Available at: [https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/com\\_2030\\_ctp\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/com_2030_ctp_en.pdf).

<sup>306</sup> Tender Specifications, section 2.1, page 7.

<sup>307</sup> European Federation for Transport & Environment (2019). *EU Commission bids to stem the flow of greenwashing in banking with own 'green list'*. Available at: <https://www.transportenvironment.org/press/eu-commission-bids-stem-flow-greenwashing-banking-own-green-list>.

<sup>308</sup> Imperial College Business School (2020). *Transition Finance: Managing Funding to Carbon-Intensive Firms*. Available at: <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/centre-climate-finance-investment/research/transition-finance-managing-funding-to-carbon-intensive-firms/>.

<sup>309</sup> European Commission (n.d.). *Overview of sustainable finance*. Available at: [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/what-sustainable-finance\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/what-sustainable-finance_en).

<sup>310</sup> See for example: International Capital Market Association (2020). *Sustainable Finance High-level definitions*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Sustainable-Finance-High-Level-Definitions-May-2020-110520v4.pdf>.

International Capital Market Association (ICMA)) and academia (e.g. Imperial College Business School).<sup>417</sup>

At a product level, there is also a lack of standardised definitions in the market. For example, there is no uniform standard for green bonds, which are one of the most mature 'green' product types. The lack of clear and comparable definitions for green bonds has been discussed at international forums.<sup>311</sup> In this context, and at EU level, the 2018 report of the EU High-level Expert Group on Sustainable Finance highlighted the need to develop official European sustainable finance standards, to introduce an official EU Green Bond Standard, and to "consider an EU Green Bond label or certificate to help the market to develop fully and to maximise its capacity to finance green projects that contribute to wider".<sup>312</sup> In 2019, the Technical Expert Group on Sustainable Finance published a report that proposes the content of a draft EU Green Bond Standard (EU GBS) and provides guidance to the Commission on the proposed way forward for the EU GBS, including the creation of a centralised accreditation scheme for external verifiers.<sup>313</sup> Some civil society organisations, such as Finance Watch, advocate that compliance with the EU GBS should be made compulsory and that implementation should take place through a regulation.<sup>314</sup> As further argued by SOMO, "the voluntary nature of this popular green investment instrument contrasts with the urgency of re-orienting capital towards effective positive climate and environmental impact".<sup>315</sup>

For product offerings related to the S pillar, the lack of conceptual clarity was identified as an issue in the context of providing access to finance for social enterprises<sup>316</sup>, particularly in relation to micro-finance and microcredit.<sup>317</sup>

In general, when factoring ESG criteria into product offering, banks typically formulate specific requirements either towards the characteristics of 'counterparties' (e.g. issuers / borrowers), or on the 'use of the proceeds' (e.g. loans for 'green' purposes). For example, for project finance and real estate financing, the use of proceeds largely determines if a product is considered sustainable; in other words, the funds must be allocated to sustainable projects. However, in a report from the Imperial College Business School, one concern was raised that 'use of proceeds' model may "soon reach its limit to drive change in the financial system" as evaluation of green activities cannot be indefinitely separated from the performance of the entire firm.<sup>318</sup> For other lending products – for example, general purpose lending like working capital loans – it is often the counterparty itself that

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<sup>311</sup> See for example: G20 Green Finance Study Group (2016). *Terms of Reference*. Available at: <http://unepinquiry.org/wp-content/uploads/2016/08/Final-GFSG-TOR-2016-01-29.pdf>.

<sup>312</sup> EU High-level Expert Group on Sustainable Finance (2018). *Financing a Sustainable European Economy*. Available at: [https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report\\_en.pdf](https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf).

<sup>313</sup> EU Technical Expert Group (2019). *Report on EU Green Bond Standard*. Available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard_en.pdf).

<sup>314</sup> See for example: Finance Watch (2019). *Response to Invitation for feedback on the TEG preliminary recommendations for an EU Green Bond Standard*. Available at: <https://www.finance-watch.org/wp-content/uploads/2019/04/Finance-Watch-feedback-TEG-report-Green-Bonds.pdf>.

<sup>315</sup> Centre for Research on Multinational Corporations (2019). *Green bond standards?* Available at: <https://www.somo.nl/a-voluntary-eu-green-bond-standard/>.

<sup>316</sup> Defined as businesses that have a social or environmental purpose - they reinvest any surpluses back into the business in order to deliver more of their social or environmental purpose.

<sup>317</sup> Expert group on social economy and social enterprises (2020). *Minutes of the Meeting of the European Commission's Expert Group on Social Economy and Social Enterprises*. Available at: <https://ec.europa.eu/docsroom/documents/42441>.

<sup>318</sup> Imperial College Business School (2020). *Transition Finance: Managing Funding to Carbon-Intensive Firms*. Available at: <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/centre-climate-finance-investment/research/transition-finance-managing-funding-to-carbon-intensive-firms/>.

is being considered when assessing sustainability based on predefined criteria. If it is a company, it either must be within a certain industry or sector focused on specific activities, or it must be assessed as overall sustainable or commit to improving its performance on certain sustainability indicators. If it is an individual, they often need to meet certain criteria, such as belonging to a vulnerable segment in relation to financial inclusion considerations.

As a result, and as further illustrated below, there is no consistent approach to ESG-related (or sustainable) product classification across analysed banks given the lack of baseline principles and standards. Banks' chosen approaches are often driven by factors such as the bank's size, its internal ESG-related capacity, and the sophistication of their overall ESG product offering. For example, smaller banks may have loan exposures to green projects or other sustainable purposes, but these are not necessarily publicly promoted or externally labelled as 'green finance'. On the other hand, larger banks tend to establish an internal framework – sometimes using external or regulatory guidance such as the EU Taxonomy or available principles such as the Green Bond Principles<sup>319</sup> and Social Bond Principles<sup>320</sup> –, to classify ESG products. In addition, some banks develop their own taxonomies as a basis to manage their ESG products (see section 6.2.4.1).

In addition to this lack of consistent classification of green products across banks, ShareAction highlighted in a survey that only 25% of surveyed banks publicly disclose an independent assessment of their low-carbon products, which also limits transparency to stakeholders.<sup>321</sup>

#### 6.2.2.2 Overview of market for green and sustainable financial instruments, products and services

This Study reviews sustainable finance products along three main product segments of bank ESG offerings: i) Debt and Equity Capital Markets; ii) Corporate and SME lending; iii) Lending to individuals and microbusinesses.

Figure 70 provides an overview of key ESG products that were mentioned by banks during the Study; this is further discussed in the following sections.

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<sup>319</sup> ICMA (2018). *Green Bond Principles – Voluntary Process Guidelines for Issuing Green Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf>.

<sup>320</sup> ICMA (2020). *Social Bond Principles - Voluntary Process Guidelines for Issuing Social Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>.

<sup>321</sup> ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

Figure 70: ESG products map

**ESG Classification**  
  Based on use of proceeds (if applicable) / products' own features  
  Based on ESG objectives or profile of the counterparty

Division	Instrument Type	Products and relevant ESG pillars		
		Environmental	Social	Governance
Debt and Equity Capital Markets	Bonds	Green Bonds	Social Bonds	
		Blue Bonds		
		Transition Bonds		
		Sustainability Bonds		
		Sustainability-linked Bonds		
		SDG Bonds		
	Securitisation	Green ABS		
		ESG CLOs		
		Capital Relief Transactions		
	Derivatives	Carbon Derivatives		
		ESG-linked Derivatives		
		ESG Futures and Options linked to STOXX or MSCI Index		
Corporate and SME Lending	Loans	Green Loans	Social Loans	
		Sustainability-linked Loans/ ESG-linked Loans		
		SDG Loans		
		Revolving green credit facilities		
		Sustainability Improvement Loans		
		Green Project Finance	Social Impact Project Finance	
		Sustainable Supply Chain Finance		
Lending to individuals and microbusinesses	Mortgages	Green/Energy Efficiency Mortgages		
	Loans	Electric Car Loans	Loans to vulnerable segments	
		Consumer loan for energy efficiency/ renewable energy instalment		
		Credit for Energy Efficiency		
	Credit Cards	Sustainable Credit Cards		
	Other	Green Deposits		

Source: Public reports from banks and BlackRock FMA analysis

Emerging ESG business opportunities mentioned most frequently by participants during interviews are summarised in *Figure 71*. Currently, according to respondents, there is a strong focus on green loans<sup>322</sup> and sustainability-linked bonds<sup>323</sup>. They also mentioned the importance of more innovative financial structures, e.g. sustainable supply chain finance, and the expectation that, in the near future, a broader range of environmental aspects beyond climate will become important in product offerings, e.g. sustainability-linked loans with interest margin linked to waste reduction targets.

In addition, participants mentioned that products related to the S pillar, such as social impact bonds<sup>324</sup>, are likely to gain more prominence, especially in light of the Covid-19

<sup>322</sup> Defined as any type of loan instrument made available exclusively to finance or re-finance, in whole or in part, new and/or existing eligible Green Projects according to the LMA Green Loan Principles. See LMA (2018). *Green Loan Principles*. Available at:

[https://www.lma.eu.com/application/files/9115/4452/5458/741\\_LM\\_Green\\_Loan\\_Principles\\_Booklet\\_V8.pdf](https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf).

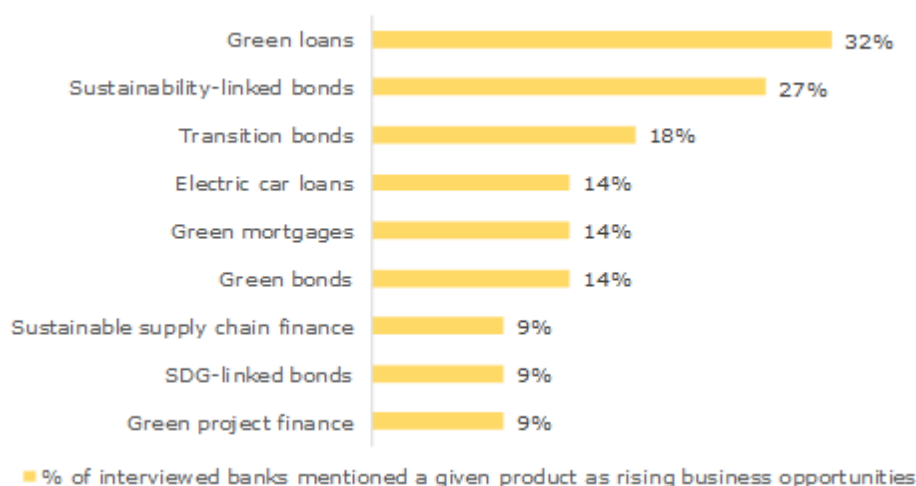
<sup>323</sup> Defined as "bond instrument for which the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined Sustainability/ ESG objectives" according to ICMA Sustainability-Linked Bond Principles. See ICMA (2020) *Sustainability-Linked Bond Principles*. Available at:

<https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Sustainability-Linked-Bond-PrinciplesJune-2020-100620.pdf>.

<sup>324</sup> According to the OECD, social impact bonds are pay-for-success instruments which make financing conditional upon the delivery of concrete results. Thereby, commissioners (often public authorities or philanthropies) enter into agreements with social service providers, such as social enterprises or non-profit organisations, and investors (typically development finance providers) to pay for the delivery of pre-defined.

pandemic. Some participants also believe that all financial instruments can have an ESG characteristic and there will be an increasing adaptation of existing financial products to create new solutions.

Figure 71: Rising business opportunities for ESG<sup>325</sup>



Source: BlackRock FMA analysis

#### 6.2.2.3 Debt and Equity Capital Markets

Green bonds play an increasingly important role in financing assets needed for the low-carbon transition.<sup>326</sup> For example, according to the Climate Bonds Initiative, new issuance of green bonds and green loans that were aligned to their Climate Bonds Taxonomy<sup>327</sup> reached a record high in 2019 of approximately USD 258 billion, up more than 50% from 2018. The volume was primarily driven by the European market which accounted for 45% of global issuance (see Figure 72). Use of proceeds from global green bonds issuance in 2019 were mainly for renewable energy (31%), green buildings (30%), and transportation (20%). As the market continues to mature, the basket of issuers is becoming more diverse, both at European and global level, and there is an increasing issuance of social and/or sustainable-labelled bonds.<sup>328</sup> It is notable that private sector green bonds which meet the criteria set out by the Climate Bond Initiative where proceeds are allocated to

social outcomes. Social impact bonds are applied to address a range of social issues such as workforce development, education and health. See OECD (2019). *Social Impact Investment 2019*. Available at: <https://www.oecd-ilibrary.org/docserver/9789264311299-en.pdf>.

<sup>325</sup> Question: What ESG-related product opportunities do you see arising across the E/S/G pillars in the coming years? Sample size: 22. Respondents also mentioned other raising ESG business opportunities (but less than 10% of total responses) that include: sustainability advisory services, carbon credits and / related certificates for trading, products that support transition to decarbonisation, equity and equity linked thematic finance, SDG bonds, Covid bonds, securitisations, derivatives, etc. for Debt and Equity Markets; sustainable real estate, sustainability-linked loans and credit facilities, etc. for Corporate and SME Lending; and green leasing, ESG guarantees, sustainable credit cards, microfinance and loans to vulnerable segments, etc. for lending to individuals and micro-businesses.

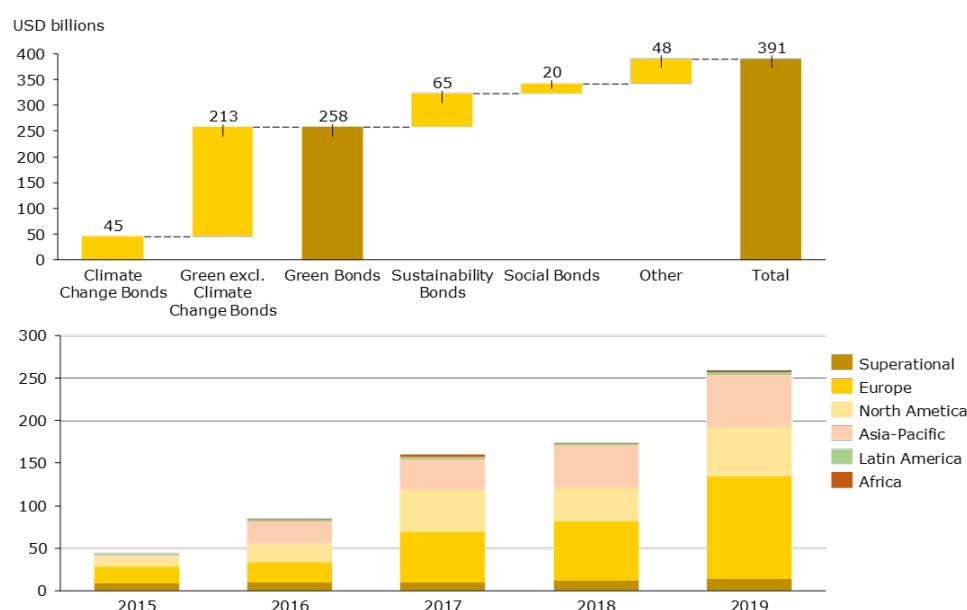
<sup>326</sup> EU Technical Expert Group (2019). Report on EU Green Bond Standard. Available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-green-bond-standard_en.pdf).

<sup>327</sup> Only bonds with at least 95% proceeds dedicated to green assets and projects that are aligned with the Climate Bonds Taxonomy are included in the Green Bond figures under Climate Bonds Initiative. For instance, sustainability bonds with a wider use of proceeds or bonds which fund large amounts of working capital would be excluded.

<sup>328</sup> Climate Bonds Initiative (2019). *Green Bond Market Summary*. Available at: [https://www.climatebonds.net/system/tmf/reports/2019\\_annual\\_highlights-final.pdf?file=1&type=node&id=46731&force=0](https://www.climatebonds.net/system/tmf/reports/2019_annual_highlights-final.pdf?file=1&type=node&id=46731&force=0).

environmental projects, do not have markedly different maturities compared with conventional corporate bonds; however, green bonds issued by the public sector tend to have longer maturities than the ones issued by the private sector.<sup>329</sup> One civil society organisation expressed the view that green bonds are legally the same as other general corporate purpose bonds and do not exhibit characteristics that would indicate different riskiness.

**Figure 72: Overview of sustainable bond issuance in 2019 and evolution of green bond issuance by region<sup>330</sup>**



Source: Climate Bonds Initiative (2019)

Another feature of the green bond market is the increasing relevance of transition bonds, which are designed to help companies that are considered 'brown' to transition towards becoming 'greener'.<sup>331</sup> The proceeds from these bonds are used to improve the sustainability and environmental profile of the issuer. However, they may not qualify as EU Green Bonds under the EU Green Bond Standards or the Climate Bond Initiative Standards. A number of participants stated that, in their view, transition bonds will be one of the key growth areas for the coming years, as they could facilitate changes of organisations in carbon intensive sectors such as materials, extractives, and chemicals that may lack green assets to support issuance of a green bond. However, there are currently no universally accepted definitions for transition bonds, and there are no reliable

<sup>329</sup> ECB, ESRB (2020), *Positively green: Measuring climate change risks to financial stability*. Available at: [https://www.esrb.europa.eu/pub/pdf/reports/esrb.report200608\\_on\\_Positively\\_green\\_-\\_Measuring\\_climate\\_change\\_risks\\_to\\_financial\\_stability~d903a83690.en.pdf?c5d033aa3c648ca0623f5a2306931e26](https://www.esrb.europa.eu/pub/pdf/reports/esrb.report200608_on_Positively_green_-_Measuring_climate_change_risks_to_financial_stability~d903a83690.en.pdf?c5d033aa3c648ca0623f5a2306931e26).

<sup>330</sup> Product classification is based on standards set by Climate Bond Initiative; "Other" includes (i) ineligible green bonds that allocate over 5% of proceeds to assets or projects that are not necessarily linked to green or financing for projects that are not aligned with the CBI Green Bond Databased Methodology. For full classification see: Climate Bonds Initiative (2019). *Green Bond Market Summary*. Available at: [https://www.climatebonds.net/system/tdf/reports/2019\\_annual\\_highlights-final.pdf?file=1&type=node&id=46731&force=0](https://www.climatebonds.net/system/tdf/reports/2019_annual_highlights-final.pdf?file=1&type=node&id=46731&force=0)

<sup>331</sup> According to the IFC, transition bonds aim to finance the transition to a low-carbon economy. See IFC (2019). *Emerging Market Green Bonds Report 2019*. Available at: <https://www.ifc.org/wps/wcm/connect/a64560ef-b074-4a53-8173-f678ccb4f9cd/202005-EM-Green-Bonds-Report-2019.pdf?MOD=AJPERES&CVID=n7Gtahg>.



estimates of the market size. Civil society organisations emphasised the importance of addressing the lack of a common standard for transition bond issuance in the market and suggested that the classification of such activities could be further enhanced in the EU Taxonomy.

The green securitisation and structured finance market is expected to play an increasingly important role to finance green projects particularly for smaller scale low carbon and climate-resilient assets. Although no formal definition has been adopted for green securitisation, three main types of transactions labelled as 'green' can be identified: i) securitisations with 'green' collateral i.e. when the securities are backed by portfolios of green assets, for example, electric vehicle loan or mortgages for energy-efficient homes; ii) securitisation with 'green' use of proceeds that will be used for investment in green projects; and iii) capital relief transactions, for example, synthetic securitisation where the originator uses freed-up capital to invest in green projects.<sup>332</sup> In January 2019, the new regulatory framework for securitisations in the EU came into force, that defined criteria for "simple, transparent, and standardised" securitisations.<sup>333</sup> However, in this context one respondent bank argued that the current European regulatory framework for securitisation is not effective, especially for small-scale loans, mortgages and consumer loans. Another bank specifically mentioned that similar programs to the Property Assessed Clean Energy (PACE) program<sup>334</sup> in the US is lacking at European level which, among other factors, could support growth of green securitisation in Europe. Nevertheless, respondent banks still believe the demand for green securitisations will continue to grow in the coming years in line with the need for green finance initiatives and high demand of green products.

ESG derivatives are another business opportunity mentioned by participants and can be seen as a response to growth in ESG assets and the ensuing demand to hedge and manage sustainability exposure. The German exchange Eurex has listed standardised futures and options to global, regional and local MSCI indices and STOXX indices to allow asset holders manage undesired sustainability risks. Banks have also developed ESG derivatives that allow companies to hedge against moves in interest rates and exchange rates of sustainable or green bonds. For example, some swap products hedging sustainable bonds become more expensive if the company fails to reach its sustainability target under the related sustainable bond.

Compared with the green bonds issuance and other ESG debt offerings, ESG-related equity products are still relatively limited. In fact, very few interviewed banks stated that they currently provide such products. Only one bank stated that they advise clients holistically on broader sustainable finance aspects, including Equity Capital Markets. Two banks mentioned services such as green IPOs and provision of strategic and financial advice to corporate clients on M&A transactions to support their carbon optimisation objectives.

Last but not least, supervisors and civil society organisations emphasised the importance of integrating more ESG factors and considerations into off-balance-sheet transactions, for example, advisory services, securitisation, derivatives, and trade finance, to enable further

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<sup>332</sup> Climate Bonds Initiative (2017). *Green Securitisation: unlocking finance for small-scale low carbon projects*. Available at:

[https://www.climatebonds.net/files/files/March17\\_CBI\\_Briefing\\_Green\\_Securisation.pdf](https://www.climatebonds.net/files/files/March17_CBI_Briefing_Green_Securisation.pdf).

<sup>333</sup> Regulation (EU) 2017/2402 of the European Parliament and of the Council of 12 December 2017 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation, and amending Directives 2009/65/EC, 2009/138/EC and 2011/61/EU and Regulations (EC) No 1060/2009 and (EU) No 648/2012. OJ L 347, 28.12.2017, p. 35–80 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R2402>.

<sup>334</sup> Property Assessed Clean Energy Programs (n.d.). Available at: <https://www.energy.gov/eere/slsc/property-assessed-clean-energy-programs>.



transition from brown assets to green assets. Moreover, several civil society organisations and other stakeholders highlighted that currently off-balance sheet assets are not adequately taking ESG risks into account. For example, loans to potentially 'unsustainable' sectors that were securitised or sold after the origination may not be in scope of relevant disclosures or assessments.

Table 5 illustrates different product categories by giving examples of sustainable products currently offered by banks in the Debt and Equity Capital Markets business.

Table 5: Illustrative examples of ESG products in Debt and Equity Capital Markets

Product type	Example
<b>Bonds</b>	
<b>Green Bonds<sup>335</sup></b>	In 2019, a German state-owned development bank brought a total of USD9bn worth of green bonds to market. Proceeds will be used to provide financing or co-financing to renewable energy and green building projects.
<b>Social Bonds<sup>336</sup></b>	In May 2020, a large European bank issued a EUR1bn Covid-19 social bond. The funds, as published by the bank, will be primarily allocated to mitigating the severe economic and social impact caused directly and indirectly by the Covid-19 pandemic.
<b>Blue Bonds<sup>337</sup></b>	An investment bank served as an underwriter of a USD10mn blue bond for an international organisation. The bond helped to highlight the growing need to protect the world's oceans as well as the economies that rely upon their health and resilience.
<b>Transition Bonds</b>	In March 2020, a UK gas distribution network agreed to the UK's first transition bond which has been issued to enable heavy-carbon emitters to access funds to decarbonise.
<b>Sustainability Bonds<sup>338</sup></b>	In August 2020, a technology company issued a USD5.75bn sustainability bond with proceeds set to support investment in both environmental and social initiatives including eligible pre-defined projects for energy efficiency, clean energy, green buildings, racial equality, and support for small businesses in the wake of Covid-19.

<sup>335</sup> According to the ICMA Green Bond Principle, green bonds are defined as any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects. Eligible Green Project categories include, e.g., renewable energy and clean transportation. See ICMA (2018). *Green Bond Principles – Voluntary Process Guidelines for Issuing Green Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf>.

<sup>336</sup> According to the ICMA Social Bond Principles, social bonds are defined as bonds that the use of proceeds is used to raise funds for new and existing projects with positive social outcomes. See ICMA (2020). *Social Bond Principles – Voluntary Process Guidelines for Issuing Social Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>.

<sup>337</sup> According to IMF, blue bond is a debt instrument issued by governments, development banks or others to raise capital from impact investors to finance marine and ocean-based projects that have positive environmental, economic and climate benefits. See World bank (2018). *Sovereign Blue Bond Issuance: Frequently Asked Questions*. Available at: <https://www.worldbank.org/en/news/feature/2018/10/29/sovereign-blue-bond-issuance-frequently-asked-questions>.

<sup>338</sup> According to ICMA Sustainability Bond Guidelines, sustainability bonds are bonds where the proceeds will be exclusively applied to finance or re-finance a combination of both Green and Social Projects. See ICMA (2018). *Sustainability Bond Guidelines*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Sustainability-Bonds-Guidelines-June-2018-270520.pdf>.

Product type	Example
<b>Sustainability-linked Bonds</b>	In 2019, an Italian energy company paved the way with the world's very first sustainability-linked bond with interest rate adjustments related to sustainability performance targets.
<b>SDG Bonds</b>	In 2019, an international organisation issued a 10-year global Sustainable Development Goals (SDG) bond to raise awareness of SDG 2, SDG 5, SDG 13, SDG 16 at a total of EUR1.5bn.
<b>Securitisation</b>	
<b>Green Asset-backed Securities (ABS)</b>	In 2019, a European bank served as structuring agent and bookrunner on two solar securitisation deals, totalling USD575mn.
<b>ESG Collateralized Loan Obligations (CLOs)</b>	In 2019, a European bank priced the first ESG CLO that is fully compliant with the ESG best practices and with of EUR410mn utilising a wholly exclusionary loan selection process.
<b>Capital relief transactions</b>	In 2019, a European bank conducted a synthetic risk transfer to enhance the capacity to finance new socially responsible projects through reallocating the released capital from the legacy loan book. Additionally, the investor will reduce the coupon if the bank manages to redeploy more risk weighted assets than committed towards these projects in the agreed timeframe.
<b>Derivatives</b>	
<b>Carbon Derivatives</b>	A European bank offers structured notes that allow investors to take positions in EU carbon allowances while helping utilities reduce their funding costs.
<b>ESG-linked Derivatives</b>	The first ESG-linked sustainability-improvement derivative was launched in August 2019 which hedges the interest rate risk of the construction of an infrastructure project. The credit spread of the derivative can increase or decrease based on the projects' ESG performance.

Source: Public reports of banks and BlackRock FMA analysis

Among interviewed banks, green bonds are the most commonly offered (or developed) ESG products, followed by sustainable bonds and social impact bonds (see Figure 73). In fact, all of the interviewed G-SIBs are offering or developing green bonds and sustainable bonds while this is less common among non-GISIBs, for which approximately half of the interviewed banks did not offer these products. In addition to ESG products, several banks also provide advisory services to help clients on their capital market issuance, in particular to check their eligibility for labelled bond issuance. Apart from ESG bond offerings, other products are still a niche area for non-G-SIBs. For example, within the non-G-SIB group, only one bank has issued or developed Green ABS and carbon credits, while another bank offers carbon derivatives.

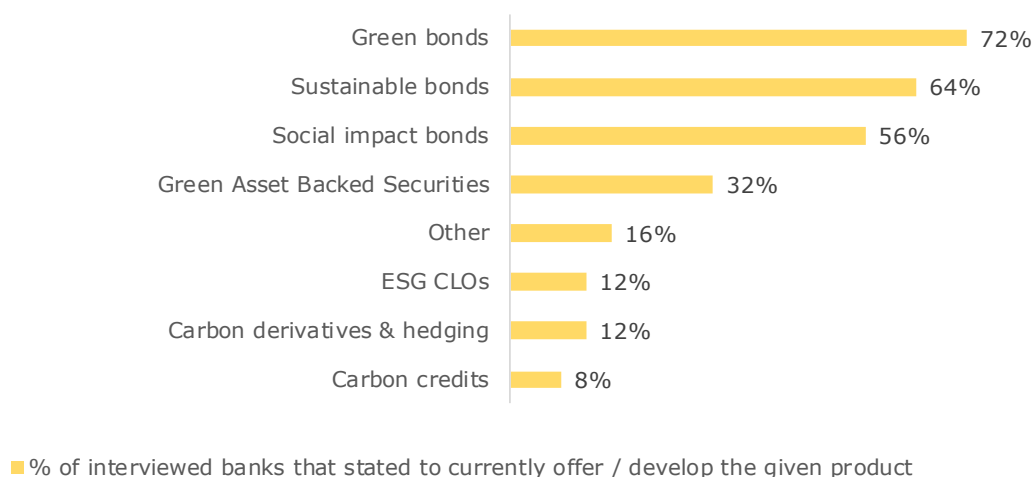
In terms of emerging business opportunities, participants mentioned that there may be a potential for expansion in 'use of proceeds' and KPI-linked structures for ESG products. To this end, several participants stated that they are observing an increasing level of interest in sustainability-linked products, as firms put more ESG strategies in place and try to link

these strategies to debt financing instruments, which they believe may potentially come at lower funding costs.

As a recent development, the ECB has announced that they will accept sustainability-linked bonds as central bank collateral from January 2021 and will potentially include them in their asset purchases.<sup>339</sup>

Banks also mentioned a notable growth potential for ESG derivatives and hedging solutions – for example, for renewable energy project financing and corporates.

Figure 73: ESG products offered and/or developed for Debt and Equity Capital Markets<sup>340</sup>



Source: BlackRock FMA analysis

#### 6.2.2.4 Corporate and SME Lending

Green and sustainability-linked loans are a relatively recent innovation, but respondents stated that they have become increasingly relevant for their ESG product offerings. With the release of the Green Loan Principles in 2018<sup>341</sup>, green loans can now be referenced to a set of basic standards similar to those for Green Bonds, setting out eligible uses of proceeds, project evaluation, management of proceeds, and reporting standards.

Sustainability-linked loans, according to the Sustainability Linked Loan Principles published in 2020<sup>342</sup>, do not set conditions on the purpose of the proceeds, but instead incentivise the borrower to improve its performance against pre-determined ESG criteria. *Table 6* provides a selection of case studies for sustainable products currently offered by banks in the Corporate and SME lending division.

<sup>339</sup> ECB (2020). *ECB to accept sustainability-linked bonds as collateral*.

Available at: <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200922~482e4a5a90.en.html>.

<sup>340</sup> Question: What are the key ESG-focused products you are currently offering and/or developing for a given segment / division? Sample size: 24. "Other" includes ESG-linked derivatives, Equity Capital Markets offerings (e.g. Green IPOs), sustainability / ESG-linked bonds, green convertible bonds, Covid bonds, and Capital relief transactions.

<sup>341</sup> LMA (2018). *Green Loan Principles*. Available at:

[https://www.lma.eu.com/application/files/9115/4452/5458/741\\_LM\\_Green\\_Loan\\_Principles\\_Booklet\\_V8.pdf](https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf).

<sup>342</sup> APLMA, LMA, LSTA (2020). *Sustainability Linked Loan Principles*. Available at: <https://www.lsta.org/content/sustainability-linked-loan-principles-sllp/>.

Table 6: Illustrative examples of ESG products in Corporate and SME Lending<sup>343</sup>

Product type	Example
<b>Loans</b>	
<b>Green Loans</b>	In April 2019, a European bank acted as an arranger and conducted a first solar rooftop financing transaction in Asia Pacific for a SGD50mn loan, which was used to finance an approximately 50MW portfolio of rooftop solar projects.
<b>Social Loans</b>	A European bank provides social loans as part of its social impact finance business to support projects that lead to, for example, affordable housing or basic infrastructure improvements.
<b>Sustainability-linked Loans/ ESG-linked Loans</b>	In July 2019, a European bank provided a UK housing association with a five-year GBP50mn sustainability-linked loan for general corporate purposes but incorporating a pricing mechanism linked to the their ESG performance. The UK housing association will benefit from a lower interest rate margin if it gets a predefined number of unemployed residents into work or supports them with work-ready training.
<b>Revolving green credit facility</b>	In early 2019, a Belgian chemical company collaborated with a European investment bank on a EUR2bn revolving credit facility linked to environmental commitments. The cost of credit is linked to a reduction of the company's greenhouse gas emissions.
<b>Sustainability Improvement Loans</b>	In July 2019, a European bank coordinated a sustainability improvement loan in commodity trading for a multinational food and agriculture company. The interest rate of the USD2.1bn loan links to its sustainability performance and rating.
<b>Green Project Finance</b>	In 2016, a European bank arranged EUR3.9bn in project finance for renewable energy projects generating over 3,480 megawatts.
<b>Social Impact Project Finance</b>	Since 2015, a European bank has undertaken a Social Impact Project Finance initiative to renovate a local residential care home and improve assistance for the elderly, involving a total financing of EUR8mn.
<b>Sustainable Supply Chain Finance</b>	In 2020, a European bank developed a sustainable supply chain program for a US retailer and pegged a supplier's financing rate to its sustainability credentials, for example, progress on cutting carbon emissions.

Source: Public reports of banks and BlackRock FMA analysis

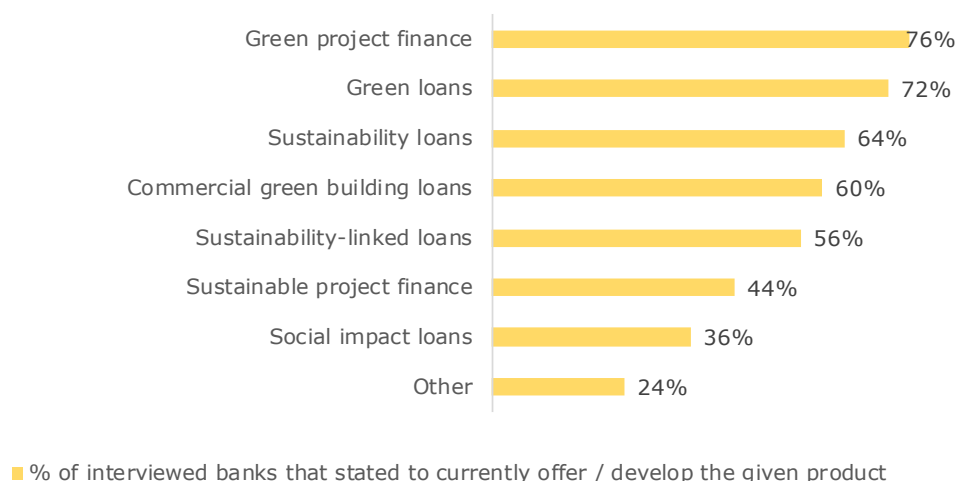
Among interviewed banks, the lending product most frequently offered (or currently developed) by banks is green project finance, followed by green loans and commercial green building loans (see *Figure 74*). G-SIBs and non-G-SIBs seem to have a different focus on product offerings. Among non-G-SIBs, green project finance, green loans, and commercial green building loans are most commonly offered, whereas among G-SIBs, sustainability loans, green loans, and sustainability-linked loans/credit facilities are the most frequent product offerings.

In terms of emerging opportunities, banks mentioned the offering of 'green fee models', where part of the fee for products is taken and contributed to sustainable or green

<sup>343</sup> Source: Desk research on banks within the Stakeholder Perimeter.

purposes. In addition, respondents highlighted that sustainable supply chain financing could connect green lending with global supply chains solutions for clients when they have incorporated eligible social, environmental, and governance criteria into contracts with suppliers or consumers.

*Figure 74: ESG products offered and/or developed for corporate and SME Lending<sup>344</sup>*



Source: BlackRock FMA analysis

#### 6.2.2.5 Lending to individuals and microbusinesses

Sustainable products offered to individuals and microbusinesses currently include, among others, green mortgages, electric car loans, loans to vulnerable segments, and sustainable credit cards. However, according to respondents, the current demand for ESG products from retail clients is not as clear or as high as in other segments. One reason for this mentioned by respondents is that corporates are more pressured by investors and civil society to become more sustainable, compared to retail customers.

Energy efficiency mortgages have gained significant momentum in the past few years, supported by, for example, the market-led initiative Energy Efficient Mortgage Action Plan (EeMAP), as well as through the creation of dedicated funds at national level.<sup>345</sup> EeMAP aims to create standardised, energy efficient mortgages that offer preferential financing conditions for owners that improve the energy efficiency of their buildings or acquire an energy efficient property. Nearly 40 major banks from across Europe participated in the pilot phase in 2018.<sup>346</sup>

Table 7 illustrates different product categories by providing specific examples of sustainable products currently offered by banks in the retail space.

<sup>344</sup> Question: What are the key ESG-focused products you are currently offering and/or developing for a given segment / division? Sample size: 24. "Other" includes solar panel loans, Covid related moratoria and loans, sustainable supply chain finance, ESG-linked cash management service and specific program for social businesses.

<sup>345</sup> See for example: CEE Bankwatch Network (2020). *EU Funds For A Green Recovery - Recommendations To Steer EU Regional And Recovery Funding Towards Climate Neutrality*. Available at: <http://www.caneurope.org/docman/climate-finance-development/3625-eu-funds-for-a-green-recovery-report-july-2020/file>.

<sup>346</sup> EeMAP (n.d.). *WELCOME TO THE EeMAP Initiative*. Available at: <https://eemap.energyefficientmortgages.eu/>.

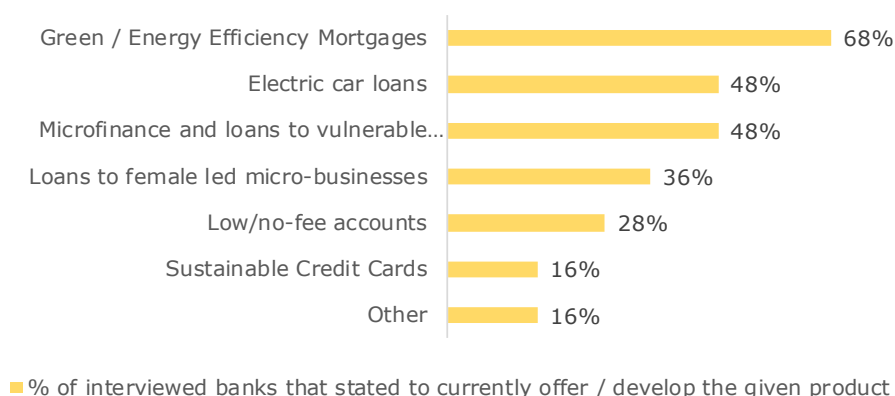
**Table 7: Illustrative examples of ESG products in lending to individuals and microbusinesses**

Product type	Example
<b>Mortgages</b>	
<b>Green/Energy Efficiency Mortgages</b>	A Finnish bank joined the pilot project EeMap and will test and implement the framework for energy-efficient home loans, to be launched into existing products and processes.
<b>Loans</b>	
<b>Electric Car Loans</b>	A European bank provides car loans geared toward individuals and freelance workers who wish to buy electric cars with emissions under 75g CO <sub>2</sub> /KM. The electric car loan comes with several specific conditions, e.g. a longer repayment period, a competitive interest rate, and no origination fees.
<b>Loans to vulnerable segments</b>	A European bank offers loans to support vulnerable people in their search for a job.
<b>Consumer loan for energy efficiency / renewable energy instalment</b>	A European bank provides green housing / energy saving loans to finance home repair or renovation works, aimed at upgrading energy efficiency and enhancing energy conservation.
<b>Credit for Energy Efficiency</b>	A revenue service in the US provides residential energy efficient property credit that allows for a credit equal to the pre-determined percent of the cost of qualified energy efficient property, e.g. qualified solar electric property.

Source: Bank public reports and FMA analysis

Among interviewed banks, the product most frequently offered by banks is green / energy efficiency mortgages, followed by electric car loans, microfinance, and loans to vulnerable segments (*Figure 75*). In addition, respondents stated that they expect the demand for green building loans and electric car loans to continue growing.

**Figure 75: ESG-focused products currently being offered and/or developed for lending to individuals and microbusinesses<sup>347</sup>**



Source: BlackRock FMA analysis

<sup>347</sup> Question: What are the key ESG-focused products you are currently offering and/or developing for a given segment / division? Sample size: 24. "Other" includes 'mobility solutions' for customers e.g. banking app that offers services with easy access to public transport, car sharing, and bicycle renting; 'energy solutions' for customers to support their energy scans, energy renovation studies for private homes.

## 6.2.3 ESG strategy & governance

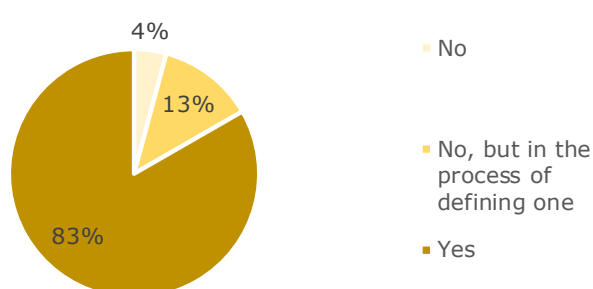
### 6.2.3.1 ESG strategy and public commitments

According to an article from the World Economic Forum (WEF), in recent years leading banks have started to see sustainability as a priority by, for example, considering how to support the low-carbon transition of the economy through the promotion of more sustainable practices, as well as creating appropriate governance structures to address changing needs from consumers and other stakeholders.<sup>348</sup> In a recent paper, Bruegel expressed the view that “the financial sector can fulfil a stewardship role to steer companies towards sustainable business practices”.<sup>349</sup> As further emphasised by other civil society organisations, such as Change Finance, banks can accelerate the transition through choosing to finance sustainable companies and projects that will address these societal issues.<sup>350</sup>

Of those banks interviewed, the majority expressed that they strive to create a positive impact via their ESG strategy. Many stated that they define positive impact, and subsequently their sustainability strategy, based on the concept of ‘double materiality’ – i.e. they aspire to take into account the impact of their practices, not only on their own balance sheet but also on the wider community and environment.

As shown in *Figure 76*, 83% of interviewed banks claimed that they have a strategy in place for the integration of ESG into lending and investments, including all interviewed G-SIBs, with another 13% being in the process of defining such a strategy. However, few banks explicitly stated that they have concrete KPIs or processes in place to monitor implementation in the organisation. In fact, approximately one out of four of interviewed banks that stated to have an ESG strategy clarified that the only element implemented was integration of sustainability criteria into the credit application process. The 4% of banks that neither have a strategy in place to integrate ESG factors, nor plan to do so, mentioned that they have incorporated ESG factors into the client screening process through negative screening, but do not envisage a more integrated or broader strategic framework.

**Figure 76: Strategies in place for ESG integration into lending and investments**<sup>351</sup>



Source: BlackRock FMA analysis

<sup>348</sup> World Economic Forum (2019). *Banking on sustainability - what's next?* Available at: <https://www.weforum.org/agenda/2019/09/how-banks-can-be-more-sustainable>.

<sup>349</sup> Schoenmaker, D. (2020). *The impact economy: balancing profit and impact*. Working Paper 2020/04, Bruegel. Available at: [bruegel.org/wp-content/uploads/2020/07/WP-2020-04-Impact-Economy-D.-Schoenmaker.pdf](https://bruegel.org/wp-content/uploads/2020/07/WP-2020-04-Impact-Economy-D.-Schoenmaker.pdf).

<sup>350</sup> See for example Change Finance (n.d.). *Investing not betting*. Available at: <https://www.changefinance.org/solution/investing-not-betting/>.

<sup>351</sup> Question: *Do you have a strategy in place to integrate ESG factors within your lending and investment activity?* Sample size: 24.



A commonly used starting point for banks' development of an ESG strategy are international agreements on sustainability, such as the United Nations' Sustainable Development Goals and the Paris Agreement, to which banks can work to align their strategy. Within the stakeholder perimeter, 69% of analysed banks mention key SDGs that they aim to contribute to. This is consistent with the UNEP Finance Initiative's Principles for Responsible Banking, a major banking sector specific sustainability initiative which was launched in 2019 and signed by 132 banks.<sup>352</sup> According to these principles, "banks should align business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks". Other notable international sustainability initiatives that have driven sustainability integration and promoted ESG strategies within the banking sector include the United Nations' Principles of Responsible Investment<sup>353</sup>, launched in 2006, and the first and most widely adopted global standards for sustainability, the GRI Sustainability Reporting Standards<sup>354</sup>, originated in 1997.

However, very few banks have concrete action plans to align their business with the Paris Agreement and subsequently disclose their progress towards it (see section 6.2.4.1). This finding is consistent with outcomes of a survey by ShareAction, which found that while all surveyed banks have a strategy related to climate change, strategies from 65% of the surveyed banks are not aligned with a specific temperature increase scenario, which is a key component in ensuring full alignment with goals of the Paris Agreement.<sup>355</sup>

While most banks state that they have an ESG strategy in place, the nature and degree of ambitions, priorities and underlying initiatives varies across institutions. Yet, based on the stocktake and, in the context of lending and investment activities, two main themes can broadly be identified. The first relates to the objective of ensuring that sustainability becomes an integral part of banks' offerings. To meet this objective, 62% of banks stated that they have set targets for ESG lending and investment across divisions (see *Figure 77*). Similarly, some respondents stated that they have product development plans in place to either introduce, or extend their offering of, sustainable and green products. Within the broader stakeholder perimeter defined, 64% of analysed banks have set forward-looking financing or investment targets for ESG, or sectoral phase-out targets. The second theme relates to the objective of further integrating ESG considerations into banks' risk management frameworks (see section 4.2.4.2).

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<sup>352</sup> UNEP Finance Initiative (2020). *Signatories*. Available at:

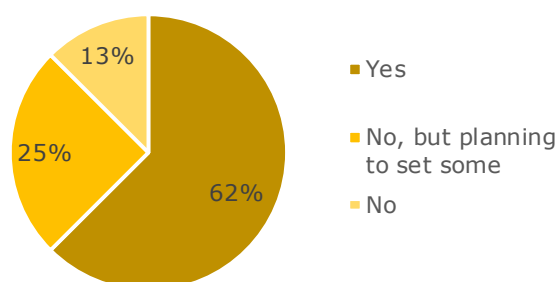
<https://www.unepfi.org/banking/bankingprinciples/signatories/>.

<sup>353</sup> Principles for Responsible Investment (n.d.) *About the PRI*. Available at: <https://www.unpri.org/>

<sup>354</sup> GRI (n.d.) *Resource Center*. Available at: <https://www.globalreporting.org/how-to-use-the-gri-standards/resource-center/>.

<sup>355</sup> ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

Figure 77: Medium / long term ESG lending and investment targets across divisions<sup>356</sup>



Source: BlackRock FMA analysis

Moreover, while most banks state that they have an ESG strategy in place, specific ESG-related objectives and commitments in the context of lending and investment activities are often at high-level. For example, few banks in the perimeter have publicly made detailed quantitative ESG commitments. An example of a bank that has published a more comprehensive ESG strategy that includes quantitative financing targets is shown in Figure 78.

Figure 78: Case study on sustainability strategy

A European bank has defined four pillars for its sustainability strategy, referring to the workplace, sustainable economic and financial inclusion, digitalisation and ethical standards. For each pillar, further commitments have been formulated, which are aligned with both the bank's CSR strategy and the UN Sustainable Development Goals. The following chart highlights the pillar and commitments that are most relevant for sustainable lending and investments as part of the strategy:

<b>Sustainability Strategy – Delivering on strategic priorities and creating value for all stakeholders</b>	
<b>Selected Pillar</b>	
<b>I</b> Driving sustainable economic growth and financial inclusion	
<b>Selected Commitments</b>	
<b>1</b> Support vulnerable customers	
<b>2</b> Finance a more sustainable future	
<b>3</b> Be a valuable and sustainable partner	
<b>4</b> Reduce our environmental footprint	
<b>5</b> Help the country transition to a low carbon economy and fight climate change	
<b>UN Sustainable Development Goals</b>	
SDG 1, 3, 4, 5, 7, 10, 11, 12, 13, 17	

For each commitment, the bank then defined a series of indicators and reports past performance for these indicators, if available, along with the concrete target formulated

<sup>356</sup> Question: Do you have medium/long term E/S/G lending and investment targets across your divisions (e.g. renewable project financing, lending for financial inclusion)? Sample size: 24.

for the next year. This information is published annually in its ESG supplement report; the most relevant targets for investments and financing are highlighted below.

Pillar	Commitment	Indicator	Past Performance	
		2020 Objective	2019	2018
I	3 Finance a more sustainable future	EUR[.]mn in funding support for the social housing sector	[.]bn EUR	[.]bn EUR
	4 Be a valuable and sustainable partner	EUR[.]mn in funding support for individuals with education, employability and entrepreneurship programmes	-	-
	10 Help the country transition to a low carbon economy and fight climate change	EUR[.]mn in funding to continue supporting renewable energy and other sustainable energy solutions	-	-
		Launch a new green mortgage proposition to improve home movers' energy efficiency	-	-

Source: Public reports from banks and BlackRock FMA analysis

In particular civil society organisations emphasised the importance of setting science-based targets for banks to align with the Paris Agreement and SDGs. However, only a few analysed G-SIBs have in practice aligned their sustainable finance targets with the Paris Agreement, as summarised in *Figure 79*. In some cases, commitments also go hand in hand with the implementation of a monitoring framework for select sectors such as fossil fuels, power, and coal (see section 6.2.4.1). Civil society organisations also highlighted that the EU Taxonomy could be used as one relevant indicator for banks to set targets. For example, as also mentioned in a recent EBA discussion paper on the management and supervision of ESG risks, institutions could align more closely with the EU Taxonomy by setting targets associated with activities that qualify as sustainable under the Taxonomy on a certain proportion of their overall credit or investment portfolios.<sup>357</sup>

**Figure 79: Examples of ESG investment and lending commitments made by global systemically important banks**

Bank	Geography	Commitment	Total size	Timeline	Yearly Commitment	Paris Pathway Alignment	Paris Pathway Sector
Bank 1	EU	Support more than EUR120bn in green finance from 2019 to 2025 and EUR220bn by 2030	EUR220.0bn	2018-2030	EUR18.3bn		
Bank 2	EU	Target of EUR185bn to contribute to achieving the SDGs by the end of 2020 (increased from EUR166bn in 2018)	EUR185.0bn	2018-2020	EUR9.5bn	✓	Fossil Fuel, Power
Bank 3	EU	Additional funding of EUR14.6bn from 2018 to 2022 to organisations that help combat climate change	EUR14.6bn	2018-2022	EUR3.7bn	✓	Fossil Fuel, Power, Automotive, Cement
Bank 4	EU	Raise EUR120bn to support the energy transition between 2019 and 2023	EUR120.0bn	2019-2023	EUR30.0bn	✓	Coal

<sup>357</sup> European Banking Authority (2020). EBA discussion paper: On management and supervision of ESG risks for credit institutions and investment firms. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_n%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf](https://eba.europa.eu/sites/default/documents/files/document_n%20Paper%20on%20management%20and%20supervision%20of%20ESG%20risks%20for%20credit%20institutions%20and%20investment%20firms/935496/2020-11-02%20%20ESG%20Discussion%20Paper.pdf).

Bank	Geography	Commitment	Total size	Timeline	Yearly Commitment	Paris Pathway Alignment	Paris Pathway Sector
Bank 5	Non-EU	Raise USD5.0bn in client assets to narrow funding gaps needed to reach the SDGs	USD5.0bn	2017-2021	USD1.3bn		
Bank 6	Non-EU	Provide GBP150bn of environmental and social financing by 2025	GBP150.0bn	2018-2025	GBP21.4bn	✓	Fossil Fuel, Power
Bank 7	Non-EU	Provide and facilitate USD100bn of sustainable financing and investment by the end of 2025	USD100.0bn	2017-2025	USD12.5bn		
Bank 8	Non-EU	Finance and facilitate USD35bn of clean technology and renewables, USD40bn of sustainable infrastructure by 2024	USD75.0bn	2020-2024	USD18.8bn	✓	Fossil Fuel, Power, Automotive, Cement
Bank 9	Non-EU	Provide USD300bn in financing by 2030 to low-carbon, sustainable business	USD300.0bn	2019-2030	USD27.3bn		
Bank 10	Non-EU	Facilitate USD200bn in clean financing by 2025	USD200.0bn	2016-2025	USD22.2bn		

Source: Public reports from banks and Blackrock FMA analysis

#### 6.2.3.2 ESG governance structures, board oversight and organisational set-up

Effective governance structures and organisational arrangements can also support the integration and advancement of ESG strategy in banks' business activities. The most impactful governance elements considered by interviewed banks are: i) ESG-focused management committees; ii) ESG-focused board-level committees; and iii) Corporate Social Responsibility (CSR) / Sustainability teams, as shown in *Figure 80*).

**Figure 80: Ranking of governance structures and organisational arrangements**<sup>358</sup>



Source: BlackRock FMA analysis

While some banks expressed the view that the integration of ESG factors does not require the set-up of dedicated committees and structures focused on ESG, others argued that this would be required to drive the ESG agenda and enhance commitment across the bank.

<sup>358</sup> Question: What kind of governance and organisational arrangements do you have in place to advance your ESG business strategy? Rank the top 3 most impactful elements based on your experience. Sample: 17.

The latter view is supported by academic research, suggesting that a dedicated sustainability committee allows for a more thorough and reliable implementation of sustainability strategies, while at the same time increasing stakeholders' awareness of the bank's ethical values.<sup>359</sup>

While banks give different names to these committees, as shown in *Figure 81*, 72% of the interviewed banks stated that they have set up such an ESG-focused board-level committee, which is ultimately responsible for approving sustainability strategies, policies, and guidelines. The effectiveness of boards' involvement was questioned in a ShareAction survey that found that board-level ESG committees do not play a driving role at 40% of surveyed banks and merely approves climate-related policies.<sup>360</sup>

Moreover, 80% of the interviewed banks, including all interviewed G-SIBs and the majority of interviewed non-GSIBs, stated that they have established a centralised sustainability team and function to drive group-wide ESG integration and coordinate with divisions and business units. For the most part, these teams and functions are part of CSR or Corporate and Investment Banking divisions, and, in a few cases, part of Corporate Strategy. The establishment of dedicated teams and committees for advancing the ESG business strategy among interviewed banks differs from their practices on ESG risk management, where most banks build upon existing teams and committees already in place (see section 4.2.3).

**Figure 81: Governance structures and arrangements to advance ESG business strategy**<sup>361</sup>



Source: BlackRock FMA analysis

Besides ESG-focused governance bodies and structures, 52% of interviewed banks stated that they have linked their managerial incentive systems with ESG KPIs in order to advance their ESG business strategy, albeit to varying degrees. The Responsible Banking Principles outlines that aligning remuneration programmes with the sustainability agenda of a bank

<sup>359</sup> Cremona, B.; Passador, M. (2019). *What about the future of European banks? Board characteristics and ESG Impact*. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3441784](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3441784).

<sup>360</sup> ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>361</sup> Question: *What kind of governance and organisational arrangements do you have in place to advance your ESG business strategy?* Sample size: 23. "Other" includes working groups, environmental and social risk team, action plans, etc.

creates awareness, delivers action, and demonstrates credibility.<sup>362</sup> There is also academic research analysing whether providing executives with direct incentives for CSR is an effective tool to increase firms' social performance outcomes. One example of this is a paper published by the Journal of Business Ethics, which found evidence that identifies "corporate governance as a determinant of managerial incentives for social performance".<sup>363</sup>

A recent survey undertaken by ShareAction found that 35% of the more advanced banks surveyed have set climate-related objectives or KPIs for employees and the executive board, and incorporated these into incentive structures.<sup>364</sup>

## **6.2.4 ESG measurement, monitoring & disclosure**

### **6.2.4.1 ESG business profile classification, measurement and monitoring methodology**

The ability to effectively classify, measure, and monitor the ESG business profile of their lending and investment activity<sup>365</sup> is the basis for banks in order to be able to set informed ESG commitments and track progress against them.

The main approaches that banks use to measure their ESG business profile are by sector, by loan purpose, by counterparty type<sup>366</sup> – e.g. based on clients' ESG rating –, and by product type. As shown in *Figure 82*, the majority of interviewed banks stated that they have a methodology in place to measure the ESG business profile at a sectoral level (83%) or by loan purpose (79%), focusing on the E and S pillars. More specifically, while sectoral classifications are equally adopted among G-SIBs and non-G-SIBs, distinction by loan purpose is more common in G-SIBs. Measurement at a sectoral level means that banks can measure the share of their portfolio in certain sectors, such as oil and gas industries. An example of monitoring the ESG business profile of lending activities based on loan purpose is project finance for renewable energy.

Fewer banks stated that they have more granular measurement levels in place. Measurement by counterparty type – i.e. taking into account the ESG performance of a client by looking at, for example, an ESG rating – is done by 54% of interviewed banks. Product type measurement – i.e. analysing the portfolio based on ESG products offered – is applied by 50% of the banks and predominantly by non-GSIBs instead of G-SIBs. Only approximately one third of interviewed banks have a comprehensive measurement approach in place that covers all of the above described levels of granularity. A common reason provided for this limitation is the lack of regulatory guidance to develop such methodologies, as well as a lack of harmonised client data for defining the 'greenness' of an asset. In this context, interviewed academics highlighted that some sort of "accounting standard" for ESG disclosures is currently lacking. Hence, some banks, – and especially those which are relatively smaller –, are holding back on any further development on ESG measurements to avoid inconsistency with regulatory requirements that may unfold later.

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<sup>362</sup> UNEP FI (2019). *Principles for Responsible Banking*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/09/PRB-Guidance-Documents-Final-19092019.pdf>.

<sup>363</sup> Hong, B.; Li, Z.; Minor, D. (2016). *Corporate Governance and Executive Compensation for Corporate Social Responsibility*. Available at: <https://link.springer.com/article/10.1007/s10551-015-2962-0>.

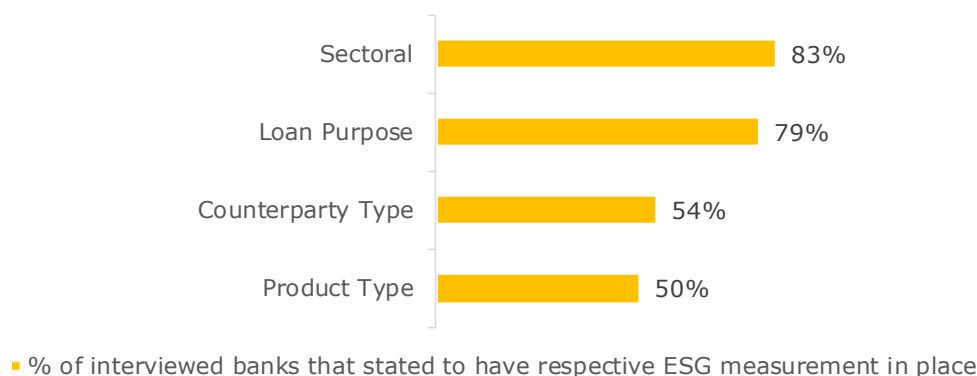
<sup>364</sup> ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>365</sup> The term investment(s) is used to indicate capital markets activity (e.g. Equity Capital Markets, Debt Capital Markets underwriting, sales and trading activity) as well as treasury portfolio. It does not include investments on behalf of clients (i.e. asset management / private banking activity and associated products).

<sup>366</sup> Counterparty type in this section is defined as portfolio exposure to certain clients and their ESG performance /score.

Additionally, many banks stated that the coverage of ESG measurement is limited. This means that the measurement does not apply to the entire portfolio but only to specific aspects, such as project finance. In this context, a difference between the monitoring of green and brown assets was highlighted in a joint EBF / IFF survey that found that nearly 50% of surveyed financial institutions monitor the share of green assets in their lending and investment portfolios compared to only 12% of firms that keep track of brown assets.<sup>367</sup>

**Figure 82: Measurement of the ESG business profile of banks' lending and investment activity<sup>368</sup>**



Source: BlackRock FMA analysis

The main reason provided by banks as to why the sectoral view is most prevalent is that sectoral policies based on environmental and social risks are commonly in place (see section 6.2.5.1). As part of their sectoral policies, banks often stated that they identify the most carbon intensive sectors for close monitoring – for example, the thermal coal industry, and the energy sector. A sector which banks typically monitor and classify as green is the renewable energy sector. According to respondents, governance aspects are not commonly measured at portfolio level as they are integrated into the overall credit and compliance process.

With respect to loan-level purpose information, according to respondents, information on the purpose or underlying economic activities related to corporate loans is not always collected or available, which poses a challenge for measurement. One exception mentioned is single purpose loans, e.g. within project finance. Consequently, according to banks, only a subset of ESG products are usually measured based on the use of proceeds, including i) ESG products whose use of proceeds is examined during the credit process – e.g. green mortgages – for which the use of proceeds is checked to ensure compliance with requirements<sup>369</sup>, ii) sustainability-linked products, whereby borrowers report the use of proceeds to banks on a regular basis to comply with pre-defined sustainability targets, and iii) ESG products, if their use of proceeds is characterised by international market

<sup>367</sup> EBA, EBF (2019). *Joint EBA & EBF Workshop on Sustainable Finance*. Available at: <https://www.ebf.eu/wp-content/uploads/2019/04/EBA-EBF-Workshop-on-Sustainable-Finance-Highlights-and-summary.pdf>.

<sup>368</sup> Question: How do you measure the ESG business profile of your lending and investment activity (e.g. green vs. brown exposures) and what key data-points do you rely on? Sample size: 24.

<sup>369</sup> According to EeMAP, definition of existing green mortgages varies among financial institutions. In some cases, specific requirements have to be fulfilled. For example, these requirements might be energy consumption related or they might be based on energy performance certificates (EPCs) where eligibility is limited to energy levels above B (and in some cases A). Interviewed banks mentioned that green mortgages require the property to have a certain energy efficiency rating and customers have to demonstrate the proof of it during credit process.



standards and practices, such as the ICMA Green Bond Principles<sup>370</sup> for green bonds or the ICMA Social Bond Principles<sup>371</sup> for social bonds.

Regarding the measurement of the ESG business profile at counterparty level<sup>372</sup>, banks that have such a measurement in place stated that they often apply and rely on environmental and social risk scores / ratings at counterparty level and perform an internal counterparty risk assessment, which allows for the measurement of the ESG business profile by counterparty type. This approach is often only available after the sectoral and loan purpose views have been established as, according to respondents, measurement of the ESG business profile by counterparty requires more granular client information. Moreover, even if such measurement is in place, most banks stated that they do not necessarily have the capabilities to aggregate individual ratings at portfolio level.

The approaches employed by banks for ESG classification based on product type and the level of available supporting information vary across products. According to respondents, ESG offerings for which banks more commonly track ESG-factors are project finance products for renewable energy or infrastructure financing, where volume, and sometimes detailed KPIs, are monitored. Banks also stated that they monitor the volume of products labelled as 'green', e.g. green loans. For other products, an internal labelling is often not available; however, a number of interviewed banks mentioned plans to expand this product-level monitoring. For example, one bank mentioned that it has developed a product approval process that includes the identification of ESG characteristics to allow a volume tracking of financial products through quarterly KPIs.

In order to define a classification of ESG product offerings in a more comprehensive way, approximately 20% of banks said that they have started to develop an internal taxonomy for ESG criteria – i.e. a framework that allows a measurement along multiple dimensions. An example for such an internal taxonomy is given in *Figure 83*.

**Figure 83: Case study on internal taxonomy for measurement of ESG business profile**

A European bank developed an internal taxonomy for ESG offerings that enables a classification of the portfolio based on use of proceeds, counterparty type, and product type. It specifies the classification logic, the eligibility criteria, the applicable environmental and social due diligence requirements, and the verification process for sustainable finance. It also serves as a basis for defining targets and metrics for sustainable finance to deliver on the ESG commitment and sets requirements for reporting.

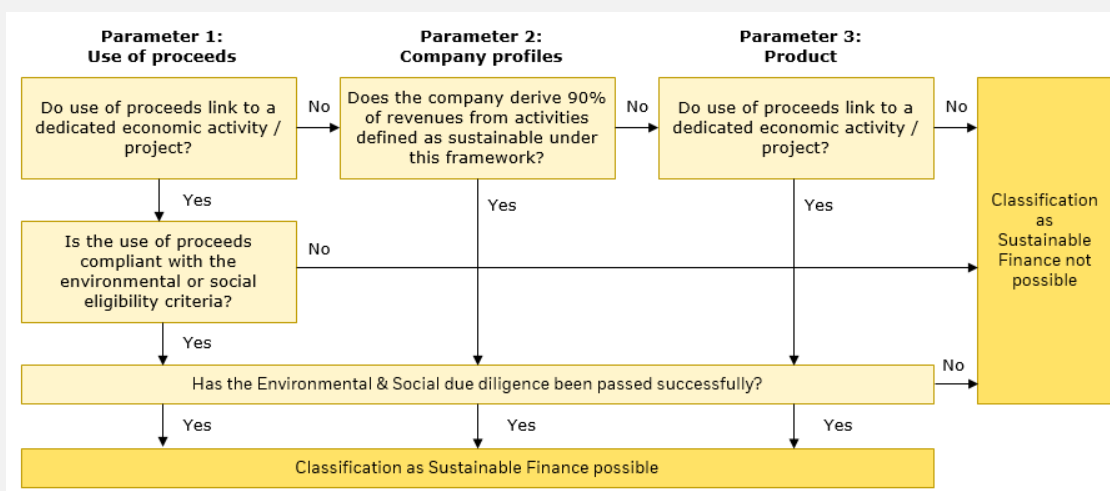
The classification logic first assesses the use of proceeds where possible. The eligibility criteria for the use of proceeds focus on environmental and social aspects and are aligned on a best effort basis with the EU Taxonomy and internationally acknowledged principles e.g. ICMA Social and Green Bond Principles. If the use of proceeds is not specified or dedicated to facilitating a certain activity, e.g. general corporate purposes,

<sup>370</sup> ICMA (2018). *Green Bond Principles – Voluntary Process Guidelines for Issuing Green Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf>.

<sup>371</sup> ICMA (2020). *Social Bond Principles - Voluntary Process Guidelines for Issuing Social Bonds*. Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>.

<sup>372</sup> "Counterparty Type" is defined as analysing portfolio exposure to certain clients and their ESG performance/score.

the eligibility of a transaction will be assessed on the basis of the company profile. The final validation is at product type level and tailored to sustainability-linked products.

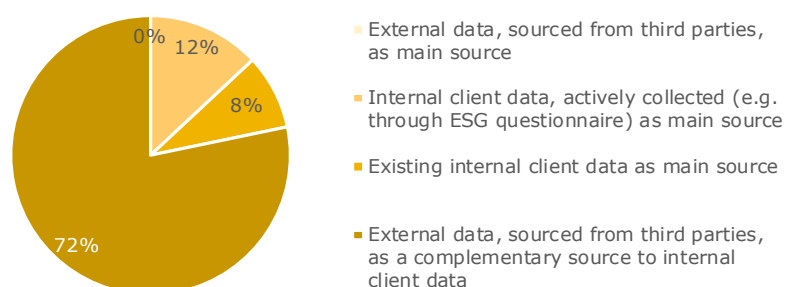


The aforementioned environmental and social criteria are aligned with SDG goals. The environmental assessments apply to sectors including manufacturing, energy, water & waste, real estate, and transportation as well as storage. Themes considered for the social assessment are affordable basic infrastructure, access to essential services, affordable housing, SME financing and microfinance, and food security. The following example illustrates detailed eligibility criteria for the energy sector.

Source: Public reports from banks and FMA analysis

All of the aforementioned approaches to assess the ESG profile of a bank's lending and investment activity require the use of various data sources. As shown in Figure 84, the majority of respondent banks (72%) use external data sourced from third parties as a complement to internal data. For example, banks often use external ESG ratings to inform the credit assessment. However, fewer interviewed banks use more granular raw data sourced externally to complement the credit assessment – for example, data on carbon emissions. For banks that focus on internal data, the main reason mentioned was the lack of availability of external data, especially for non-listed companies (see section 4.2.4.1.1). None of the interviewed G-SIBs use existing internal client data as the main source.

Figure 84: Data sources to assess ESG profile<sup>373</sup>



Source: BlackRock FMA analysis

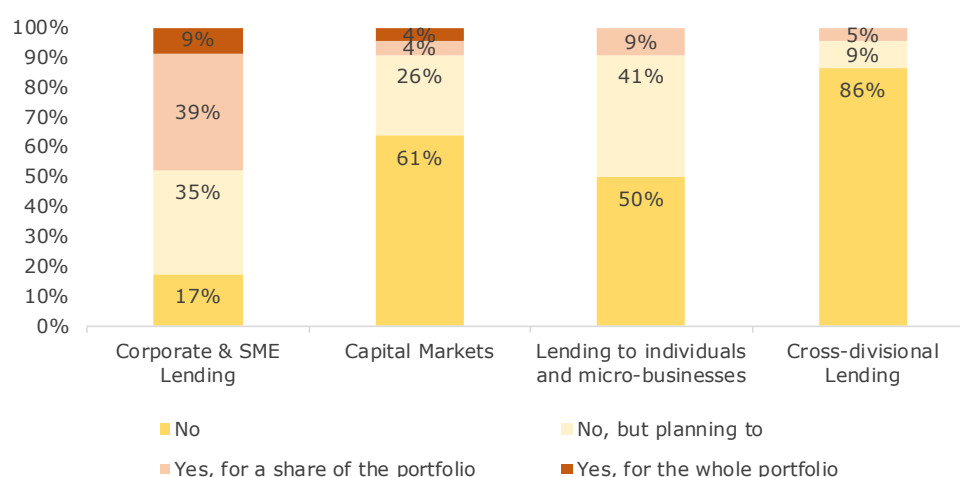
<sup>373</sup> Question: Which data sources do you use to assess the "ESG profile" of lending and investment activity? Sample: 24.

As discussed in section 4.2.4.1.2, an area that has received attention from civil society and industry initiatives is the alignment of a bank's portfolio to international agreements or goals, such as the Paris Agreement or the UN Sustainable Development Goals. A similar trend can be observed for bank regulators. For example, in its December 2019 consultation for the upcoming Climate Stress Test, the Bank of England included a request for banks and insurers to submit the implied temperature rise associated with their exposures.

Since the adoption of the Paris Agreement, financial institutions have undertaken commitments to align their activities with the goals agreed by their national governments.<sup>374</sup> In particular, alignment to the Paris Agreement and recommendations to direct financial flows to facilitate and promote the transition to a decarbonised society have been urged by numerous institutions, including at a geo-political level.<sup>375</sup> Respondents also mentioned that aligning portfolios to the Paris Agreement is very relevant for the double materiality concept of ESG definitions. Within the broader sample of analysed banks, 46% have aligned parts of their portfolio to the Paris Agreement or have plans to do so.

In relation to having a more detailed framework for portfolio alignment with international agreements or goals, only one interviewed bank stated that they have a framework in place to measure the alignment of their entire portfolio to the Paris Agreement, which covers both capital markets and corporate and SME lending. Moreover, as shown in Figure 85, few respondent banks have a framework that is applied to a share of the portfolio, such as corporate & SME lending (39% of respondent banks), and very few banks stated that they have a framework in place for lending to individuals and micro-businesses (9% of respondent banks), capital markets (4% of respondent banks), or cross-divisional lending (5% of respondent banks).

**Figure 85: Capabilities of banks to measure alignment of its portfolio to Paris Agreement or other frameworks / benchmarks<sup>376</sup>**



Source: BlackRock FMA analysis

<sup>374</sup> I4CE (2019). *A Framework for Alignment with the Paris Agreement: Why, What and How for Financial Institutions?* Available at: [https://www.i4ce.org/wp-core/wp-content/uploads/2019/09/I4CE%E2%80%A2Framework\\_Alignment\\_Financial\\_Paris\\_Agreement\\_52p.pdf](https://www.i4ce.org/wp-core/wp-content/uploads/2019/09/I4CE%E2%80%A2Framework_Alignment_Financial_Paris_Agreement_52p.pdf).

<sup>375</sup> See, for example G20 (2019). *Strengthened Actions towards Decarbonised and Climate Resilient Society*. Available at: <https://www.g20-insights.org/wp-content/uploads/2019/05/t20-japan-tf3-1-actions-decarbonised-climate-resilient-society-1.pdf>.

<sup>376</sup> Question: Do you have any frameworks in place to measure the alignment of your portfolio to the Paris Agreement or other frameworks (e.g. Sustainable Development Goals)? Sample size: 24.

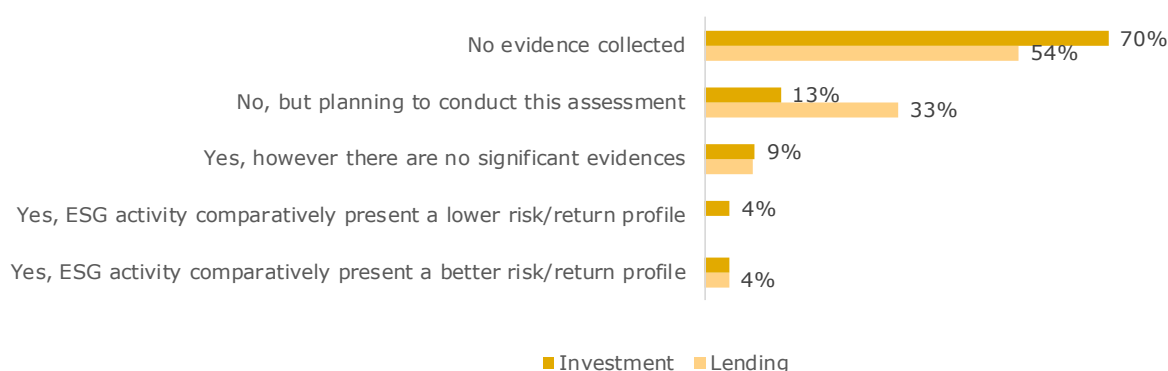
One civil society stated that banks should focus on measuring portfolio alignment for most carbon-intensive sectors instead of the full portfolio. An overview of approaches undertaken by banks to measure the climate alignment of their lending portfolios is presented in section 4.2.4.1.2.

#### 6.2.4.2 ESG impact on funding and banks' balance sheet

Understanding the risk and return characteristics of ESG products supports extending and steering banks' ESG offerings, informing and validating the ESG strategy, and pricing ESG related products and services. However, among the interviewed banks, 87% stated that they have not collected evidence on the risk / return profile of their lending activities, and the same applies for investment activities (83%) (see *Figure 86*). These responses are similar to findings from the recent NGFS Status Report, which states that "respondents have so far not been able to verify a clear corresponding link between greenness and better profitability."<sup>377</sup>

One interviewed bank stated that ESG lending activity presented a comparatively better risk / return profile. This bank found that governance drivers are more statistically significant for larger companies, while environmental and social drivers are significant across all other companies. Other banks said that they observed lower yields on ESG bonds, driven by the high demand.

**Figure 86: Evidence on risk / return profile**<sup>378</sup>



Source: BlackRock FMA analysis

Although there is currently limited evidence observed or analysed by interviewed banks and supervisors on the risk / return profile of ESG lending activity, a recent academic study presented an analysis of the effects of ESG dimensions on corporate bond issue spreads, suggesting a negative relationship between environmental and social ratings and issue spread, which would mean that primary bond markets would reward firms for good environmental and social performance. Moreover, according to the study, the negative relationship was driven mostly by product-related dimensions. The study did not find

<sup>377</sup> NGFS (2020). *A Status Report on Financial Institutions' Experiences from working with green, non-green and brown financial assets and a potential risk differential*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_status\\_report.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf).

<sup>378</sup> Question: Have you collected any evidences on the risk/return profile of ESG products vs. traditional lending/investment products? Sample size: 24.

evidence to prove other dimensions, such as environment, community, or human rights, influence the pricing of corporate bonds.<sup>379</sup> Similarly, a negative correlation between credit spreads and ESG scores<sup>380</sup> is observed in the market for sovereign debt issuance, which means that issuers with poor ESG characteristics need to compensate investors with higher yields.<sup>381</sup>

For European individual stock returns, a recent working paper published by Joint Research Centre of the European Commission provided evidence suggesting a negative and significant correlation between climate risk related pricing factors and the associated risk premium.<sup>382</sup> The finding indicates that, for European stocks, investors would accept a comparably lower return for greener and more transparent firms and would hold those positions as a hedging strategy to reduce exposure to climate risk. In the study, an index of greenness and environmental transparency was constructed at an individual company level, which takes into account both the GHG emission intensity of a company as well as the quality of its environmental disclosure.

There is also an increasing number of publications that indicate that enhanced ESG factors could result in higher profitability of companies. For example, in a report published by UN PRI, it is highlighted that companies with stronger and ethnic diversity – a theme falling under the S pillar – outperform peers when measured by return on equity and other traditional financial metrics. Overall, a positive correlation between ESG ratings and risk adjusted return since the 2008 financial crisis was also indicated in the report.<sup>383</sup>

Furthermore, a recent study by MSCI showed that prudent ESG lending practices, including a look at borrowers' environmental risk management, results in better-quality loan assets; this was demonstrated during the Covid-19 pandemic. The study found that ESG 'leaders' (i.e. higher rated counterparties) saw their average Nonperforming Loan (NPL) ratio decrease slightly in H12020, compared to the same period the year before, while 'laggards' saw it increase.<sup>384</sup>

As further highlighted in interviews<sup>385</sup>, only 4% of banks stated that they have transparency on the impact of ESG lending and investment activity on profitability. 26% of interviewed banks stated that they have more visibility on asset composition and quality for green bonds than for other specific sectors, such as the renewable energy sub-sector and the most carbon-intensive sectors. Another 9% of interviewed banks stated that they have evidence of the impact of ESG offerings on their funding, while only 9% mentioned that they, to some extent, understand the impact of ESG products on their capital. One civil society highlighted that having lower cost of capital for green products could lead to an additional boost in the market, but that this would be driven by investor preferences of green products over non-green.

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<sup>379</sup> Halling, M; Yu, J.; Zechner, J. (2020). *Primary Corporate Bond Markets and Social Responsibility*. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3681666](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3681666).

<sup>380</sup> The analysis used RepRisk ESG scores as a proxy for ESG risk.

<sup>381</sup> BlackRock (2019). *Sustainability: the bond that endures*. Available at: <https://www.blackrock.com/corporate/literature/whitepaper/bii-sustainable-investing-bonds-november-2019.pdf>.

<sup>382</sup> JRC Technical Report (2020). *The Greenium matters: greenhouse gas emissions, environmental disclosures, and stock prices*. Available at: <https://publications.jrc.ec.europa.eu/repository/handle/JRC120506>.

<sup>383</sup> UN PRI (2016). A practical guide to ESG integration for equity investing. Available at: <https://www.unpri.org/download?ac=10>

<sup>384</sup> MSCI (2020). *Banks, ESG and Nonperforming Loans During Covid-19*. Available at: <https://www.msci.com/www/blog-posts/banks-esg-and-nonperforming/02113369423>.

<sup>385</sup> Question: Do you have transparency on the impact of your ESG lending and investment activity on your balance sheet? (Impact on balance sheet specified in the questionnaire includes impact on asset composition and quality, impact on capital, impact on funding, and impact on profitability).

In the context of pricing, 46% of interviewed banks stated that they do not take ESG considerations into account for product pricing, as shown in *Figure 87*. For those that consider ESG in pricing, common areas where banks stated they apply pricing adjustments are i) interest rate reductions for lending products to individuals (e.g. to promote the product) or to incentivise customers to become more sustainable (e.g. through green mortgages or green car loans), and ii) pricing of sustainability-linked loan products, mostly for corporate clients, where the interest rate is linked to ESG KPIs.

Overall, most banks stated that they adjust the pricing for ESG products primarily to incentivise clients, meet client demand, or follow the inherent product structure, as opposed to a differentiation in the underlying risks. Only one interviewed bank mentioned that they have a methodology to differentiate and quantify the credit risk associated with the environmental and social issues which impact the client's risk rating and, consequently, the pricing.

**Figure 87: ESG impact on product pricing**<sup>386</sup>



Source: BlackRock FMA analysis

Internal funding, e.g. funds transfer pricing or costs of capital, are a key component of product pricing and bank steering. However, as highlighted in interviews<sup>387</sup>, only 26% of banks stated that they reflect ESG in internal funding, e.g. in form of lower costs of funds on the internal pricing for green products. Two banks explicitly mentioned that they apply a discount on internal pricing where a green exposure is funded through the issuance of ESG debt via green bonds.

Of the remainder of interviewed banks, 52% stated that they neither have a mechanism for such ESG-related internal pricing in place, nor do they currently plan to include it in the future. These banks emphasised the lack of risk assessment and measurement capabilities to define internal incentives and link them to external factors. This is consistent with feedback from respondent banks that they do not integrate ESG factors in risk parameters (see section 4.2.4.2).

#### 6.2.4.3 ESG activity disclosure and impact of legislation

Respondents' answers show that banks' ESG disclosure practices – e.g. non-financial reporting and sustainability reporting – have largely been driven by regulatory and legislative requirements coupled with voluntary international disclosure standards, as well

<sup>386</sup> Question: Do you have transparency on the impact of your ESG lending and investment activity on your balance sheet? Sample size: 24.

<sup>387</sup> Question: Do you have internal ESG incentives related to funding (e.g. funds transfer pricing) or capital (e.g. sustainability capital requirements benefit)? Sample 24.



as an increasing pressure from investors and civil society organisations. Policy actions are also being advocated by International Organisations, for example, the OECD highlighted a priority for “facilitating fit-for-purpose data and disclosures in ESG investing” in its 2020 Business and Finance Outlook, and called for guidance and regulatory requirements to improve transparency, consistency, and clarity in strategies in this context.<sup>388</sup>

Among other reporting frameworks, the EU NFRD (Directive 2014/95/EU), Guidelines on non-financial reporting: Supplement on reporting climate-related information<sup>389</sup>, and the voluntary GRI are examples of guidelines that have influenced and shaped banks’ ESG disclosure practices in recent years.<sup>390</sup> In relation to ESG disclosure for various asset classes, in 2019, the Technical Expert Group published an interim report that proposes to set out disclosure requirements based on how ESG and climate-related considerations can be integrated in the valuation of assets, either of a particular asset class, or across similar asset classes.<sup>391</sup>

As introduced in section 4.2.5, the desire to align various voluntary reporting requirements has fostered collaboration among cross-standard setting bodies and the launch of various initiatives to define relevant ESG standards. An example of such an initiative is the one launched by the World Economic Forum who, working in collaboration with the four biggest auditing firms, has published a report which presents a set of 21 ‘core metrics’ and 34 ‘expanded indicators’ to help companies more consistently measure and report progress on four pillars, namely ‘principles of governance’, ‘people’, ‘planet’, ‘people and prosperity’.<sup>392</sup>

Other recent market activity includes the launch of a consultation from the International Financial Reporting Standards (IFRS) Foundation to assess whether it should broaden its mandate to embrace sustainability issues.<sup>393</sup> As argued in this consultation, demand for better disclosure of sustainability information is tangible, with various stakeholders acknowledging that delays to global coherence may result fragmentation and potentially cause challenges in engaging capital markets to smooth the transition to a low-carbon economy.

Most respondent banks stated that they disclose their ESG strategy, CSR commitments, and publicly announced ESG targets at high-level. At the same time, according to a survey undertaken by ShareAction, the majority of the surveyed banks publicly disclose absolute targets to accelerate green finance, but no European banks publicly disclose the share of their underwriting activity that is low-carbon.<sup>394</sup>

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<sup>388</sup> OECD(2020). *OECD Business and Finance Outlook*. Available at: <http://www.oecd.org/finance/Sustainable-and-resilient-finance.htm>.

<sup>389</sup> Communication from the Commission — Guidelines on non-financial reporting: Supplement on reporting climate-related information. OJ C 209/1, 20.6.2019, p. 1–29 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019XC0620%2801%29>.

<sup>390</sup> See for example IOSCO (2019). *Statement on disclosure of ESG matters by issuers*. Available at: <https://www.iosco.org/library/pubdocs/pdf/IOSCPD619.pdf>.

<sup>391</sup> EU Technical Expert Group on Sustainable Finance (2019). *TEG INTERIM REPORT ON CLIMATE BENCHMARKS AND BENCHMARKS’ ESG DISCLOSURES*. Available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/190618-sustainable-finance-teg-report-climate-benchmarks-and-disclosures\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-climate-benchmarks-and-disclosures_en.pdf).

<sup>392</sup> World Economic Forum (2020). ‘Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation’. Available at: [http://www3.weforum.org/docs/WEF\\_IBC\\_ESG\\_Metrics\\_Discussion\\_Paper.pdf](http://www3.weforum.org/docs/WEF_IBC_ESG_Metrics_Discussion_Paper.pdf).

<sup>393</sup> IFRS Foundation (2020). *Consultation Paper on Sustainability Reporting*. Available at: <https://cdn.ifrs.org/-/media/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf?la=en>

<sup>394</sup> ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.



Overall, interviewed banks with a presence in the EU stated that EU legislation – for example, the EU Taxonomy and the NFRD – have a strong impact on their current ESG disclosure practices.<sup>395</sup> In particular, the EU Taxonomy published in March 2020 was considered by interviewed banks as a key driver for enhancing banks' ESG reporting. Interviewed banks also acknowledged that the taxonomy provides definitions on what is considered as green economic activities and currently acts as the only international reference in this field that defines Paris Agreement-aligned performance criteria over a set of economic activities. Some respondents including banks and civil society organisations expressed their expectation that once the EU Taxonomy becomes a more common language, it will support the market in further aligning on some standards and definitions for ESG business opportunities.

However, a number of challenges were highlighted by respondents in relation to referencing the EU Taxonomy for ESG product classification and reporting. One challenge identified is that the taxonomy is perceived to be very granular and therefore not easily applied to bank lending businesses; an example given for this is that it is activity-based, whereas client information that banks gather is often borrower-based. According to banks, it is not always possible to link client data to activities, especially for loans with general corporate purposes. Additionally, some respondents mentioned that, while the taxonomy focuses on green activities, a 'brown taxonomy' and classification of the scale of 'green' to 'brown' and assets that are neither 'green' nor 'brown' might also be required. Finally, respondents mentioned that the EU Taxonomy is limited to the E pillar and does not include social or governance components.

In the context of implementing the EU Taxonomy, one academic mentioned that taking into account the ESG impact of business activities beyond their labelled classification and sector is important – they described it as developing the "first derivative of the EU Taxonomy". For example, lending to non-green sectors, which per se may not be 'ESG compatible', could be beneficial if it contributes to an overall improvement.

The Platform on Sustainable Finance, which advises the European Commission on the development of technical screening criteria for the EU Taxonomy, will provide recommendations to the Commission on requirements for updated EU Taxonomy and publish reports for the review of the Taxonomy regulation by the end of 2021. In this context, one respondent from civil society mentioned that four categories could be created in the "complete taxonomy" – sustainable, non-sustainable, medium-sustainable, and a category that is taxonomy-irrelevant. The respondent additionally highlighted that two areas should be clarified between how ESG terms are defined in the Taxonomy and their application. The first one relates to the difference between 'medium-sustainable activities', i.e. activities that are taxonomy relevant but are neither sustainable nor non-sustainable, for example, steel industry, and activities that are taxonomy irrelevant i.e. low-impact activities for climate risks, for example, healthcare. The second clarification is around the definition of transition activities. Market participants tend to consider 'medium-sustainable' activities as transition activities in the finance space which is inconsistent with the definition provided in Article 10 of the Taxonomy.

One civil society organisation also highlighted that formal definitions for carbon-intensive sectors have not been developed or agreed in the market. To this end, banks could use

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<sup>395</sup> Question: How would you assess the impact of relevant (EU) legislation (e.g. the Non-financial Reporting Directive, EU taxonomy) and regulation on your current ESG disclosure practices (e.g. time effort)? Please provide a score (i.e. 0,1,2,3,4, or 5) with 0 being not influenced and 5 being strongly influenced; average score provided by interviewed banks was 3.4 of 5, sample size: 22.

Nomenclature of Economic Activities (NACE) codes as referenced in the Taxonomy to identify and clarify the scope for carbon-intensive sectors.

The NFRD, which came into effect in 2014, requires certain large companies with more than 500 employees – including listed companies, banks, and insurance companies to include a non-financial statement as part of their annual public reporting obligations starting from 2018 (for financial year 2017).<sup>396</sup> Specific guidelines are provided for financial institutions. Required disclosures include companies' business model, policies, outcomes, risk management, and KPIs that are relevant to the four sustainability issues identified - environment, social and employee issues, human rights, and bribery and corruption. In June 2019, as part of the Sustainable Finance Action Plan<sup>397</sup>, the European Commission published additional non-binding guidelines on reporting climate-related information which integrate the TCFD recommendations.<sup>398</sup>

The NFRD is currently under revision as part of the Commission's strategy to strengthen the foundations for sustainable investment. The expansion of the perimeter of corporates that report ESG-related information is under consideration, bringing the market closer to the goal of meaningful minimum mandatory reporting by all major European companies, according to a report by CDP.<sup>399</sup> Selected feedback by respondents during its public consultation on the review of the NFRD included the following elements: i) respondents showed strongest support to expand the scope of the NFRD to certain categories of companies e.g. large companies not established in the EU but listed in EU regulated markets, large companies established in the EU but listed outside the EU, and large non-listed companies; ii) very strong support demonstrated by respondents for a requirement on companies to use a common standard; and iii) strong support among respondents for simplified standards for SMEs.<sup>400</sup>

Interviewed banks stated that the revised NFRD would contribute to bridging the ESG data gap between banks' requirements and their clients in the EU. Similarly, as mentioned in an EBA Working Paper<sup>401</sup>, surveyed banking institutions anticipate that the implementation of the revised NFRD would result in a standardised framework with consistent definitions and requirements.

## **6.2.5 ESG portfolio steering & business as usual processes**

### **6.2.5.1 ESG lending & investment strategies and policies**

As set out by a UNEP FI report, sustainability policies enable a bank to provide their own, distinct account of how they relate to sustainability issues and the appropriate actions to

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<sup>396</sup> European Commission (n.d.). *Non-financial reporting*. Available at: [https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting\\_en](https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en).

<sup>397</sup> European Commission (n.d.). *Renewed sustainable finance strategy and implementation of the action plan on financing sustainable growth*. Available at: [https://ec.europa.eu/info/publications/sustainable-finance-renewed-strategy\\_en](https://ec.europa.eu/info/publications/sustainable-finance-renewed-strategy_en).

<sup>398</sup> Communication from the Commission — Guidelines on non-financial reporting: Supplement on reporting climate-related information. OJ C 209/1, 20.6.2019, p. 1–29 Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52019XC0620%2801%29>.

<sup>399</sup> CDP (2019). *The new EU guidelines on non-financial reporting: Setting the scene for a review of the EU corporate reporting framework*. Available at: <https://www.cdp.net/en/articles/governments/the-new-eu-guidelines-on-non-financial-reporting>.

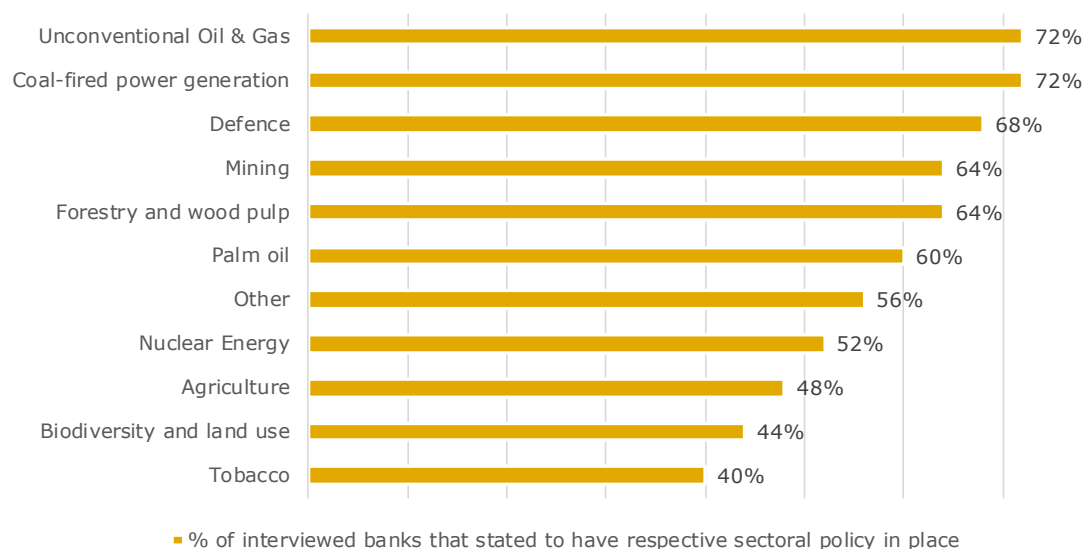
<sup>400</sup> European Commission (2020). *Summary Report of the Public Consultation on the Review of the Non-Financial Reporting Directive*. Available at: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive/public-consultation>.

<sup>401</sup> EBA (2020). *Sustainable Finance - Market Practices*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Sustainable%20finance%20Market%20practices.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Sustainable%20finance%20Market%20practices.pdf).

be taken.<sup>402</sup> A key constituent of sustainability policies are sectoral policies, which set detailed assessment criteria for certain industries, typically for those that are sensitive from a social and environmental point of view. Thereby, assessment criteria often entail risk considerations and are based on industry standards such as the Equator Principles for determining and assessing environmental and social risks in development projects.<sup>403</sup>

A majority of interviewed banks (84%) currently have sectoral policies in place. The sectors most commonly covered by such policies are the unconventional oil & gas sector, coal-fired power generation, and defence (see *Figure 88*). All interviewed G-SIBs mentioned that they have sectoral policies for unconventional oil & gas, coal-fired power generation, mining, forestry and wood pulp, and palm oil in place. Interviewed banks that currently do not have any sectoral policies (16%) stated that they aim to develop relevant sectoral policies in the future following an internal assessment. Banks that already have sectoral policies in place often commented that these policies are regularly reviewed, for example, on an annual basis. Moreover, they often state that they engage multiple stakeholders in this process to reflect their perspectives, including customers, civil society organisations, and external industry experts.

**Figure 88: Availability of current sectoral policies**<sup>404</sup>



Source: BlackRock FMA analysis

In general, interviewed banks stated that they have a lower risk appetite for sectors that are considered sensitive from an ESG perspective. One way that respondents address this is via exclusion lists as part of the respective sectoral policies. Examples given for such exclusion lists include financing to oil and gas projects in the arctic circle, direct financing related to development of thermal coal-fired power stations, and companies whose thermal coal activities are above a certain threshold of their total revenue. In addition, interviewed banks often identify sensitive sectors where lending activities are not completely prohibited but are under higher scrutiny, e.g. the energy sector. Consequently,

<sup>402</sup> UNEP FI (2016). *Guide to Banking and Sustainability*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2017/06/CONSOLIDATED-BANKING-GUIDE-MAY-17-WEB.pdf>.

<sup>403</sup> Equator Principles (n.d.). *The Equator Principles*. Available at: <https://equator-principles.com/>.

<sup>404</sup> Question: What kind of ESG sectorial policies do you have in place / plan to introduce, and how do are they applied to the bank lending and investment activity? Sample size: 25.

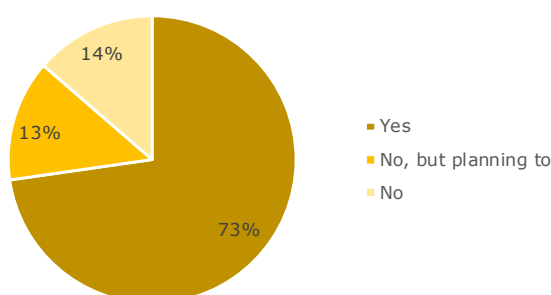
according to respondents, a stricter screening during the credit approval process against certain environmental and social eligibility criteria is applied (see also section 4.2.4.2).

#### 6.2.5.2 Business planning and steering

Sustainability policies were mentioned by many respondents as an important element of integrating ESG considerations into lending and investment, as well as for effective business planning and portfolio steering. Among interviewed banks, 73% of respondents have cascaded ESG-related policies into commercial planning, as shown in *Figure 89*. This includes 90% of interviewed G-SIBs compared with only 58% of interviewed non-GSIBs.

However, most interviewed banks integrate ESG considerations during the client screening and credit approval process only and do not reflect specific ESG objectives into their credit strategies. Only few banks stated that sectoral policies are further considered in business origination guidelines and procedures. For example, some banks stated that they deprioritise clients with higher ESG risks for opportunities at the commercial planning stage based on a negative selection. Similarly, some banks mentioned that they have sectoral exit strategies in place that are informed by exclusion policies, and that are translated into the planning cycle. Civil society organisations also highlighted that sectoral policies could support the implementation of high-level ESG targets as they are more relevant for banks' daily operations.

Figure 89: Sectoral policies cascaded into commercial planning<sup>405</sup>



Source: BlackRock FMA analysis

However, in addition to the integration of sectoral policies into banks' business origination processes, respondent banks acknowledge that effective portfolio steering also requires specific metrics, targets, and underlying underwriting plans to capture not only the emerging ESG business opportunities but support risk mitigation in relation to a bank's risk appetite. One civil society mentioned the importance for sectoral policies to be linked to more specific sectoral targets, for example, biodiversity for agriculture, social issues for healthcare. Further examples of measures that banks can use to steer their portfolios are provided, for example, by the Climate Financial Risk Forum, and include: i) climate risk limits e.g. limits related to carbon intensity of counterparties; ii) enhancements to increase product offerings with an attractive risk return profile under climate change assumptions; and iii) target ratios for 'green' and 'brown' activities that banks can steer towards

<sup>405</sup> Question: Are ESG-relevant policies (e.g. sectoral policies) cascaded into commercial planning (e.g. deal origination guidelines). If so how? Sample size: 22.

facilitated by taxonomies either developed internally or referencing the one under the European Commission.<sup>406</sup>

#### 6.2.5.3 Client engagement

According to the PRB, client engagement is one of the key tools that banks can use for “encouraging sustainable practices and accompanying their customers and clients in their transition towards more sustainable business models, technologies and lifestyles”.<sup>407</sup> In line with this, client engagement is considered an important area by many respondent banks to promote sustainable practices and steer their portfolio towards a stronger ESG profile. According to those interviewed, various client engagement activities exist. Thought-leadership events are the most common activity that 65% of the interviewed banks conduct. For instance, banks hold client meetings to engage on the green agenda.

Client partnership is also a common form, which is conducted by 52% of the interviewed banks, as shown in *Figure 90*. This means that a bank partners with clients to better understand their current practices and potential opportunities for the client to improve their alignment towards sustainable practices. Some interviewed banks specifically stated that they carry out strategic dialogues with clients that operate in, or are associated with, high-risk sectors – such as the oil and gas sector, thermal coal mining, and utilities – in order to understand their ability to adapt their business activities to a low-carbon and climate resilient economy or their progress along this path. In the engagement process, interviewed banks also mentioned that they identify opportunities to support their clients with the transition, e.g. helping them invest in renewable energy or realise energy saving initiatives. In this context, one respondent bank stated the view that over the next few years, there will be more focus on how banks support their clients in the transition and measure their progress, and particularly, a discussion about if banks should step away from clients that could not achieve their transition targets.

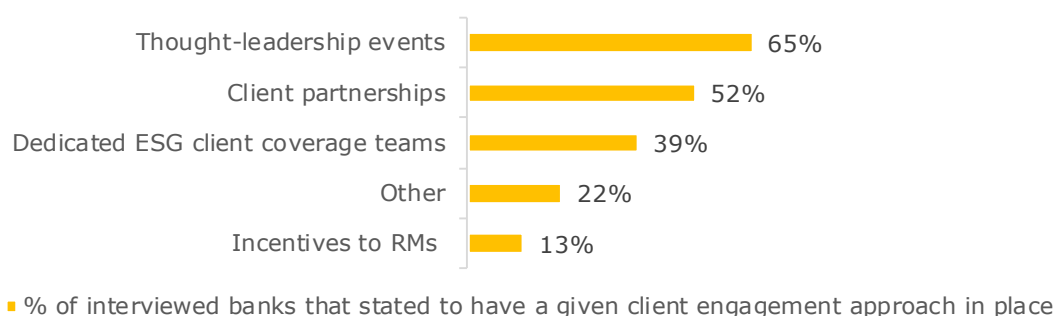
A less common approach among respondents is the setup of dedicated ESG client coverage teams, with 54% of G-SIBs having it in place compared to only 17% of non-G-SIBs. However, some banks mentioned that they have interdepartmental sustainability teams in place, for example, as part of their corporate and investment banking division. These teams then support, for example, the respective relationship manager in having periodic engagement with clients on environmental and social topics.

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<sup>406</sup> Climate Financial Risk Forum (2020). *Climate Financial Risk Forum Guide 2020*. Available at: <https://www.fca.org.uk/publication/corporate/climate-financial-risk-forum-guide-2020-summary.pdf>.

<sup>407</sup> UNEP FI (2019). *Principles for Responsible Banking – Guidance Document*. Available at: <https://www.unepfi.org/wordpress/wp-content/uploads/2019/09/PRB-Guidance-Documents-Final-19092019.pdf>.

Figure 90: Forms of client engagement to promote more sustainable practices<sup>408</sup>

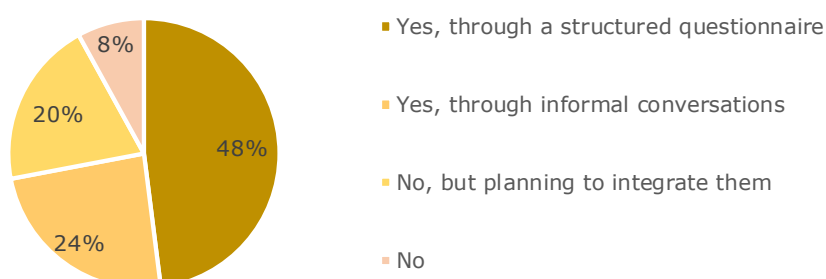


Source: BlackRock FMA analysis

In the context of client engagement, several banks highlighted the importance of relationship managers, since they directly face clients and engage on ESG related matters. However, only 13% of interviewed banks mentioned that they have specific ESG-related incentives in place for relationship managers.

Moreover, some respondent banks mentioned that they do not have a framework to capture ESG-relevant information in a structured way, although this would assist with capturing required information for portfolio steering and monitoring purposes. As shown in Figure 91, 48% of interviewed banks have established an internal framework for relationship managers to gather such information – for example, through an onboarding form or client questionnaire. Another 24% stated that they capture information informally, while 20% are planning to capture ESG-related information from clients going forward. A small number of banks do not have such a framework in place, nor do they currently plan to do so, as they use vendors to collect environmental and social information on clients. In this instance, relationship managers are responsible for collecting governance information only. This also includes some larger banks who prefer third party data as they mentioned that capacities to source all information internally from clients are limited.

Figure 91: Availability of internal framework for relationship manager to capture ESG-related client information<sup>409</sup>



Source: BlackRock FMA analysis

<sup>408</sup> Question: How do you engage with your clients to promote more sustainable practices and steer your portfolio towards a stronger ESG profile? "Other" includes ESG advisory team offering investor insights to clients; bank's partnership with organisations active in the sustainability field for client events; periodical engagement with clients, etc. Sample size: 23.

<sup>409</sup> Question: Have you developed an internal framework for relationship managers to capture ESG-relevant information from clients (e.g. onboarding form)? Sample size: 25.

Banks that mentioned having a structured questionnaire in place often stated that, while the process is consistent across lending and underwriting activities, the actual questionnaire and content is adapted to the specific client situation and/or differentiated by sector. This is particularly the case for clients in more sensitive industries – for example, mining, oil, and gas – where assessments are conducted beyond traditional environmental and social drivers. Additional elements assessed by some interviewed banks typically include risks that can unfold due to regulatory changes, litigation trends, operational and market barriers, and technological changes that can impact clients' financial results.

For banks that do not capture climate-related information systematically, one supervisor provided an explanation that based on their discussions with banks, "banks desire to define information required from clients right from the outset, as requesting revised data fields from clients later on are seen as sub-optimal". Similarly, if financial institutions could have a higher degree of standardisation of data required from corporates, the data requesting process could be less burdensome for the real economy.

However, albeit the data issue is recognised as an issue across market players, civil society organisations, supervisors and several banks highlighted that banks should take more responsibility and enhance efforts in this area by, for example, launching initiatives to collect data directly from their clients. Furthermore, several stakeholders mentioned the need for NFRD related obligations to be expanded to SMEs to broaden data availability and the potential value add of public databases as a utility for the industry.



### **6.3 A first overview of the impediments to the development of a well-functioning EU market for green finance and instruments and strategies to promote the scaling-up of green finance**

While progress has been made in the integration of ESG factors in risk management, prudential supervision and bank's business strategies, participants highlighted a number of challenges, as well as enabling factors, that cut across all objectives discussed in this Interim Study, for the further advancement of green finance and responsible investment for banks.

This section focuses on products and services offered by banks in line with the scope of the Study. A broader market perspective, e.g. including other financial products and services as well as other market participants, are beyond the scope of the analysis.

#### **6.3.1 A first overview of the impediments to the development of a well-functioning EU market for green finance and for responsible investment**

Based on the data collected during the data collection phase thus far, preliminary areas that could be seen as focus areas for identifying initial key impediments are listed below and will be further refined during the remainder of the Study.

According to respondents, particularly banks, the key challenges in relation to the development of a well-functioning EU market for green finance and for responsible investment are the following, which are described in further detail in this section: i) Data-related issues, ii) lack of standards (including guidelines and common definitions), and iii) limited internal resources and capabilities of banks. However, other challenges were also mentioned by participants across stakeholder groups, such as a lack of innovation of products within the ESG space, and limited resources and time spent by banks to develop ESG product offerings. One civil society organisation pointed out that the market for green finance has been growing, and questioned whether there are real impediments to the development of a well-functioning EU market for ESG products.

##### **Data-related issues**

Data is perceived to be one of the most prevalent challenges by interviewed stakeholders across banks supervisors and other stakeholders. However, although data issues are recognised as a challenge, civil society organisations, supervisors and several banks highlighted that banks could enhance efforts in this area by, for example, conducting assessments of data needs and current gaps, as well as launching initiatives to collect additional data required directly from their clients. Furthermore, several stakeholders mentioned the need for NFRD related obligations to be expanded to SMEs to broaden data availability and the potential value add of public databases as a utility for the industry.

Based on the current stocktake, concerns mentioned related mainly to data availability, reliability, accuracy and comparability (as mentioned in 4.2.4.1.1). As shown in *Figure 92*, interviewed banks ranked issues related to the availability, reliability, accuracy and comparability of data as the most relevant impediment for the development of ESG products and services. Data availability issues are perceived to be more extensive for exposures related to smaller and non-listed companies, as their disclosures are not as comprehensive as those of listed counterparties. A majority of banks claimed that a lack of quality data on counterparties' ESG practices – e.g. energy efficiency certifications for real estate, clients' 'brown revenue' data –, makes it difficult to perform ESG analysis at counterparty level, especially for SMEs. However, it is worth pointing out that some banks

proactively conduct activities to address the issue of data availability, for example, by gathering additional information directly from SME clients.

Data accuracy and comparability issues, according to respondent banks, also apply to listed counterparties. As noted by participants, concerns on the wide divergence and low correlation of scores and ratings produced by data providers creates 'noise' and reduces the credibility of ESG assessments, especially when external data is used as the main or complementary source for classification of counterparties. Civil society organisations also raised the issue that while data providers aim to increase data coverage, data comparability needs to be enhanced. In addition, beyond data comparability for corporates, standards need to be set for the implementation of ESG integration in financial intermediaries so that ESG performance and ratings of banks can be compared.

Additionally, participants mentioned challenges in relation to technological infrastructure. For instance, robust internal and external ESG databases, and related automation of data processing, is seen as requiring further enhancement, and the information available in banks' systems is still seen as insufficient by banks to enable the identification of certain loans as, for example, 'green', 'brown', or 'sustainable'.

In this context, availability of data to support research and build further evidence – for example, on risk-return characteristics of sustainable products – was repeatedly mentioned as another major challenge. Few interviewed banks stated that they make efforts in collecting evidence both internally and externally to further analyse the topic.

**Figure 92: Challenges faces by banks when developing ESG products and services<sup>410</sup>**



Source: BlackRock FMA analysis

In the context of risk management, and as shown in *Figure 93*, 87% of banks referenced complexity and lack of standardised approaches and methodologies as a key challenge, while 91% of those interviewed considered data to be the main challenge for defining, identifying, assessing and managing ESG risks. For instance, relevant ESG data for clients' ESG profile (e.g. clients' carbon emissions, quantitative information on their organisational set-up and operations) was considered to be difficult to obtain, often only available for large corporates, and often not standardised. However, some participants acknowledge

<sup>410</sup> Question: *From your perspective, what are the greatest challenges your bank faces when developing ESG products and services?* Sample size: 23.

that proxy approaches for non-listed counterparties could be an interim solution until better data becomes available publicly and / or banks collect data from their clients.

**Figure 93: Challenges for defining, identifying, assessing and managing ESG risks<sup>411</sup>**



Source: BlackRock FMA analysis

The view that data is a key issue was also confirmed by interviewed supervisors in the context of the assessment of ESG risk in supervised institutions – and by other stakeholders, including civil society organisations and academics<sup>412</sup> –, and has also been observed in other surveys.<sup>413</sup> It is also reported that the level, quality, and relevance of information provided by issuers, for instance, on ESG credit exposures, can vary significantly, even for the same issuer across time.<sup>414</sup>

### **Lack of standards**

Complexity and a lack of common standards with respect to ESG factors was identified as a major challenge by many respondents, both in the context of the development of ESG products and services, as well as in the context of risk management. Participants referred to a lack of harmonised and coherent standards across a wide range of topics including ESG definitions, approaches, methodologies, classifications, and disclosure practices.

However, several civil society organisations and banks emphasised that it is often not the scarcity of available standards or frameworks, but the lack of a universal standard, which presents a challenge. For example, in the context of ESG reporting and disclosure, multiple voluntary reporting standards (e.g. TCFD, GRI, SASB, UN PRI) are in place with overlapping elements; however, they do not ensure full comparability between companies and their performance in this area.

In the context of the development of ESG lending offerings, according to respondents, a lack of international harmonised classification standards is making it difficult for banks and other participants to properly understand and assess market and product characteristics – as well as opportunities – which, according to participants, ultimately negatively affects

<sup>411</sup> Question: *What are biggest challenges your organisation faces while defining, identifying, assessing and managing ESG risks?* Sample size: 23.

<sup>412</sup> See for example ShareAction (2020). *Banking on a Low-Carbon Future II*. Available at: <https://shareaction.org/wp-content/uploads/2020/04/ShareAction-Banking-Report-2020.pdf>.

<sup>413</sup> See for example EBF and IIF (2020). *Global Climate Finance Survey: A look at how financial firms are approaching climate risk analysis, measurement and disclosure*. Available at: [https://www.iif.com/Portals/0/Files/content/2020\\_global\\_climate\\_survey.pdf](https://www.iif.com/Portals/0/Files/content/2020_global_climate_survey.pdf).

<sup>414</sup> See for example Fitch Ratings (2020). *ESG in Credit*. Available at: <https://your.fitch.group/esgwhitepaper.html>.

demand for these products. The lack of such harmonised marked-wide product definitions and frameworks acts as a barrier to the further evolution of sustainable finance; this has also been identified in earlier studies, for example, in the context of the green bond market.<sup>415</sup> However, respondents also stated that standards for green bonds are further developed, and they also acknowledged the ongoing development of market standards for other products such as sustainability-linked loans (see section 6.2.2.1). It was also mentioned by civil society organisations that an expanded EU taxonomy, which includes and defines 'grey' and 'brown' activities, could further standardise the classification of ESG activities and facilitate a common product labelling.

A lack of standardised approaches and established methodologies was also mentioned in the context of risk management and disclosure – for example, on how to calculate financed emissions, or model transition risk, as discussed in 4.2.5.2. Supervisors mentioned the same challenges in the context of prudential supervision (see section 5.2.5.1). However, several participants highlighted that the challenge is rather linked to too many live initiatives attempting to define standards, rather than an actual lack of standards, albeit resulting in the same outcome.

A lack of transparent and harmonised disclosure standards, as well as the lack of an external and independent assessment of provided ESG information, was highlighted by respondent banks, supervisors, and academics as an impediment for making comparisons across banks, and potentially acting as a source of 'greenwashing', i.e. if market participants cannot reliably assess statements of institutions on their sustainability targets based on available information. The risk of greenwashing was also commonly mentioned by other stakeholders and is not limited to disclosure standards, but also to the labelling of products as sustainable.

In this context, it was highlighted that there is currently no widely agreed definition of what counts as 'green' or 'sustainable' in financial markets.<sup>416</sup> The lack of standards according to stakeholders also causes concern with respect to the question whether sustainable bonds have an impact on the transition, since, as mentioned in a recent discussion paper, "without more holistic standards, green finance is simply cutting the same pie into different slices".<sup>417</sup>

The majority of interviewed supervisors see the development and definition of standardised methodologies as a major issue and it is considered to be at an early stage. Here, supervisors often referred to standards for exposure measurement and taxonomies. Third Generation Environmentalism (E3G), in their 2020 report "A Vision for Sustainable Finance in Europe", states that "the lack of a science-based definition of sustainable economic activities has led to substantial greenwashing and has slowed down efforts to increase sustainable investment. It is now time to take steps to address this gap by creating a taxonomy of unsustainable activities".<sup>418</sup> In this context, respondents mentioned the risk of a proliferation of competing standards internationally.

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<sup>415</sup> See for example European Commission (2016) "Study on the potential of green bond finance for resource-efficient investments". Available at: <https://ec.europa.eu/environment/enveco/pdf/potential-green-bond.pdf>.

<sup>416</sup> European Federation for Transport & Environment (2019). *EU Commission bids to stem the flow of greenwashing in banking with own 'green list'*. Available at: <https://www.transportenvironment.org/press/eu-commission-bids-stem-flow-greenwashing-banking-own-green-list>.

<sup>417</sup> Imperial College Business School (2020). *Transition Finance: Managing Funding to Carbon-Intensive Firms*. Available at: <https://www.imperial.ac.uk/business-school/faculty-research/research-centres/centre-climate-finance-investment/research/transition-finance-managing-funding-to-carbon-intensive-firms/>.

<sup>418</sup> E3G (2020). *A Vision for Sustainable Finance in Europe*. Available at: [https://www.e3g.org/wp-content/uploads/E3G-A-Vision-for-Sustainable-Finance-in-Europe\\_Full-Report.pdf](https://www.e3g.org/wp-content/uploads/E3G-A-Vision-for-Sustainable-Finance-in-Europe_Full-Report.pdf).

## **Limited internal capabilities and know-how**

Limited internal capabilities and know-how was identified as a further challenge across stakeholder groups and was often mentioned by respondents in the context of the cost of developing capabilities and the associated business potential from ESG-linked products. In the context of developing new ESG offerings, many participants stated that sustainable products are a relatively recent development, and so they have not yet built up comprehensive knowledge and understanding of the nature of these products, innovations, and overall market developments and opportunities.

The understanding of the potential impact of ESG products on profitability is seen to be fairly limited among respondents. This is also in line with the findings from the NGFS Status Report which states that “respondents have so far not been able to verify a clear corresponding link between greenness and better profitability.”<sup>419</sup> Moreover, according to several banks, there does not seem to be a significant pricing differential in products, such as ESG-related bonds and loans, though this is disputed by other Study participants.

Hence, in the absence of other incentives and the presence of high development costs, according to several of the interviewed banks, there might be limitations as to the resources that could be allocated to further develop and promote ESG offerings and build risk management capabilities. This lack of incentives has also been mentioned in other studies.<sup>420</sup> A lack of scale due to relatively low volumes further exacerbates the challenge of covering the related costs for ESG offerings. However, a number of banks stated that they see ESG products as a differentiating factor based on increasing client demand, which they believe could impact price differentials going forward and create additional scale.

Some civil society organisations also see issues related to capabilities. A Finance Watch white paper states that, when it comes to finance professionals, there is “no training and competence regime for sustainability within financial institutions”, and also that there was a “risk of sustainability being bolted on to existing business models which are too narrowly focused on maximising financial outcomes, rather than being built in to new business models that take a holistic view.”<sup>421</sup>

Respondents, including civil society organisations, highlighted a lack of innovation of products within the ESG space as an issue, and believe that there should be an ESG version of all vanilla capital markets products – i.e. swaps, options, futures, etc. – available, to facilitate market participants playing their role of re-directing capital. In addition, respondents across stakeholder groups suggested having ESG factors embedded and mainstreamed into all products to avoid ESG products stay a niche area in the future. The relative shortage of sustainable products is also highlighted as an impediment by more than two-thirds of surveyed financial firms in the EBF / IFF survey.<sup>422</sup>

Other challenges mentioned by participants include a lack of customer demand, number of sizeable opportunities, and price differentiation.

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<sup>419</sup> NGFS (2020). *A Status Report on Financial Institutions’ Experiences from working with green, non-green and brown financial assets and a potential risk differential*. Available at: [https://www.ngfs.net/sites/default/files/medias/documents/ngfs\\_status\\_report.pdf](https://www.ngfs.net/sites/default/files/medias/documents/ngfs_status_report.pdf).

<sup>420</sup> See for example EBA (2020). *Sustainable Finance – Market Practice*. Available at: [https://eba.europa.eu/sites/default/documents/files/document\\_library/Sustainable%20finance%20Market%20practices.pdf](https://eba.europa.eu/sites/default/documents/files/document_library/Sustainable%20finance%20Market%20practices.pdf).

<sup>421</sup> See for example Finance Watch, together with GABV and Mission 2020 (2020). *New pathways: Building blocks for a sustainable finance future for Europe*. Available at: <https://www.finance-watch.org/publication/new-pathways-building-blocks-for-a-sustainable-finance-future-for-europe/>.

<sup>422</sup> EBA, EBF (2019). *Joint EBA & EBF Workshop on Sustainable Finance*. Available at: <https://www.ebf.eu/wp-content/uploads/2019/04/EBA-EBF-Workshop-on-Sustainable-Finance-Highlights-and-summary.pdf>.

Figure 94: Illustrative comments from banks on impediments to the development of a well-functioning market

**From your perspective, what are major impediments to the development of a well-functioning (EU) market for green finance and sustainable investment?**

*"Data, data and data again. Everybody, practitioners, academics, regulators, etc., is working with highly imperfect, contradicting, often times severely biased data"*

*"The NFRD does not result in standardised corporate sustainability disclosures, making it difficult to compare the sustainability performance of companies"*

*"The fact that the taxonomy covers only sustainable and some transition activities is causing confusion as to which activities are not sustainable"*

*"Public awareness is very low about ESG principles. Collaboration between public authorities and financial sector is not well developed. There are no incentives for banks nor for corporates"*

*"There is also lack of demand at the SME and retail banking level. ESG is still a niche product so far for many segments"*

*"Sustainability is a global challenge, ideally addressed in a global framework. Yet policy responses are shaped by regional agendas, often with selective focus on the most polluting sectors"*

*"There is insufficient business rationale for corporates to transition the economy and for banks to scale up sustainable finance. The EU Green Deal goals need to be underpinned by quantitative reduction trajectories for GHG emissions, allowing businesses to plan the transition"*

*"Lack of early visibility of future regulation, allowing to factor future regulatory cost into strategic planning"*

### **6.3.2 A first overview of the appropriate instruments and strategies to promote the scaling-up of green finance and of the market for sustainable financial products and to enhance the ability of banks to understand how ESG objectives can translate into financial opportunities**

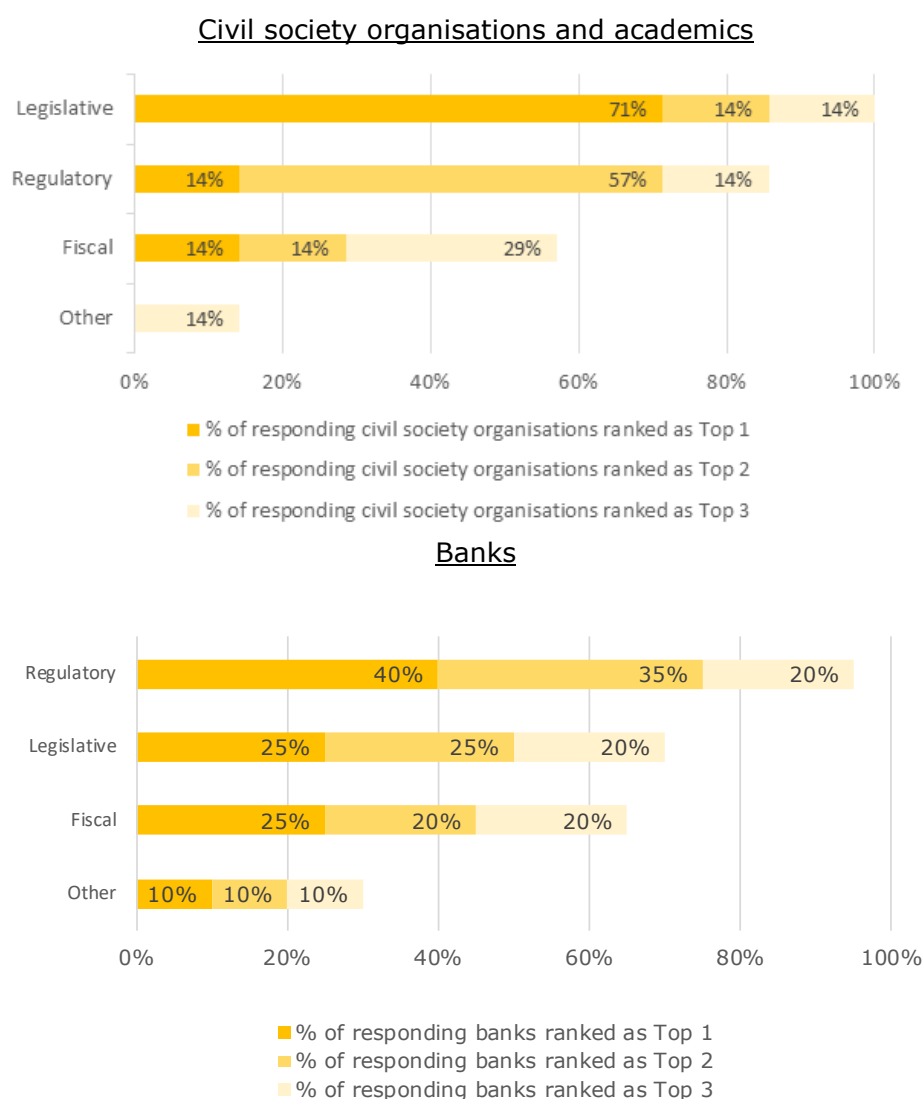
Based on the data collected during the data collection phase thus far, preliminary areas that could be seen as focus areas for identifying initial key instruments and strategies are listed below and will be further expanded upon and analysed during the remainder of the Study.

To address the aforementioned preliminarily identified challenges to enable the integration of ESG factors into business strategies (including the development of ESG products and services), study participants mentioned various instruments that could be taken into consideration. These instruments would also potentially apply to address the challenges mentioned by participants for the integration of ESG factors into risk management and prudential supervision. Most notably, participants pointed out the need to consider measures that go beyond regulation and legislation, and that other areas, such as fiscal incentives, should be examined. For completeness, additional instruments mentioned by respondents are included in this section. However, it should be noted that some of these

instruments, e.g. instruments including fiscal incentives, and monetary policy, are beyond the scope of this Study.

While regulation and legislation are the two incentives mentioned most frequently by respondents, as shown in *Figure 95* respondent banks consider regulatory incentives as the most effective measure to promote the scaling-up of green finance, whereas participants from civil society and academics highlight more the importance of legislative incentives.

**Figure 95: Incentives that could promote the scaling-up of green finance and the market for sustainable financial products<sup>423</sup>**



## **1. Supervisory and regulatory instruments**

- Regulatory guidance was mentioned by some participants as an important tool to define standards, in particular for common scenarios, taxonomies and measurement approaches (including stress testing approaches). For instance, civil society

<sup>423</sup> Question: *From your experience, what kind of incentives could be put in place to promote the scaling-up of green finance and the market for sustainable financial products?* Sample size: 7 for civil society organisations, 20 for banks.



organisations highlighted that regulators should focus on developing common scenarios (e.g. for stress testing and scenario analysis) that banks can reference, as it would lead to more comparability of results among banks and make aggregation of information possible. Scenarios published by the NGFS were frequently mentioned as a starting point for the development of common scenarios. However, both banks and other stakeholders more frequently referred to voluntary initiatives for defining these standards, such as disclosure standards like TCFD, or the UNEP Finance Initiative aimed at co-building methodologies to assess loan-books' exposure to climate-related risks and opportunities.

- Formulating regulatory requirements with respect to ESG risk management was mentioned by various participants as a key lever. For example, a 'green' supporting factor resulting in lower prudential capital requirements, or a 'brown' penalising factor, should be further investigated according to various market participants.<sup>424</sup> However, most supervisors, banks and other stakeholders mentioned that capital requirements should be risk-based and that, at this point, there may not be enough evidence to quantify an ESG impact from a pure risk perspective. It was also commented by most supervisors and civil society organisations that there should be a delineation between the objectives of prudential supervision and other political objectives. At the same time, some Study participants highlighted the case for a brown penalising factor as a precautionary measure, as highlighted in section 5.2.5.1 above in the report.
- To this effect, supervisors could ask banks for additional evidence or data to support the analysis of risk differentials for sustainable products.
- Requirements and guidance by supervisors with respect to disclosures – for example, the addition of ESG disclosures in Pillar 3 reporting – were mentioned by supervisors and other stakeholders, as well as some banks, as key instruments to ensure consistent disclosure. Further supervisory guidance on other aspects, such as methodological approaches, was also mentioned by supervisors and banks.
- Training initiatives were mentioned as a further key enabler by various participants, including trainings to not only build ESG-related in-house expertise of supervisors and banks, but also efforts to increase know-how and awareness of clients and customers. Mandatory trainings for board members and executive management members were also proposed by civil society organisations and academics.

## **2. Legislative instruments**

- Various participants across stakeholder groups mentioned that, in addition to the 'green' taxonomy, the EU could consider developing a 'brown' taxonomy to include performance criteria for activities which are significantly harmful. This is in line with a report published by the Technical Expert Group on Sustainable Finance which states that an expanded EU Taxonomy should incorporate "technical screening criteria for significant levels of harm to environmental objectives."<sup>425</sup>
- The NFRD review was highlighted by many respondents as an enabler for solving data needs for climate risk. This was particularly highlighted by banks and civil society

<sup>424</sup> E.g. Finance Watch, together with GABV and Mission 2020 (2020), *New pathways: Building blocks for a sustainable finance future for Europe*; Available at: <https://www.finance-watch.org/publication/new-pathways-building-blocks-for-a-sustainable-finance-future-for-europe/>.

<sup>425</sup> EU Technical Expert Group on Sustainable Finance (2020), *Taxonomy: Final report of the Technical Expert Group on Sustainable Finance*, Available at: [https://ec.europa.eu/info/sites/info/files/business\\_economy\\_euro/banking\\_and\\_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy\\_en.pdf](https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf).

organisations in relation to data requirements from corporate & SME clients, as well as an expansion to smaller firms.

- A point often mentioned in this context was the need for verified data, for example, by potentially setting standards for ESG reporting, similar to accounting standards. Respondents, including academics, highlighted that a requirement to treat ESG-related information in a similar manner as financial information – i.e. by introducing accounting standards and external validation – could further promote the integration of ESG factors.
- A number of participants, in particular civil society organisations, mentioned that EU legislation could consider requiring banks to take responsibility for ensuring the alignment of their strategies with international agreements, such as the SDGs and/or the Paris Agreement. Others suggested introducing legislation that requires banks to align remuneration and promotion with the achievement of sustainability targets, and that the sustainability strategy and performance be assessed independently on an annual basis.
- Many respondents across banks, supervisors and other stakeholders, including civil society organisations, mentioned the importance of clear legislative decisions regarding certain activities or sectors.

### **3. Other instruments**

- Some respondents mentioned that more subsidies to sectors with a positive impact, such as clean energy or low-carbon technologies, could help attract further investment, make the prices of these technologies more accessible, and make non-sustainable sectors comparably less attractive. Moreover, respondents mentioned that tax advantages or disadvantages and other fiscal incentives for customers could foster an increasing demand for ESG products offered by banks.
- To complement supervisory, legislative, and fiscal incentives, respondent banks and civil society organisations mentioned that macroeconomic policies and political direction could also serve as catalysts for creating demand in the real economy, especially for low carbon technology (e.g. solar energy and wind energy). Once incentives and a clear pathway are created in the real economy, the finance industry could follow the signals and further redirect capital.
- Participants also stated that existing loan guarantee and export finance schemes could be adapted to provide guarantees for bank loans supporting sustainable projects and/or helping with the transition of companies' business models. This aspect was also mentioned as a potential instrument to potentially generate a pricing benefit for sustainable bonds.
- Respondents across all stakeholder groups highlighted the possibility of the development of a centralised data collection platform – providing granular and comparable ESG related data –, which could address issues related to data comparability, consistency, and quality.
- Moreover, expanding international efforts and collaboration between various stakeholders, including public authorities, civil society, and the financial sector, was mentioned as an instrument for capacity building and the development of know-how, standards, and capabilities globally. Agreeing on standards at an international level, was considered as another key enabling factor by a wide range of participants.

- One civil society pointed out that shareholder and employee pressure, alongside disclosure standards, are additional stimulating factors to push companies towards more sustainable practices.
- An observation made by many participants in the context of ESG-related incentives was that enabling factors for the scaling up of green finance go beyond banking supervision and regulation, and that political decisions are required to set effective incentives.

## Annex I. List of abbreviations

Abbreviation	Full Phrase
<b>ABS</b>	Asset-backed Securities
<b>ACPR</b>	Autorité de contrôle prudentiel et de résolution (ACPR)
<b>AML</b>	Anti-money Laundering
<b>Austrian FMA</b>	Österreichische Finanzmarktaufsichtsbehörde
<b>BaFin</b>	Bundesanstalt für Finanzdienstleistungsaufsicht
<b>BaU</b>	Business as Usual
<b>BCBS</b>	Basel Committee on Banking Supervision
<b>BES</b>	Biennial Exploratory Scenario
<b>BIS</b>	The Bank of International Settlements
<b>BoE</b>	Bank of England
<b>CCISC</b>	Climate Change Impacts Study Committee
<b>CDP</b>	Carbon Disclosure Project
<b>CDSB</b>	Climate Disclosure Standards Board
<b>CFO</b>	Chief Finance Officer
<b>CFRF</b>	Climate Financial Risk Forum
<b>CISL</b>	University of Cambridge Institute for Sustainability Leadership
<b>CLO</b>	Collateralised Loan Obligation
<b>CMN</b>	National Monetary Council
<b>CMU</b>	Capital Markets Union
<b>CRD</b>	Capital Requirements Directive
<b>CRR</b>	Capital Requirements Regulation
<b>CRR2</b>	Capital Requirements Regulation 2
<b>CSR</b>	Corporate Social Responsibility
<b>DNB</b>	De Nederlandsche Bank
<b>E</b>	Environment
<b>E3G</b>	Third Generation Environmentalism
<b>EBA</b>	European Banking Authority
<b>EBF</b>	European Banking Federation
<b>EBRD</b>	The European Bank for Reconstruction and Development
<b>EDHEC Business School</b>	Ecole des Hautes Etudes Commerciales du Nord
<b>EeMAP</b>	Energy Efficient Mortgage Action Plan
<b>EFRAG</b>	European Financial Reporting Advisory Group
<b>EGDIP</b>	European Green Deal Investment Plan
<b>EIOPA</b>	European Insurance and Occupational Pensions Authority
<b>ESA</b>	European Supervisory Agency
<b>ESG</b>	Environment, Social and Governance
<b>ESR</b>	Environmental Social Risk
<b>ETS</b>	Exchange Trade Systems
<b>EU</b>	European Union
<b>EU GBS</b>	EU Green Bond Standard
<b>EV</b>	Electric Vehicle
<b>FCA</b>	Financial Conduct Authority
<b>FISMA</b>	Financial Services and Capital Markets Union
<b>FMA</b>	Financial Markets Advisory
<b>FSB</b>	Financial Stability Board
<b>G</b>	Governance
<b>GDP</b>	Gross Domestic Product
<b>GEVA</b>	GHG Emissions per unit of Value Added

<b>GHG</b>	Greenhouse Gas
<b>GRI</b>	The Global Reporting Initiative
<b>G-SIB</b>	Global Systematically Important Banks
<b>HLEG</b>	High-Level Expert Group
<b>I4CE</b>	Institution for Climate Economics
<b>IAIS</b>	International Association of Insurance Supervisors
<b>IAM</b>	Integrated Assessment Model
<b>ICAAP</b>	The Internal Capital Adequacy Assessment Process
<b>ICMA</b>	International Capital Market Association
<b>IEA</b>	International Energy Agency
<b>IFC</b>	International Finance Corporation
<b>IFRS</b>	International Financial Reporting Standards
<b>IIF</b>	Institute of International Finance
<b>IIRC</b>	International Integrated Reporting Council
<b>ILAAP</b>	The Internal Liquidity Adequacy Assessment Process
<b>IMO</b>	International Maritime Organisation
<b>IT</b>	Information Technology
<b>ITS</b>	Implementing Technical Standards
<b>ITR</b>	Implied Temperature Rise
<b>KPI</b>	Key Performance Indicators
<b>KyC</b>	Know-your-Customer
<b>LGD</b>	Loss Given Default
<b>LTV</b>	Loan to Value
<b>MAGPIE</b>	Model of Agricultural Production and its Impacts on the Environment
<b>MAS</b>	Monetary Authority of Singapore
<b>MIT</b>	Massachusetts Institute of Technology
<b>NACE</b>	Nomenclature of Economic Activities
<b>NCA</b>	National Competent Authority
<b>ND-GAIN</b>	Notre Dame Global Adaptation Initiative
<b>NFRD</b>	Non-Financial Reporting Directive
<b>NGFS</b>	Network for Greening the Financial System
<b>NPL</b>	Nonperforming Loan
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>ORSA</b>	Own Risk and Solvency Assessment
<b>P&amp;L</b>	Profit and Loss
<b>PACE</b>	Property Assessed Clean Energy
<b>PACTA</b>	Paris Agreement Capital Transition Assessment
<b>PCAF</b>	Platform for Carbon Accounting Financials
<b>PG</b>	Probability of Default
<b>PIK</b>	Potsdam Institute for Climate Impact Research
<b>PRA</b>	The Prudential Regulation Authority
<b>RAF</b>	Risk Appetite Framework
<b>RAG</b>	Red Amber Green
<b>REMIND</b>	Regional Model of Investment and Development
<b>S</b>	Social
<b>S&amp;P</b>	Standard and Poor's
<b>SASB</b>	Sustainability Accounting Standards Board
<b>SBTi</b>	Science Based Targets initiative
<b>SDA</b>	Sector Decarbonisation Approach
<b>SDG</b>	Sustainable Development Goals
<b>SDS</b>	Sustainable Development Scenario

<b>SEIP</b>	Sustainable Europe Investment Plan
<b>SIF</b>	Sustainable Insurance Forum
<b>SME</b>	Small and Medium Enterprises
<b>SOMO</b>	Centre for Research on Multinational Corporations
<b>SREP</b>	Supervisory Review and Evaluation Process
<b>SS</b>	Supervisory Statement
<b>SSM</b>	Single Supervisory Mechanism
<b>SyRB</b>	Sectoral Macroprudential Systemic Risk Buffer
<b>TCFD</b>	Task Force on Climate-related Financial Disclosure
<b>The Commission</b>	European Commission
<b>UNEP FI</b>	United Nations Environment Programme - Finance Initiative
<b>VAR</b>	Value at Risk
<b>WEF</b>	World Economic Forum
<b>WWF</b>	World Wide Fund for Nature

## Annex II. List of stakeholders

Table 8, Table 9, and Table 10 list all stakeholders per group as defined in section 3.2. As described in section 3.1, desk research was carried out for all stakeholders while other research methods as defined in section 3.1 were carried out with on subset of the full perimeter. An inclusion of an entity in this list does not imply that the entity actively participated in the Study nor that the Study reflects the views of this entity.

Table 8 – Banks

Geography	Country	Stakeholder name
<b>EU member states</b>	Austria	Erste Group
	Belgium	KBC
	Bulgaria	DSK Bank
	Cyprus	Bank of Cyprus
	Denmark	Danske Bank
	Estonia	Luminor Bank
	Finland	Nordea Bank
	France	BNP Paribas
		Crédit Agricole Group
		Société Générale
	Germany	Deutsche Bank
		DZ Bank
	Greece	Eurobank
	Hungary	OTP Bank
	Ireland	Bank of Ireland
	Italy	UniCredit
		Intesa Sanpaolo
	Latvia	Citadele banka
	Lithuania	Šiaulių Bankas
	Luxembourg	Banque et Caisse d'Epargne de l'Etat
	Malta	Bank of Valletta

	Netherlands	ING Group
	Poland	PKO Bank Polski
	Portugal	Caixa Geral de Depósitos
	Romania	Banca Transilvania
	Slovenia	Nova Ljubljanska banka
	Spain	Banco Santander
		Banco Bilbao Vizcaya Argentaria
	Sweden	Svenska Handelsbanken
<b>Non-EU member states</b>	Brazil	Itaú Unibanco Holding
	China	China Construction Bank Corporation
		Industrial & Commercial Bank of China Ltd.
	India	State Bank of India
	Japan	Mitsubishi UFJ Financial Group
		Sumitomo Mitsui Financial Group
	USA	Bank of America
		JPMorgan Chase & Co.
	UK	Barclays
		HSBC
		Standard Chartered
	Switzerland	Credit Suisse
		UBS Switzerland

**Table 9 – Supervisors and Regulators**

Geography	Country	Stakeholder name
<b>EU member states</b>	Supranational	European Banking Authority (EBA)
		European Central Bank (ECB)
		European Systemic Risk Board (ESRB)
	Austria	The Austrian Financial Market Authority (FMA)
	Belgium	National Bank of Belgium
	Bulgaria	Bulgarian National Bank
	Croatia	Croatian National Bank
	Cyprus	Central Bank of Cyprus
	Czechia	Czech National Bank
	Denmark	Danish Financial Supervisory Authority
	Estonia	The Estonian Financial Supervisory Authority
	Finland	Financial Supervisory Authority (FIN-FSA)
	France	Autorité de contrôle prudentiel et de résolution
		Banque de France
	Germany	Deutsche Bundesbank
		Federal Financial Supervisory Authority (BaFin)
	Greece	Bank of Greece
	Hungary	Magyar Nemzeti Bank (Central Bank of Hungary)



	Ireland	Central Bank of Ireland
	Italy	Bank of Italy (Banca d'Italia)
	Latvia	Latvia Financial and Capital Market Commission's (FCMC)
	Lithuania	Bank of Lithuania (Lietuvos bankas)
	Luxembourg	Commission de Surveillance du Secteur Financier (CSSF)
	Malta	Malta Financial Services Authority (MFSA)
	Netherlands	Netherlands Bank (De Nederlandsche Bank)
	Poland	Polish Financial Supervision Authority
	Portugal	Central Bank of Portugal (Banco de Portugal)
	Romania	National Bank of Romania (Banca Națională a României)
	Slovakia	National Bank of Slovakia (Národná banka Slovenska)
	Slovenia	Bank of Slovenia (Banka Slovenije)
	Spain	Bank of Spain (Banco de España)
	Sweden	Finansinspektionen
<b>Non-EU member states</b>	Brazil	Central Bank of Brazil
	China	China Banking Regulatory Commission (CBRC) The People's Bank of China
	India	Reserve Bank of India
	Japan	Japanese Financial Services Agency
	Mexico	Bank of Mexico
	Singapore	Monetary Authority of Singapore (MAS)
	Switzerland	Swiss Financial Market Supervisory Authority (FINMA)
	United Kingdom	Bank of England Prudential Regulation Authority (PRA)
	United States	Federal Reserve

Table 10 - International Organisations, Civil Society and Other Stakeholders

Type	Country	Stakeholder name
<b>Academics</b>	EU Member State	Bocconi University
		EDHEC Business School
		ESMT Berlin: Center for Financial Reporting and Auditing (CFRA)
		Florence School of Regulation
		Goethe University of Frankfurt (Centre for Financial Studies)
		Institute Louis Bachelier
		Stockholm School of Economics (Centre for Sustainable Markets)
		Wirtschaftsuniversität Wien (Vienna University of Economics and Business)
		Imperial College Business School

	Non-EU Member State	Northwestern University
		MIT Sloan School of Management
		Tsinghua University Centre for Finance and Development
		University of Cambridge (Cambridge Institute for Sustainability Leadership (CISL))
		Zurich University
<b>Associations</b>	EU Member State	European Banking Federation
		European Financial Reporting Advisory Group
		European Systemic Risk Board (ESRB)
	Non-EU Member State	Asia Pacific Loan Market Association (APLMA)
		Association for Financial Markets in Europe (AFME)
		International Capital Market Association (ICMA)
		Loan Market Association (LMA)
		Loan Syndications and Trading Association (LSTA)
	Global	Equator Principles
		Global Association of Risk Professionals (GARP)
		Institute of International Finance (IIF) - Sustainable Finance Working Group (SFWG)
		Platform for Carbon Accounting Financials (PCAF)
<b>Civil Society Organisations</b>	EU Member State	Bruegel
		CEE Bankwatch Network
		Centre for Research on Multinational Corporations (SOMO)
		European Federation for Transport & Environment
		Finance Watch
		Institute for Climate Economics (I4CE)
	Non-EU Member State	E3G
		2° Investing Initiative
	Global	Amnesty International
		Carbon Disclosure Project
		Change Finance
		Climate Bond Initiative
		Global Reporting Initiative
		International Financial Reporting Standards Foundation (IFRS) Foundation
		Oxfam
		ShareAction
		Transparency International
		WWF
<b>Data Providers/Rating Agencies</b>	Global	Fitch
		Moody's (incl. Vigeo Eiris)
		MSCI
		Refinitiv

<b>International Organisations/ Fora</b>		RepRisk
		Rhodium
		S&P (incl. RobecoSAM, TRUCOST)
		Sustainalytics
	EU	European Commission
		European Investment Bank
	Non-EU Member State	Climate Financial Risk Forum (CFRF)
	Global	Bank for International Settlements (BIS)
		European Bank for Reconstruction and Development (EBRD)
		FSB Task Force on Climate-related Financial Disclosure (TCFD)
		G20 (e.g. Green/Sustainable Finance Study Group)
		International Monetary Fund (IMF)
		IOSCO and the Sustainable Finance Network
		Network of Central Banks and Supervisors for Greening the Financial System (NGFS)
		Organisation for Economic Co-operation and Development (OECD)
		United Nations - Environment Programme Finance Initiative (UNEP FI) - Sustainable Development Goals (SDGs) - Global Compact
		World Bank - IFC's Sustainable Banking Network
		World Economic Forum - Global Future Council on Sustainable Development, Public Private Cooperation and Int. governance

### Annex III. Bibliography

The below list comprises documents referenced in the Interim Study only. The desk research, however, comprised a significantly broader sample.

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