SURVEY & RANKING | December 2017

Banking on a Low-Carbon Future

A RANKING OF THE 15 LARGEST EUROPEAN BANKS' RESPONSES TO CLIMATE CHANGE

ASSET OWNERS DISCLOSURE PROJECT

ShareAction»

Author

Sonia Hierzig

Acknowledgements

ShareAction gratefully acknowledges the financial support of the Finance Dialogue for this project. It is the mission of the Finance Dialogue to support the energy transition by catalysing a substantial redirection of capital into the low-carbon economy. The Finance Dialogue has funded this project, but the views expressed are those of ShareAction and not necessarily those of the Finance Dialogue. More information is available at http://www.financedialogue.org/.

We would further like to thank the panel of experts who gave their time to provide guidance to inform this research project, and particularly the development of the methodology.

We also acknowledge our appreciation of the efforts made and time given to supply information by individuals in the banks included in this survey.

Contents

Executive summary

Group	Rank	Bank	Country	Score (out of 162)
Leader	1	BNP Paribas	France	107
Challengers	2	UBS	Switzerland	94
	3	HSBC Holdings	UK	92.5
	4	Crédit Agricole	France	92
	5	Societe Generale	France	89
	6	ING	Netherlands	82.5
Learners	7	Deutsche Bank	Germany	61.5
	8	Barclays	UK	58
	9	Santander	Spain	56.5
	10	Credit Suisse Group	Switzerland	55.5
	11	RBS	UK	54
	12	BBVA	Spain	52.5
	12	Standard Chartered	UK	52.5
Bystanders	14	UniCredit	Italy	43
	15	Lloyds Banking Group	UK	37

Table 1: Ranking of the 15 largest European banks

This is the first comprehensive report to capture the current state of the European banking sector's response to climate-related risk and the low-carbon transition. It is based on a survey carried out by ShareAction between July and November 2017 – after the publication of the final recommendations of the Task Force on Climate-related Financial Disclosures in July 2017. It aims to provide share- and bondholders in the 15 largest European banks with an overview of where the sector is positioned on climate-related risks and opportunities and the information required to encourage individual European banks to improve their climate-related performance. It will also be of interest to policymakers, legislators and banking supervisors.

Investors are increasingly concerned about the lack of disclosure on climate-related risks. In September, over 100 institutional investors co-coordinated by ShareAction with nearly US$2 trillion in assets under management (AUM) wrote to 62 of the world's largest banks, calling for a strengthening of climate-related disclosures.[1]

Survey findings

1. **All 15 surveyed banks have considered climate-related risks and opportunities** and adopted policies, introduced processes and launched products as a result. The 100% response rate to the survey also provides an indication that banks are becoming increasingly aware of the issue.

2. **BNP Paribas is the clear leader in the field**, followed by a group of 'challengers' including UBS, HSBC, Crédit Agricole, Societe Generale and ING. Lloyds Banking Group and UniCredit appear to have so far been bystanders on climate-related issues.

3. **All three French banks surveyed score well compared to their European peers**. Our research shows this seems to be related to the introduction of legislative and regulatory measures, including Article 173 in France. This has important implications for policymakers and regulators in other countries.

4. **13 out of 15 banks have confirmed their intention to implement the Task Force on Climate-related Financial Disclosures** (TCFD) recommendations. However, there are clear differences in the interpretation of these recommendations and TCFD 'readiness'. ShareAction expects a number of banks to publish more comprehensive approaches to the TCFD recommendations during 2018 and encourages banks' shareholders to monitor these and engage in follow-up discussions as necessary.

5. The surveyed banks generally perform well on questions related to public policy engagements, collaboration, governance and climate strategies (sections 3 and 4). **Most banks give weaker responses on the more complicated areas of risk assessments and management and the development of low-carbon products and services** (sections 1 and 2). This should be a red flag to investors, who will be most interested in banks' actual exposure to climate-related risks, how these are managed and how this will affect their own investment portfolios.

6. 14 of the 15 banks have adopted policies to avoid or limit exposure to activities with significant negative climate impacts, such as thermal coal extraction. These policies vary in nature and **still leave many banks with significant exposures to climate-related liabilities and risks**. This will be a concern for institutional investors, who should ensure banks' policies are aligned with the climate targets set in the Paris Agreement of limiting global average temperature rises to <2°C.

7. **13 of the 15 banks have policies on engaging with clients in sectors most exposed to climate-related risks. However, most of those policies do not set clear objectives and timelines or detail what the consequences are if clients fall short**. It is important that shareholders request these policies are improved and information about clients' transition plans is included in loan covenants. This will improve the banks' ability to manage climate-related risks appropriately when lending to sectors with high-carbon activities or highly exposed to climate-related risks.

8. **All banks have developed a range of products** that help clients meet the challenges and opportunities caused by changes in technology, regulation and consumer behaviour driven by climate change. The supply and choice of low-carbon products and services is expanding rapidly. Institutional investors should encourage banks to continue with this positive trend for innovation and scale up the current range of offerings.

9. **All surveyed banks are actively engaging with external actors on climate-related issues**, including policymakers, trade associations and credit rating agencies. Banks' shareholders are encouraged to do the same to ensure the right policies and regulations are in place for a smooth low-carbon transition across the European banking sector.

Recommendations for investors and policymakers

This report provides recommendations for institutional investors, policymakers and regulators. As the report has identified that there are significant weaknesses in the European banking sector's approach to climate-related risk assessment and management, shareholders should prioritise engagement and discussion with banks on this topic. At those banks where significant progress has been or is being made on climate-related risk assessments and management, investors might also ask about issues linked to low-carbon products and services, policy engagements and collaboration with other actors, as well as governance structures and climate strategies.
Policymakers and regulators across Europe must take note of the recent developments in France and the effects it appears to have had on the French banking sector. It is recommended that they review the effects of Article 173 in France and assess the potential applicability in other countries and/or at EU level. Another route to promote the increased disclosure requirements that many banks are supportive of could be to make the TCFD recommendations mandatory.

Besides the need for increased disclosure requirements, this survey has also brought up a range of other policy and regulatory suggestions supported by banks. For example, several banks expressed support for a timely introduction of carbon pricing. Policymakers and regulators ought to assess new ways of taxing or trading carbon or make current measures more effective. There has also been considerable support for incentivising green product development. One potential way of achieving this could be by adjusting capital requirements. Regulators are encouraged to collect evidence on whether certain types of green assets present lower risks than brown assets and vice-versa, and consider the effect this might have on capital requirements.

Foreword by Sarah Breeden, Executive Director, International Banks Supervision at the Prudential Regulation Authority (PRA)

Sarah is the Executive Director for International Banks Supervision at the PRA. She joined IBD in February 2015 as Director, Major Overseas Banks where she was responsible for supervision of the UK operation of the largest investment firms, banks and custodians.

Before moving into supervision, Sarah was a Director in the Financial Stability Strategy and Risk directorate, focused on development of the UK's macro prudential policy making framework and supporting the Financial Policy Committee. Prior to that she was Head of the division in Financial Stability that assessed risks to financial stability from financial markets, the non-bank financial sector and the real economy.

Sarah led the Bank's work to support the transition of prudential regulation of banks and insurers from the Financial Services Authority to the Bank. Prior to that she was head of the Bank's Risk Management Division and head of Special Projects in the Markets directorate, leading the design and risk management of financial market operations undertaken by the Bank including those launched during the financial crisis.

Climate Change, and society's response to it, present financial risks which impact upon the Bank of England's objectives of maintaining the safety and soundness of the firms it regulates and ensuring the stability of the UK financial system.

These risks arise through two primary channels: the physical effects of climate change and the impact of changes associated with the transition to a lower-carbon economy. And the financial implications of a low-carbon transition in particular are significant, implying the reallocation of tens of trillions of dollars of investments. Though climate-related risks may not crystallize in full in the near-term, actions over the next decade may be decisive.

With this context, the Bank has been seeking to enhance the resilience of the UK financial system to climate-related risks. This includes engaging with regulated firms on these issues through our prudential supervision, as well as participating in international initiatives to support an orderly market transition to a lower-carbon economy.

Our increasing focus on the financial impact of climate change sits within a broader context of actions being taken by central banks and financial regulators globally. We welcome the increase in investor focus on this important issue including this report by ShareAction. It highlights a number of challenges facing the European banking sector and firms' responses to these, alongside recommendations for banks and for regulators.

The Bank will soon be publishing its own review into the UK banking sector's response to climate-related risks. As part of this, we will consider Share-Action's findings and the types of recommendations set out in their report. And we look forward to continuing our dialogue and engagement with stakeholders across the financial sector. Firms, investors, regulators and society at large will need to work closely together to meet the immense challenge of climate change. This report is an important input to those efforts.

Foreword by Jean Boissinot, Director of Financial Stability at Direction Générale du Trésor within the French Ministry of Finance

Jean Boissinot is Director of Financial Stability at Direction Générale du Trésor within the French Ministry of Finance since July 2017. He is also a senior advisor to the Director General, coordinating cross-directorate work on a number of finance related matters including green finance. He previously held various positions within the DG Trésor, HM Treasury (UK) and Insee.

Banks are at the nexus of many – if not most – capital allocation decisions. As such, in addition to strengthening climate policies and developing low-carbon products, one of the most critical parts of the transition to a climate-resilient economy is the management of climate-related risks and opportunities by the financial sector, especially banking institutions.

France aims to foster and accelerate this process through actively engaging with the banking sector on policies that are conducive to real change. This was the intention of the French reporting framework required by Article 173 (and the TCFD recommendations), as well as a year-long joint study by the French Treasury, Banque de France and ACPR published in February this year on current best practice and perspectives on understanding, assessing and managing climate-related risks in banking.

It is encouraging to see that this policy approach may indeed have contributed to nudging institutions towards stronger action. It is especially encouraging to see the reporting being picked up by shareholders to drive change and more urgent action. Faced with the challenges of climate change, it is certainly preferable that banks are taking early – albeit not perfect – action and showing a strong commitment to achieving the Paris Agreement rather than taking a passive approach and waiting for solutions to be developed and tested before implementing them. This ShareAction report clearly highlights that this approach is the common driver behind the leadership of the handful of banks that are fully engaged in the low-carbon transition, an approach that needs to echo throughout the wider European banking sector.

Introduction

In the wake of the Paris Agreement, 2017 has proven a landmark year for corporate climate disclosure. A historic milestone in this space was the publication of the Financial Stability Board's (FSB) TCFD recommendations in July encouraging disclosures on climate-related risks and opportunities in mainstream financial filings.[2] These recommendations have received widespread support from industry, governments and international agencies.

The UK Government has officially endorsed the TCFD recommendations and has encouraged all listed companies to implement them.[3] In France, Article 173 entered into force in 2016, requiring disclosure of climate-related financial risks. For banks and other credit providers, this includes regular stress tests reflecting the risks associated with climate change.[4] Other countries are expected to follow suit with similar legislation.

As financial intermediaries, banks are exposed to climate-related risks and the low-carbon transition due to the sector's wide range of activities. On the one hand, they are exposed to the physical, transitional and liability risks linked to climate change via the clients they lend to. On the other hand, they are also able to make a positive contribution by mobilising the capital required for a successful low-carbon transition.

In view of this, the banking sector is attracting scrutiny from investors, policymakers, regulators, and civil society. The Bank of England, for example, is currently evaluating banks to assess the level of climate-related risk facing the sector.[5] The Dutch Central Bank similarly intends to embed climate-related risks more firmly in its supervisory approach and is working on developing climate stress tests.[6] At EU level, the European Commission has established a High-Level Expert Group on Sustainable Finance (HLEG) to advise on developing a comprehensive EU strategy on sustainable finance,[7] The aim is to integrate sustainability considerations into the financial policy framework in order to mobilise finance for sustainable growth.

The investor community has also voiced concerns. In September, over 100 institutional investors co-coordinated by ShareAction with nearly US$2 trillion in assets under management (AUM) wrote to 62 of the world's largest banks, calling for a strengthening of climate-related disclosures.[8]

This report is intended to support investors in their engagement with the European banking sector on climate-related issues and follows the 'Banking on a Low-Carbon Future' report published in February 2017 – an investor guide to engaging with banks on climate change, which includes suggested expectations and examples of good practice from specific banks.[9]

This report builds on that earlier work to present a comprehensive ranking of European banks based on their policies and performance across four key themes:

1. Climate-related risk assessment and management
2. Low-carbon products and services
3. Public policy engagement and collaboration with other actors on climate change
4. Governance structures and strategy on climate-related risks and opportunities

The survey broadly follows the TCFD recommendations, which include sector-specific guidelines for banks. However, it also aims to go beyond this and offer concrete suggestions for the participants to facilitate TCFD implementation through the questions asked and answer options given. Enhanced company disclosures, as recommended by the TCFD, will enable more comparative analysis like the one presented in this report.

We also outline suggestions for regulators and civil society organisations concerned about the banking sector's response to climate change and monitoring the sector's response to the TCFD.

This report will help:

1. Investors understand how banks are performing on financially material climate-related issues
2. Banks understand their strengths and weaknesses relative to their peers
3. Regulators identify steps to accelerate the response to climate-related financial risk in the banking sector
4. Advance the dialogue on the crucial role played by the banking sector in the global response to climate change

Methodology

Questionnaire

The survey is structured around the four key themes identified in the 2017 ShareAction report 'Banking on a Low-Carbon Future'.[10] Please refer to this document for a detailed elaboration on these themes and their importance. Each section of the survey comprises a list of questions intended to identify good practice and allow differentiation between banks.

The four sections are as follows:

1. Theme 1: Climate-related risk assessment and management

This section comprises two subsections:

(i) **Risk assessment**: This intends to gauge exposure to high-carbon assets. The survey uses the list of non-financial sectors identified by the TCFD as having the highest likelihood of climate-related financial impacts.[11 12]

(ii) **Risk management**: This covers any sector-specific policies a bank may have, for instance on coal or oil and gas. For forest-related activities, this survey uses the High Carbon Stock Approach as a framework for banking sector policy.[13] The section also covers any objectives a bank may have in terms of reducing its exposure to high-carbon assets.

A maximum of 54 points is awarded for this section.

2. Theme 2: Low-carbon products and services

This section comprises three subsections:

(i) **Current exposure and objectives**: In order to gauge exposure to low-carbon products and services, the definition incorporated in the Global Investor Coalition on Climate Change registry is used.[14]

(ii) **Framework**: This seeks to understand what resourcing and capacity is being dedicated to the development of low-carbon products and services.

(iii) **Due diligence**: This seeks to identify any monitoring or third-party verification in place to ensure low-carbon integrity.

A maximum of 54 points is awarded for this section.

3. Theme 3: Climate-related public policy engagement and collaboration with other actors

This section comprises three subsections:

(i) **Policy and regulatory framework**: This covers any climate-related engagement with policymakers and financial regulators.

(ii) **Trade associations**: This seeks to understand what efforts banks have made to ensure that their trade associations are aligned with their climate change policies.

(iii) **Other initiatives**: This aims to identify what climate-related initiatives the bank has joined and the extent of its engagement with civil society on climate change.

A maximum of 27 points is awarded for this section.

4. Theme 4: Governance, strategy and implementation of banks' low-carbon transition plans

This section comprises two subsections:

(i) **Strategy**: This covers the ambition and scope of any climate strategy a bank has adopted. It also covers disclosure of progress around the strategy.

(ii) **Governance and implementation**: This seeks to understand the role played by the board in the context of climate policy, as well as the extent of any integration of climate concerns into performance metrics and remuneration criteria.

A maximum of 27 points was awarded for this section.

Themes 1 and 2 have double the points allocated compared to Themes 3 and 4, as they are of greater significance in implementing appropriate risk management processes and low-carbon transition plans. Themes 3 and 4 can be understood as tools required to achieve this goal. The questionnaire consists of 40 questions with a maximum of 162 points available in total (see Appendix 2). The full list of questions and answer options can be found in Appendix 2.

Research process
ShareAction selected 15 leading European banks for inclusion in this study. The largest publicly traded banks by total assets in Europe were identified based on data from S&P Global Market Intelligence.15 The final list includes the five largest UK banks (due to previous engagements) and the 10 largest continental European banks. This list includes banks headquartered in seven countries: the UK, France, Spain, Switzerland, Germany, Italy and the Netherlands.

- Barclays – UK
- Banco Bilbao Vizcaya Argentaria (BBVA) – Spain
- BNP Paribas – France
- Crédit Agricole – France
- Credit Suisse Group – Switzerland
- Deutsche Bank – Germany
- HSBC Holdings (HSBC) – UK
- ING – Netherlands
- Lloyds Banking Group – UK
- Royal Bank of Scotland (RBS) – UK
- Santander Group – Spain
- Societe Generale – France
- Standard Chartered – UK
- UBS – Switzerland
- UniCredit – Italy

There was a 100% response rate to the survey.

The research was conducted in three stages. First, ShareAction prefilled the questionnaires based on publicly available information (from banks' websites, 2016 annual reports and corporate social responsibility (CSR) or sustainability-related publications). Prefilling alleviated the burden on the participants.

Secondly, ShareAction wrote to the[15] Chief Executive Officers of each of the banks inviting their bank's participation in the survey in July 2017. In August, questionnaires were then distributed by email to carefully selected contacts within each bank with a deadline for completion in September. Extensions were granted in all cases where they were requested by the banks. Where banks gave no response to either the CEO letter or to the emailed questionnaire, additional efforts were made to contact the firms by emailing other individuals in the same company and by telephone, until eventually all 15 banks agreed to respond to the questionnaire. There was continuous contact throughout the entire period from August to November.

In the third stage of the research, ShareAction reviewed and analysed completed questionnaire responses and undertook any follow-up required to clarify responses and provide an opportunity for banks to review their answer options. This process allowed ShareAction to review additional disclosures and update scores where relevant. The final deadline for information that could be reflected in the banks' scores was 17 November.

Finally, each participant was assigned a group, ranging from 'Leader' to 'Bystanders'. The scoring highlighted four different clusters of banks separated by considerable gaps in terms of scores.
Alongside scoring, the report also provides individual recommendations in the accompanying document, 'Banking on a Low-Carbon Future – Accompanying document: Individual scorecards of the 15 largest European banks'. These recommendations are based on the publicly available information examined and survey responses. ShareAction intends to discuss these recommendations with each bank and its shareholders.

Key findings

- **All 15 surveyed banks have considered climate-related risks and opportunities** and adopted policies, introduced processes and launched products as a result. The 100% response rate to the survey also provides an indication that banks are becoming increasingly aware of the issue.

The findings clearly indicate that all of the banks have started considering how climate change is going to affect their business, both in terms of risks and opportunities. 13 out of 15 have a specific climate change strategy. BBVA, one of the remaining two banks, will publish its strategy in December 2017. Both remaining banks have also started integrating climate-related concerns in other ways by, for instance, adopting policies on engaging with clients operating in the sectors most exposed to climate-related risks on <2°C alignment. It would seem that climate change is recognised as a strategic challenge for the banking sector with material financial implications.

There is considerable variation in terms of the sophistication of climate-related policies and practices. Even the score of the most highly-ranked bank, BNP Paribas, was a significant distance from achieving maximum points (the top score is 107 out of a possible 162 points). This shows that there is room for significant improvement, particularly for the most poorly-ranked banks.

Institutional shareholders will have a major role to play in driving improvements from the banks in the coming months and years.

- **BNP Paribas is the clear leader in the field**, followed by a group of 'challengers' including UBS, HSBC, Crédit Agricole, Societe Generale and ING. Lloyds Banking Group and UniCredit appear to have so far been bystanders on climate-related issues.

- **All three French banks surveyed score well compared to their European peers**. Our research shows this seems to be related to the introduction of legislative and regulatory measures, including Article 173 in France. This has important implications for policymakers and regulators in other countries.

The three French banks surveyed (BNP Paribas, Crédit Agricole and Societe Generale) are all included in the top five banks. The results and commentary from the banks indicate that a key reason for this is the introduction and implementation of Article 173 in 2016 (see table 2). This was referenced widely in the French banks' responses.

Regulation appears to be a key driver encouraging banks to manage climate-related risks and opportunities. Other countries might benefit from introducing similar legislation, to ensure banks headquartered there do not fall behind. For instance,

Article 173 of the French law on the Energy Transition for Green Growth[16]

The French law on the Energy Transition for Green Growth was adopted in August 2015 and came into effect on 1 January 2016. It has since received considerable international attention as it marks a clear turning point in terms of climate-related risk disclosure.

Article 173 strengthens mandatory disclosure requirements for listed companies and banks, and carbon disclosure requirements for institutional investors. All listed companies need to disclose:
1. information about the financial risks related to the effects of climate change;
2. the measures adopted by the company to reduce them and;
3. the consequences of climate change on the company's activities and on the use of goods and services it produces.

In particular, banks and credit providers are required to disclose in their annual report the risk of excessive leverage (not carbon-specific) and the risks exposed by regular stress tests. The article clarifies that risks that are revealed in the context of stress testing exercises are subject to prudential supervision (i.e. to be addressed within the usual risk governance framework).[17]

Table 2: Article 173

if the UK Government wants to succeed in its ambition of promoting the UK as a global centre for green finance post-Brexit,[18] it should consider introducing similar mandatory requirements on disclosure and stress testing. This is particularly relevant as the two UK retail banks in the survey (RBS and Lloyds Banking Group) and Standard Chartered are in the bottom five banks in the ranking, and the fact that the European Banking Authority will move from London to Paris.[19] Banks' institutional investors should also support necessary changes by engaging with policymakers and regulators.

- **13 out of 15 banks have confirmed their intention to implement the Task Force on Climate-related Financial Disclosures** (TCFD) recommendations. However, there are clear differences in the interpretation of these recommendations and TCFD 'readiness'. ShareAction expects a number of banks to publish more comprehensive approaches to the TCFD recommendations during 2018 and encourages banks' shareholders to monitor these and engage in follow-up discussions as necessary.

In the survey, 13 of the 15 banks intend to implement the TCFD recommendations and none state that they will not do so. Seven banks have joined the group of 16 United Nations Environment Programme Finance Initiative (UNEP FI) banks, which aims to jointly pilot the TCFD recommendations. Widespread adoption of the final TCFD recommendations will provide investors with the data required to more accurately assess climate-related risks.

Only one bank, Crédit Agricole, states that they are already implementing the TCFD recommendations. Others, like, Deutsche Bank, RBS and Societe Generale, indicate they are in the process of analysing the recommendations and are planning to partly report against them in their next annual report. BNP Paribas notes that a bank will only be able to fully implement the TCFD recommendations when its clients have implemented them.

These differences in responses might in part be down to the fact that the recommendations foresee a five-year implementation pathway for industry-wide full alignment. Some banks seem to have interpreted implementing the recommendations as starting this five-year process, while in others' understanding full implementation will not be reached until the end of that process, or indeed even until clients follow the recommendations too.

Scenario analysis
One of the TCFD recommendations is about scenario analysis, which allows organisations to explore and develop an understanding of how physical and transition climate-related risks and opportunities might impact the business over time.[20] The recommendations list a number of scenarios that can be used as tools, ranging from <2°C scenarios up to 6°C of temperature rises. The adoption of scenario analysis is at very early stages, and shareholders have a role to play in ensuring its introduction is accelerated.

Some banks have already started implementing scenario analysis. All three French banks and UBS are working on or have used scenario analyses to assess the value of certain books and/or assets under 2°C scenarios. Crédit Agricole and UBS even do so for all of their books / assets. Standard Chartered carries out <2°C and 2°C+ scenario analyses – notably the bank also refers to 1.5°C scenarios and is attempting to understand the implications of such a scenario on current clients.

BNP Paribas uses the International Energy Agency's (IEA) World Energy Outlook (WEO) 450 scenario to assess the transition risk in its energy and power portfolio and is currently conducting a study to determine the effect of a carbon price on the Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) of clients in six industrial sectors with the highest emission levels. These risks are considered as part of the annual reviews and the determination of the internal counterparty rating.

In 2016, Societe Generale, alongside the French Prudential Supervision and Resolution Authority (ACPR), the French Treasury (Trésor) and a number of other French banks, produced a report on scenario analysis. The report highlights a shared view that climate-related risks are not new, but rather accentuate existing risks already identified under Pillars 1 and 2 (credit risks, operational risks, risks linked to insurance activities etc.).

Some banks have also indicated that they are planning to carry out scenario analysis in the future. HSBC, for instance, will assess its positioning against a United Nations agreed 2°C CO2 emissions reduction scenario by 2020. Another bank indicated it has developed a number of scenario analyses tests, but methodologies need to be refined before broader adoption. The UNEP FI TCFD pilot group will work collaboratively on developing methodologies for scenario analysis.

While the issue of data quality affects all banks to a similar extent, ING is the only bank to emphasise this specifically. The bank has been working on a pilot to measure the impact of indirect emissions on two specific asset classes within its loan books. The bank struggled with the outcome, as the margin of error was unacceptable for disclosure and decision-making. This is a result of the lack of data availability. ING continues to work with internal and external partners to develop and refine methodology, but also refers to the importance of establishing international market standards to create benchmarking capabilities and a level playing field among peers.

High- and low-carbon assets and objectives
Another key TCFD recommendation is the disclosure of high-carbon assets (absolute number and percentage relative to total assets) and financing connected with climate-related opportunities. The TCFD suggests defining high-carbon assets (or carbon-related assets) as those assets tied to the energy and utilities sectors under the Global Industry Classification Standard, excluding water utilities and independent power and renewable electricity producer industries.[21] This information will be valuable to investors wanting to assess exposure to climate-related risks.

Shareholders should be concerned that almost all banks were unable to provide data on high-carbon assets in the format requested. Only BNP Paribas was able to estimate that around 10% of its assets are high-carbon. However, this estimation is based on a broader definition than the TCFD recommendation, as it includes Energy (excluding electricity) and Services to public authorities (electricity, gas, water). It will therefore overestimate the bank's exposure. It is impressive that BNP Paribas publishes this ahead of all of its peers and five years in advance of the TCFD implementation pathway.

10 other banks provide partial information, for which they were awarded a minimum score. This includes breakdowns of their loan books by sector. However, on the basis of this information, it was difficult to determine the percentage of high-carbon assets. Most banks do not have explicit objectives for decreasing exposure to high-carbon assets or CO2e emissions (scope 3), except BNP Paribas, which commits to reduce the carbon content of a kWh financed as quickly as the worldwide average in the IEA's 450 scenario (85% between 2014 and 2040), and Societe Generale, which commits to reducing its exposure by >50% by 2050. Two further banks, including Crédit Agricole, intend to reduce exposure by <50%. None of the banks were able to provide the percentage of high-carbon assets within risk-weighted assets (RWAs).

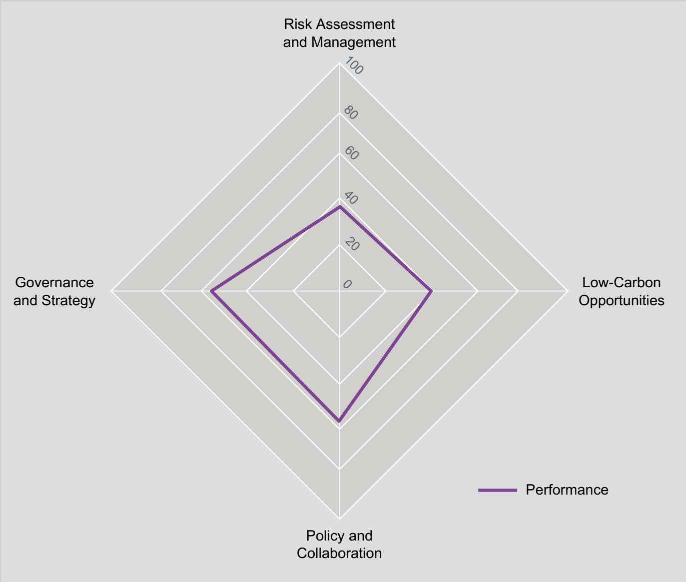
Only one bank disclosed the percentage of assets linked to low-carbon sectors (1.10%) to ShareAction, though seven banks publish related information. For example, Deutsche Bank highlights that in 2016 it arranged approximately €3.9 billion in project finance for renewable energy projects. In the same year, RBS lent over £1 billion to support UK sustainable energy projects.

No bank discloses a targeted percentage increase for low-carbon assets, though many have set specific absolute targets. For example, HSBC has recently committed US$100 billion by 2025 to financing low-carbon technology and sustainable development via green bonds, green loans, loans to renewable energy companies and investments in low-carbon funds. Crédit Agricole has committed €60 billion to renewable energy between 2016 and 2018 via market structuring and direct lending, more than half of which has already been spent. In comparison, BNP Paribas aims to double its financing of the renewable energy sector to €15 billion in 2020, RBS has pledged £3 billion for sustainable energy lending between 2015 and 2017, Societe Generale is striving for the capacity to access up to €10 billion of funding in the renewable energy sector by 2020 and Standard Chartered has a public commitment to fund and facilitate US$4 billion toward the clean technology sector between 2016 and 2020 via advisory, lending and debt capital markets underwriting activities.

Client engagement
Disappointingly, only BNP Paribas, Crédit Agricole and UBS indicate that they are engaging with clients on adopting the TCFD recommendations. If banks' clients do not follow the TCFD recommendations, this will seriously limit banks' ability to do so themselves. Shareholders should therefore challenge management teams as to why they do not appear to be encouraging clients to adopt the TCFD recommendations.

- The surveyed banks generally perform well on questions related to public policy engagements, collaboration, governance and climate strategies (sections 3 and 4).

Most banks give weaker responses on the more complicated areas of risk assessments and management and the development of low-carbon products and services (sections 1 and 2). This should be a red flag to investors, who will be most interested in banks' actual exposure to climate-related risks, how these are managed and how this will affect their own investment portfolios.



Graph 1: Performance by survey section

Reviewing scores by sections shows that surveyed banks performed significantly better in sections 3 and 4 than sections 1 and 2 (see graph 1 – scores converted into percentages to allow comparison between sections). Sections 1 and 2 showcase the banks' actual exposure to climate-related risks and opportunities and any efforts the bank is undertaking to decrease risk exposure and increase exposure to assets linked to low-carbon sectors. These two sections thus cover the core indicators assessing whether a bank is aligned with climate targets. Sections 3 and 4 are more about the tools and creating the right landscape to allow banks to transition, for instance via engaging with policymakers to ensure the right conditions are in place or by developing strategies and training employees.

Shareholders will want to make sure that the tools put in place by banks to align with climate targets are effective in actually achieving this goal. There appears to be a risk of a lot of work going into developing tools to the extent that their actual purpose is forgotten or at least not fulfilled, which is reflected in the relatively low scores on the issues the tools are meant to improve.

Banks also scored more highly in the questions on climate-related opportunities, such as low-carbon products and services, than on risk assessments and risk management, which was the lowest scoring section. This might be a reflection of the fact that it is easier for banks to justify harnessing green business opportunities where they can earn a profit than to renounce making a short-term profit to prevent carbon lock-in. Shareholders have a role to play in highlighting to investee banks that the lock-in of fossil fuel-related infrastructure will ultimately leave them more exposed to climate risks, particularly physical risks, and that the financing of activities contributing to this lock-in should be avoided.

- 14 of the 15 banks have adopted policies to avoid or limit exposure to activities with significant negative climate impacts, such as thermal coal extraction. These policies vary in nature and **still leave many banks with significant exposures to climate-related liabilities and risks**. This will be a concern for institutional investors, who should ensure banks' policies are aligned with the climate targets set in the Paris Agreement of limiting global average temperature rises to <2°C.

The burning of fossil fuels is the chief cause of anthropogenic climate change.[22] The embedded carbon emissions from oil, gas, and coal in the world's currently operating fields and mines will make temperature rises exceed 2°C.[23] To stay within the <2°C carbon budget, there can be no new fossil fuel-related exploration or infrastructure developments, and some fields and mines will need to be closed before they have been fully exploited.[24] It is therefore important that banks adopt policies aligned with <2°C scenarios to curb their exposure to these sectors.

The findings show almost all banks have introduced policies that aim to avoid or limit exposure to activities that bear significant climate-related risk, such as thermal coal extraction. However, most of those policies are not aligned with the goals of the Paris Agreement and staying well below 2°C of temperature rises. Shareholders should press banks to review their positions and encourage greater ambition.

Coal

13 banks have adopted public policies on the thermal coal sector. Santander has a policy that is currently confidential, but a summary of this will be made publicly available shortly. BBVA is the only bank that does not have a policy on thermal coal, but is about to publish one imminently.

These policies vary on activities covered (project finance for activities linked to coal mining and/or coal power or general financing for companies involved in coal mining and/or coal power), geography (globally or only high-income countries), client base covered (all clients or only new clients), and emissions intensity (for instance, Standard Chartered will in most circumstances not finance coal power projects with an emissions intensity above 830g CO2 / kWh). Some banks have adopted specific policies on mountaintop removal (MTR) mining (Credit Suisse Group, Deutsche Bank, ING, RBS and UBS).

Other banks have developed exclusion criteria for companies: Crédit Agricole, for instance, excludes any new or existing clients if revenues from coal extraction exceed 50% of total revenues. HSBC and ING have similar policies, but only for new clients, although ING additionally has a commitment to reduce its global credit exposure to thermal coal-related businesses and is the only bank to disclose portfolio development in relation to its coal policy statement. Standard Chartered will not provide financing to new clients whose sole activity is the operation of standalone, non-captive thermal coal mines. RBS excludes pure play coal mining and coal power companies (if >65% of their revenues are derived from coal).

Another trend has been banks setting general objectives in terms of reducing their exposure to coal. Barclays intends to reduce exposure to the thermal coal mining and coal power sectors globally over the medium term, while Deutsche Bank aims to gradually reduce its exposure to the thermal coal mining sector. Societe Generale, in line with the IEA WEO 450 scenario, has a more measurable target of reducing the proportion of coal power financed to 19%, and to reduce its exposure to coal extraction activities by 14% between 2016 and 2020.

None of the surveyed banks adheres to the recommended policy developed and endorsed by civil society organisations such as urgewald, BankTrack and Rainforest Action Network (RAN).[25] [26] It is important that shareholders encourage banks to strengthen their policies to make sure they are aligned with <2°C scenarios. The policy recommended by the aforementioned organisations entails ending the provision of financial services – including project finance, asset-specific financing and refinancing – to:

- new coal mines and coal-based power plants globally
- new and existing clients that are highly dependent on coal mining or power plants. 'Highly dependent' is defined as:
  - 30% or more of their power production or revenues are coal-based AND/OR
  - Their annual production, trading or consumption of coal exceeds an absolute threshold of 20 million tonnes of coal annually AND/OR
  - They are planning investments into new coal mines, new coal power plants or coal infrastructure

Oil and gas

12 banks have adopted policies addressing their exposure to the oil and gas sector. Among this group only Santander does not currently publish this policy, although the bank plans to publish a summary of it shortly. The remaining banks either do not have policies (including Barclays) or are about to publish policies imminently (BBVA).

As with the coal policies, there is variation among the oil and gas policies too. The new policy of BNP Paribas is the most innovative and far-reaching (see table 3). Shareholders should encourage banks to adopt similarly stringent policies, in order to ensure financing activities are consistent with the goals of the Paris Agreement.

**BNP Paribas –
Oil and gas policy (October 2017)**

BNP Paribas commits to:

- no longer do business with companies whose principal business activity is the exploration, production, distribution, marketing or trading of oil and gas from shale and/or oil from tar sands.
- cease financing of projects that are primarily involved in the transportation or export of oil and gas from shale or oil from tar sands.
- not finance any oil or gas exploration or production projects in the Arctic region.
- continue to actively support clients in the energy sector who are committed to being part of the energy transition.

Table 3: BNP Paribas – Oil and gas

Three other banks partially exclude some of those controversial activities. Two of the banks, including Societe Generale, have introduced policies on required environmental standards for upstream, midstream and downstream oil and gas operations and some focus on certain banking activities (Lloyds Banking Group mentions oil and gas in its credit policy).

Deforestation and peatland expansion and exploitation
Forests are important sinks for emissions contributing to climate change.[27] Hence various stakeholders (plantation companies, NGOs and technical support organisations) have developed the High Carbon Stock Approach (HCSA), which represents current best practice in this field. The HCSA is a methodology that distinguishes forest areas for protection from degraded lands with low-carbon and biodiversity values that may be developed.

Only two banks currently have aligned their policies with the HCSA: BNP Paribas and Standard Chartered. There is thus much room for investors to support banks in their endeavour to improve policies on deforestation. Despite not being aligned with the HCSA, some other banks have also adopted forest-related policies and only three banks do not have a specific forestry-related policy (including Barclays and BBVA), although BBVA is about to publish its policy imminently. Santander's policy is not currently publicly available, but a summary will be made available shortly.

Particularly noteworthy among the non-HCSA-aligned policies is that of HSBC, which has a commitment making it consistent with 'No Deforestation, No Peat and No Exploitation' policies which are increasingly common in the palm oil supply chain. HSBC also extends the policy to include refiners and traders, as well as growers and mills.

- **13 of the 15 banks have policies on engaging with clients in sectors most exposed to climate-related risks. However, most of those policies do not set clear objectives and timelines or detail what the consequences are if clients fall short**. It is important that shareholders request these policies are improved and information about clients' transition plans is included in loan covenants. This will improve the banks' ability to manage climate-related risks appropriately when lending to sectors with high-carbon activities or highly exposed to climate-related risks.

Transition pathways are likely to differ from company to company, as well as sector to sector. Key items for assessment might include how companies are allocating capital (i.e. towards low-carbon innovation, or further supporting high-carbon activities), strategy and governance. The TCFD has drafted sector-specific recommendations which could help inform a bank's assessment of how clients are managing climate risks.[28]

All but two banks have policies on engaging with clients in sectors most exposed to climate-related risks on <2°C alignment. Two of the banks (HSBC and Standard Chartered) set clear objectives and timelines, while three (BBVA, BNP Paribas and Crédit Agricole) additionally detail the consequences for clients that fall short (including ending the provision of financing and all other services) and include details on this in loan covenants.

- **All banks have developed a range of products** that help clients meet the challenges and opportunities caused by changes in technology, regulation and consumer behaviour driven by climate change. The supply and choice of low-carbon products and services is expanding rapidly. Institutional investors should encourage banks to continue with this positive trend for innovation and scale up the current range of offerings.

Green bonds: underwriting and issuance
Underwriting green bonds has grown significantly over the past few years.[29] Eight of the surveyed banks highlight examples of good practice:

- Barclays has acted as a book runner for roughly £15 billion of issuances in 2017 so far.
- BBVA was the most active Spanish book runner in the green bond market in 2016, participating in eight green and social bond issues that placed €5.3 billion.
- In 2016, BNP Paribas was the joint lead manager of €2.4 billion worth of green bonds.
- Crédit Agricole has arranged close to US$21.5 billion in green bonds, social bonds and sustainability bonds for its major customers in 2016.
- By the end of October, HSBC had underwritten US$36 billion green bonds in 2017.
- Santander provides a list of green bonds it has underwritten since 2016 worth over €3 billion.
- Since 2016 Societe Generale has arranged €22 billion in green bonds.
- In 2016, Standard Chartered supported the issuance of US$2 billion of green bonds.

Seven of the banks (Barclays, BNP Paribas, HSBC, ING, Lloyds Banking Group, Santander and Societe Generale) have issued bonds to raise capital destined to support low-carbon activities and companies. It is not easy to differentiate between these green bonds in terms of gauging the extent to which they finance environmental improvement other than through qualitative descriptions. This research shows that it is important for the growING of certifiers (including those highlighted in the banks' responses: the Climate Bonds Standards Board, the Carbon Trust, Oekom, PwC, CICERO and Vigeo Eiris) to use a common approach allowing for comparability. Table 4 provides some examples of the use of proceeds of these bonds.

Examples of use of proceeds of green bonds issued

- Residential mortgages on properties in England and Wales, which are in the top 15% of the lowest carbon intensive buildings in these countries, based on estimated energy efficiency (Barclays)
- A range of sectors, including renewable energy and smart metres (HSBC)
- Loans in six different categories: renewable energy, green buildings, public transport, waste management, water management and energy efficiency (ING)
- Renewable energy, green buildings, and climate-smart equipment, among others (Santander)

Table 4: Examples of use of proceeds of green bonds issued

Other low-carbon products and services
Besides green bonds, banks have also been working on developing other low-carbon products and services. Table 5 summarises some of the most interesting and innovative examples.

Examples of innovative low-carbon products and services

Green loans:

- Crédit Agricole markets various loans that help finance work intended to improve housing energy performance, such as the interest-free eco-loan (Eco-PTZ). Between its launch in April 2009 and end-2016, nearly 104,000 offers were made by the bank, totalling more than €2.13 billion.
- Barclays has recently launched the Green Loan, a term lending product to support corporate clients to meet their environmental objectives. The Green Loan is supported by the Green Product Framework which outlines eligible green themes and activities, and was developed in collaboration with Sustainalytics, a leading provider of ESG and Corporate Governance research and ratings.
- ING Groenbank finances sustainable investment by offering lending services at favourable interest rates to a variety of Dutch sectors, including renewable energy generation.
- Societe Generale also offers green loans for retail banking clients, for instance, the bank has granted over 25,000 interest-free eco-loans and sustainable development loans representing more than €393 million. The bank also offers preferential rates (interest rates and discounts on insurance) to clients purchasing a new or used electric or hybrid vehicle under the 'Expresso loan' scheme.

Green deposits:

- ING Groenbank offers a similar green savings deposit product. In the Netherlands, banks with a green license are required to invest at least 70% of the savings deposits in projects approved under the Dutch Government's Green Projects Scheme.
- Societe Generale also offers sustainable development savings accounts, where deposits, which currently amount to over €8 billion, are used to finance small and medium-sized enterprises (SMEs) and sustainable development projects.

Energy efficiency financing schemes:

- BNP Paribas assists entrepreneurs in improving energy efficiency. In France, the bank and its partner Economie d'Energie is integrating the 'Change to Green' scheme in its offering to corporate clients. The offer includes energy assessments, work specifications and financing arrangements.
- Lloyds Banking Group has launched a new £1bn fund to help owners of commercial real estate improve the energy efficiency of their buildings. According to the bank, over the life of the fund, the amount of energy saved could be as much as 110,000 tonnes of carbon – equivalent to the output of more than 22,000 homes.

Support for innovative start-ups:

- BNP Paribas supports innovative start-ups in the energy transition. The bank has committed to investing €100 million by 2020 in innovative start-ups involved in the energy transition. Energy Transition Capital (a dedicated team in BNP Paribas Principal Investments) is responsible for delivering this commitment.

Coupling interest rate to sustainability performance:

- NG agreed a new €1 billion loan with Philips in April 2017, with an interest rate that is partially coupled to the company's sustainability performance and rating. In June 2017, ING agreed a similar loan with Barry Callebaut (a leading manufacturer of chocolate and cocoa products) with an applicable credit margin linked to the certified sustainability performance.

Conservation finance:

- Credit Suisse Group offers conservation finance-related products and services, which are defined as capital that is invested to protect or enhance an ecosystem to generate a return. The bank's research suggests that wealthy individuals, institutional investors and even mainstream retail investors could supply as much as US$200-300 billion of investment capital per year needed to preserve the world's most important ecosystems.

Table 5: Examples of low-carbon products and services

These types of innovation reflect possible options across the sector to develop products and services that help contribute to the huge capital investment required to minimise the impact of climate change.[30] Certain banks are clearly gaining a commercial advantage from new products and shareholders should highlight these missed business opportunities among laggards.

- **All surveyed banks are actively engaging with external actors on climate-related issues**, including policymakers, trade associations and credit rating agencies. Banks' shareholders are encouraged to do the same to ensure the right policies and regulations are in place for a smooth low-carbon transition across the European banking sector.

A successful transition to a low-carbon economy will require various actions that fall outside the remit of the banking sector. Banks can help bring these wider changes about through policy engagements and collaboration with other actors. Sharing skills and expertise will promote learning and make climate action more efficient and effective across the economy.

Policymakers and regulators

It is encouraging that all 15 banks state that they engage with policymakers on reducing greenhouse gas (GHG) emissions or promoting an orderly transition to a low-carbon economy, as well as on financial regulation to ensure the rules governing the banking sector incentivise the sector's support for a low-carbon economy. The quality and quantity of those engagements appear to vary and take a range of forms (see table 6).

Trade associations

Eight banks confirm they actively ensure the climate policies of the trade associations they are members of are not inconsistent with their own. For instance, the Barclays public policy teams are in regular dialogue with the bank's 'Citizenship team' and business divisions to ensure consistent direct or indirect policy engagement.

10 banks are actively promoting support for the low-carbon transition as a topic for policy engagements within the trade associations they are members of. For example, the French Banking Federation (currently chaired by BNP Paribas CEO, Jean-Laurent Bonnafé) launched the "Bank and Climate" initiative in order to promote the commitments and actions taken by French banks in support of the energy transition.

Examples of engagements with policymakers and regulators

Engagements on reducing GHG emissions or promoting the low-carbon transition:

- **Promotion of carbon pricing:**
  BNP Paribas is a signatory of the French Climate Pledge, which promotes carbon pricing. Crédit Agricole has also appealed to governments to promote the introduction of carbon pricing.
- **Presence at the COPs:**
  HSBC has been one of the few global banks maintaining a presence at numerous COPs, with Chief Executive Officer (Stuart Gulliver) providing a keynote speech at COP21 and business and research support at COP22.
- **Support of the EU Energy Efficiency Directive:**
  Societe Generale supports the work of the European Commission related to the Energy Efficiency Directive which aims to find the financing tools for accelerating the energy efficiency for renovation work.

Engagements on financial regulation to ensure the rules governing the banking sector incentivise the sector's support for a low-carbon economy:

- **Promotion of a green supporting factor:**
  On financial regulation, BNP Paribas and Crédit Agricole support the set-up of a green supporting factor that could reduce capital requirements when financing a green asset.
- **Support of disclosure requirements:**
  Societe Generale highlights that it supported the introduction of Article 173 in France.
- **Submission of green finance policy recommendations:**
  Barclays recently submitted green finance policy recommendations to the UK Government, outlining various ways in which they could more actively support the transition to a low-carbon future.
- **Support for incentives for green bond issuance:**
  Within Singapore, Standard Chartered has engaged with the Monetary Authority of Singapore on their development of incentives for green bond issuance.
- **Participation in consultations and questionnaires distributed by regulators:**
  Some of the UK banks responded to a climate-related questionnaire of the Prudential Regulation Authority (PRA), and seven of the 15 banks indicate that they responded to the consultation on sustainable finance of the European Commission High Level Expert Group on Sustainable Finance.

Table 6: Examples of engagements with policymakers and regulators

BNP Paribas is actively participating in this initiative through the partial support of its online platform and a guiding report. HSBC is involved in a similar initiative through the chairmanship and foundation of the Association for Financial Markets in Europe (AFME) Sustainable Finance Policy WorkING.

Credit rating agencies

It is in the interest of the banking sector that climate-related concerns are fully integrated into credit risk assessments. Credit rating agencies will have a crucial role to play in this. Large banks should be encouraged by their shareholders to actively request that credit rating agencies include climate-related information into standard credit rating assessments.

Crédit Agricole, HSBC and Societe Generale state that they have an ongoing engagement with credit rating agencies on climate change, while Barclays, BNP Paribas, Deutsche Bank and UBS have had some level of interaction on this topic. Examples include HSBC working on pilot projects with major credit rating agencies to implement ESG criteria in credit assessments and UBS interacting with credit rating agencies to learn more about how they incorporate environmental and social issues into their ratings.

BNP Paribas notes that, even though CSR issues are not always a prior concern for credit rating agencies, they are increasingly willing to develop new activities enabling them to rate green financial products and services, such as green bonds.

Investors should positively note that all of the surveyed banks have considered climate change on some level, and that this topic is now firmly on the agenda. However rudimentary, most banks have started carrying out climate-related risk assessments and introduced policies for risk mitigation. It is also encouraging that all of the surveyed banks decided to actively participate in the process.

However, this survey also shows that there are still some considerable weaknesses in the ways banks have responded to climate change. It will be a concern to investors that individual banks' exposures to climate-related risks are not yet fully quantifiable, and that policies covering the sectors most exposed to those risks, as well as engagement strategies with clients, are in most cases misaligned with the target of limiting global temperature rises to <2°C. Nevertheless, the fact that all banks have started considering climate change indicates that there is a willingness in the sector to address climate-related issues. Hence, 2018 appears to be a good moment for shareholders to engage in climate-related discussions with banks.

Recommendations for individual banks, as well as scores for each question, are included in the accompanying document, 'Banking on a Low-Carbon Future – Accompanying document: Individual scorecards of the 15 largest European banks'.

Recommendations for institutional investors
This report has identified that there are significant weaknesses in the European banking sector's approach to climate-related risk assessment and management. Shareholders should prioritise engagement and discussion with banks on this topic and request banks:

- Place increased emphasis on developing methodologies for <2°C, 2°C and 2°C+ scenario analysis
- Disclose the percentage of high-carbon assets relative to total assets and what the objectives are for decreasing this
- Strengthen policies on coal mining and thermal coal power generation, oil and gas, deforestation and peatland exploitation in line with <2°C scenarios
- Introduce more stringent <2°C engagement policies reflected in loan covenants to guide dialogues with clients active in sectors highly exposed to climate-related risks – these should include:
  - clear objectives and timelines
  - escalation policies
  - request adoption of the TCFD recommendations

At banks where significant progress has been or is being made in the above areas, investors might also ask about:

- Disclosure of the percentage of assets linked to low-carbon sectors relative to total assets, and objectives for increasing this
- An outline of progress in developing low-carbon products and services, information on how this will be scaled up and clarification on the competitive advantage gained from these products
- Disclosure of the bank's position on various relevant policy topics (such as subsidies for fossil fuel companies, incentives for low-carbon growth, the introduction of climate-related concerns into capital requirements regulation, the introduction or enhancement of a carbon pricing mechanism, or climate-related disclosure requirements)
- The process by which the bank ensures trade associations they are members of are aligned with their own positions on climate change and how it drives the climate agenda in those fora
- Whether the bank is encouraging credit rating agencies to integrate climate-related concerns in credit risk assessments
- The extent to which the bank's board is involved in setting the climate agenda
- The inclusion of climate-related factors into key performance indicators (KPIs) and incentive structures of staff across banking divisions and the executive management team

Recommendations for policymakers and regulators
Firstly, policymakers and regulators across Europe must take note of the recent developments in France and the effects it appears to have had on the French banking sector. It is recommended that policymakers and regulators:

- Review the effects of Article 173 in France, particularly on the banking sector
- Assess the potential applicability in other countries and/or at EU level

Another route to promote the increased disclosure requirements that many banks are supportive of could be to make the TCFD recommendations mandatory. Policymakers and regulators are encouraged to:

- Review the TCFD recommendations and the extent to which they would satisfy banks' requests for increased disclosure requirements
- Consider how they could be transposed into EU or national legislation or regulation

Besides this, this survey has also brought up a range of other policy and regulatory suggestions supported by banks. For example, several banks expressed support for a timely introduction of carbon pricing. Policymakers and regulators ought to:

- Assess new ways of taxing or trading carbon or make current measures more effective

There has been considerable support for incentivising green product development. To give one example, French banks have been promoting a green supporting factor, which would entail lowering capital requirements for green assets compared to brown assets. Regulators are encouraged to:

- Collect evidence on whether certain types of green assets present lower risks than brown assets and vice-versa, and consider the effect this might have on capital requirements – this might be best achieved by commissioning an independent review

Appendix 1: Abbreviations

ACPR	Autorité de Contrôle Prudentiel et de Résolution (French Prudential Supervision and Resolution Authority)
AFME	Association for Financial Markets in Europe
AUM	Assets Under Management
BBVA	Banco Bilbao Vizcaya Argentaria
CDP	Carbon Disclosure Project
CSR	Corporate Social Responsibility
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
FSB	Financial Stability Board
GHG	Greenhouse Gas
HCSA	High Carbon Stock Approach
HLEG	High-Level Expert Group on Sustainable Finance
IEA	International Energy Agency
MTR	Mountaintop Removal
PRA	Prudential Regulation Authority
RAN	Rainforest Action Network
RBS	Royal Bank of Scotland
RWA	Risk-Weighted Asset
SME	Small or Medium-sized Enterprise
TCFD	Task Force on Climate-related Financial Disclosures
UNEP FI	United Nations Environment Programme Finance Initiative
WEO	World Energy Outlook

Appendix 2: Methodology

Question	Possible Answers	Points	Max. Points
	Risk assessment and management (max. 54 points)		
	Risk assessment (max. 15 points)		
1. a. Are climate risk assessments embedded into traditional types of risk, including credit risk, market risk and liquidity risk? Please provide evidence.	Yes	2 points	3 points
	No (please explain)	0 points	
b. Have the following committees discussed climate risk yet? If yes, please provide a brief summary of these discussions.	Group Risk Committee	0.5 points	
	Group Audit Committee	0.5 points	
	Group Risk Committee and Group Audit Committee	1 point	
	Neither of the above	0 points	
2. a. Does the bank use scenario analysis to assess value at risk under a variety of carbon pathways? Please specify which models are used for this analysis.	Yes, for <2°C scenarios and for all books / assets	1 point	4 points
	Yes, for <2°C scenarios but only for some books / assets	0.5 points	
	Yes, for 2°C scenarios and for all books / assets	1 point	
	Yes, for 2°C scenarios but only for some books / assets	0.5 points	
	Yes, for 2°C+ scenarios and for all books / assets	1 point	
	Yes, for 2°C+ scenarios but only for some books / assets	0.5 points	
	No	0 points	
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
3. a. In 2016, what was the amount of assets (in reporting currency) linked to the following sectors? What percentage of total assets does each represent? (If using an alternative categorisation, please explain.)	Oil & gas (carbon-related assets) [2 columns: absolute amount and percentage - same for other answer options]	Base scoring on percentage of carbon-related assets relative to total assets. For those banks that respond, award 3 points to the quartile with the lowest percentage, 2 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the highest percentage. Provide 0.5 points for those banks that respond with partial information.	4 points
	Coal (carbon-related assets)		
	Electric utilities, excluding independent power and renewable electricity producer industries (carbon-related assets)		
	Air freight		
	Passenger air transportation		
	Maritime transportation		
	Rail transportation		
	Trucking services		
	Automobiles and components		
	Metals and mining		
	Chemicals		
	Construction materials		
	Capital goods		
	Real estate management and development		
	Beverages		
	Industrial-scale agriculture		
	Packaged foods and meats		
	Paper and forest products		
	Other (please specify)		
	Total		
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
4. a. In 2016, to what extent was the bank involved in the underwriting of securities linked to the following sectors? Please disclose the absolute amount and the percentage of total securities underwritten.	Oil & gas (carbon-related assets) [2 columns: absolute amount and percentage - same for other answer options]	Base scoring on percentage of securities linked to carbon-related assets underwritten, relative to total securities underwritten. For those banks that respond, award 2 points to the quartile with the lowest percentage, 1.5 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the highest percentage. Provide 0.5 points for those banks that respond with partial information.	3 points
	Coal (carbon-related assets)		
	Electric utilities, excluding independent power and renewable electricity producer industries (carbon-related assets)		
	Air freight		
	Passenger air transportation		
	Maritime transportation		
	Rail transportation		
	Trucking services		
	Automobiles and components		
	Metals and mining		
	Chemicals		
	Construction materials		
	Capital goods		
	Real estate management and development		
	Beverages		
	Industrial-scale agriculture		
	Packaged foods and meats		
	Paper and forest products		
	Other (please specify)		
	Total		
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
5. a. What percentage of risk-weighted assets is carbon-related?	Oil & gas [2 columns: absolute amount and percentage - same for other answer options]	Unscored	1 point
	Coal		
	Electric utilities, excluding independent power and renewable electricity producer industries		
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
	Risk management (max. 39 points)		
6. a. Does the bank have long-term objectives in terms of decreasing exposure to carbon-related assets or CO2e emissions (scope 3)? To what extent?	Yes, reducing exposure to zero	5 points	9 points
	Yes, reducing exposure by 50% or more	3 points	
	Yes, reducing exposure by less than 50%	1.5 points	
	No	0 points	
b. Does the bank have long-term objectives in terms of decreasing its underwriting activities linked to carbon-related assets or CO2e emissions (scope 3)? To what extent?	Reducing exposure to zero	3 points	
	Reducing exposure by 50% or more	2 points	
	Reducing exposure by less than 50%	1 point	
	No objectives	0 points	
c. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
7. a. What is the bank's group-wide policy regarding coal mining and coal power?	There is a policy which excludes any new or existing client depending on revenues from coal mining or coal power by more than 30%	2 points	5 points
	There is a policy which excludes any new or existing client depending on revenues from coal mining or coal power by more than 50%	1.5 points	
	There is a policy which excludes project finance for coal mining and coal power globally	1 point	
	There is a policy which excludes project finance for coal mining or coal power globally	0.5 points	
	A policy, but not group-wide or does not fully exclude any of the above	0.5 points	
	No coal policy	0 points	
b. How often is this reviewed?	At least annually	1 point	
	At least every three years	0.5 points	
	Less than every three years	0 points	
c. Is this policy publicly available?	Yes	1 point	
	No	0 points	
8. a. What is the bank's group-wide policy regarding the provision of financial services that support the exploration and production of oil and gas reserves?	Policies excluding project finance for Arctic drilling, tar sands, ultra-deepwater drilling and LNG export and general financial services to companies planning to engage in the above, in addition to policies setting standards for upstream, midstream and downstream oil and gas operations	3 points	5 points
	Policies excluding project finance for Arctic drilling, tar sands, ultra-deepwater drilling and LNG export and general financial services to companies planning to engage in the above	1.5 points	
	Policies excluding one or more of the following: project finance for Arctic drilling, tar sands, ultra-deepwater drilling and LNG export and general financial services to companies planning to engage in the above, in addition to policies setting standards for upstream, midstream and downstream oil and gas operations	1.5 points	
	Policies excluding one or more of the following: project finance for Arctic drilling, tar sands, ultra-deepwater drilling and LNG export and general financial services to companies planning to engage in the above	1 point	
	Policies setting standards for upstream, midstream and downstream oil and gas operations	1.5 points	
	A policy, but not group-wide or does not apply any of the above	0.5 points	
	No policy	0 points	
b. How often is this reviewed?	At least annually	1 point	
	At least every three years	0.5 points	
	Less than every three years	0 points	
c. Is this policy publicly available?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
9. a. Does the bank have a group-wide policy on deforestation, peatland expansion and exploitation, including respecting Free, Prior and Informed Consent - in line with the High Carbon Stock Approach?	A group-wide policy in line with the High Carbon Stock Approach - clients not acting in line or on a pathway towards acting in line with this approach are excluded	2 points	4 points
	A policy, but either not group-wide or not in line with the High Carbon Stock Approach	1 point	
	No policy	0 points	
b. How often is this reviewed?	At least annually	1 point	
	At least every three years	0.5 points	
	Less than every three years	0 points	
c. Is this policy publicly available?	Yes	1 point	
	No	0 points	
10. a. What policies does the bank have in place regarding engagement with clients operating in the sectors most exposed to climate-related risks?	The bank engages with some clients operating in the sectors most exposed to climate-related risks on <2°C alignment, sets clear objectives and timelines for clients, and outlines what the consequences for clients that fall short are (including ending the provision of financing and all other services). Details on this are included in loan covenants.	5 points	8 points
	The bank engages with some clients operating in the sectors most exposed to climate-related risks on <2°C alignment, sets clear objectives and timelines for clients, and outlines what the consequences for clients that fall short are (including ending the provision of financing and all other services).	4 points	
	The bank engages with some clients operating in the sectors most exposed to climate-related risks on <2°C alignment, sets clear objectives and timelines for clients and outlines what the consequences for clients that fall short are.	3 points	
	The bank engages with some clients operating in the sectors most exposed to climate-related risks on <2°C alignment and sets clear objectives and timelines.	2 points	
	The bank engages with some clients operating in the sectors most exposed to climate-related risks on <2°C alignment.	1 point	
	The bank does not engage with any clients in sectors most exposed to climate-related risks on <2°C alignment.	0 points	
b. How often is this reviewed?	At least annually	1 point	
	At least every three years	0.5 points	
	Less than every three years	0 points	
c. Is this policy publicly available?	Yes	1 point	
	No	0 points	
d. Does this engagement with clients include requests to adopt the TCFD recommendations?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
11. a. Does the bank factor in climate change when assessing risk associated with any new or existing business and price that risk accordingly? If yes, please provide evidence.	Yes	3 points	4 points
	Partly (for some new or existing businesses, but not all)	1.5 points	
	No	0 points	
b. Is information about this made publicly available?	Yes	1 point	
	No	0 points	
12. a. Does the bank pursue any other approaches to mitigating climate risks?	Please explain	Up to 2 points (1 point per approach)	3 points
b. Is information about this made publicly available?	Yes	1 point	
	No	0 points	
13. Does the bank issue regular update reports to communicate the implementation of and progress made on its policies to assess/mitigate climate risks?	Yes, annually.	1 point	1 point
	Yes, less than annually.	0.5 points	
	No	0 points	
Low-carbon products and services (max. 54 points)			
Current exposure and objectives (max. 24 points)			
14. a. In 2016, what was the amount of assets (in reporting currency) linked to low-carbon sectors? What percentage of total assets does this represent? (If using an alternative categorisation, please explain.)	[2 fields: amount and percentage]	Base scoring on percentage of low-carbon assets relative to total assets. For those banks that respond, award 3 points to the quartile with the highest percentage, 2 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the lowest percentage. Give 0.5 points for those that disclose partial information.	7 points
b. What are the bank's long-term objectives in terms of increasing this percentage?		Base scoring on percentage of increase of low-carbon assets relative to total assets. For those banks that respond, award 3 points to the quartile with the highest percentage, 2 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the lowest percentage. Give 0.5 points for those that disclose partial information.	
c. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
15. a. In 2016, to what extent was the bank involved in the underwriting of securities linked to low-carbon sectors? Please disclose the absolute amount and the percentage of total securities underwritten.		Base scoring on percentage of securities linked to low-carbon assets underwritten, relative to total securities underwritten. For those banks that respond, award 2 points to the quartile with the highest percentage, 1.5 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the lowest percentage. Give 0.5 points for those that disclose partial information.	5 points
b. What are the bank's objectives in terms of increasing this percentage?		Base scoring on percentage of increase of securities linked to low-carbon assets underwritten, relative to total securities underwritten. For those banks that respond, award 2 points to the quartile with the highest percentage, 1.5 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the lowest percentage. Give 0.5 points for those that disclose partial information.	
c. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
16. a. What percentage of risk-weighted assets is linked to low-carbon sectors?	Unscored		4 points
b. Which tools has the bank put in place to lower the risk associated with some low-carbon assets?	First loss guarantee mechanisms	1 point	
	Partial risk guarantee mechanisms	1 point	
	Other (please specify)	Up to 1 point	
c. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
17. a. How much capital has the bank raised for its own activities via green bonds? What is the percentage of this compared to the total capital raised via debt markets? Please list each bond issued, the term and the quantum.		Base scoring on percentage of green bonds issued relative to total bonds issued. For those banks that respond, award 2 points to the quartile with the highest percentage, 1.5 points to the next quartile, 1 point to the next quartile, and 0 points to the quartile with the lowest percentage. Give 0.5 points if at least one green bond has been issued, but no percentage provided.	4 points
b. Are those green bonds certified? Please list the certifying body for each green bond issued.	Yes	2 points	
	No	0 points	
18. a. Does the bank seek out opportunities for adaptation finance? If yes, how is this achieved?	Yes (please specify)	3 points	4 points
	No	0 points	
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
Framework (max. 25 points)			
19. How much resourcing and capacity is being allocated to support the development of low-carbon products and services systematically across the bank?	Each main division (including retail banking, commercial banking, corporate banking and investment banking as appropriate) has staff dedicated to developing low-carbon products and services within their department.	5 points	5 points
	Some of the main divisions have staff dedicated to developing low-carbon products and services within their department.	2.5 points	
	There is dedicated staff working on the development of low-carbon products and services across the bank.	2.5 points	
	None	0 points	
20. What percentage of your total research budget is allocated to exploring low-carbon opportunities (either internally or via outsourcing)?		Base scoring on percentage. For those banks that respond, award 3 points to the quartile with the highest percentage, 2 points to the next quartile, 1 point to the next quartile, and 0.5 points to the quartile with the lowest percentage - also 0.5 points if they prove there is a budget via research reports published, but cannot say how much	3 points

Question	Possible Answers	Points	Max. Points
21. Please list an example of a low-carbon product or service the bank offers within each of the following divisions:	Retail banking, commercial banking, corporate banking, investment banking	Up to 8 points, 2 points each	8 points
22. How is the bank seeking to expand and promote these low-carbon products and services among its clients?	Communication with clients (list the following: newsletters, face-to-face meetings or phone calls, events, other (please elaborate))	Up to 3 points	9 points
	Incentives (list the following: low collateral requirements for green loans, favourable loan pricing, lower fees, other (please elaborate))	Up to 3 points	
	Other (please elaborate)	Up to 3 points	
Due diligence (max. 5 points)			
23. How does the bank certify and monitor low-carbon products and services to ensure their environmental sustainability?	Third party / independent reviews for all low-carbon assets followed up with regular update reports	3 points	3 points
	Third party / independent reviews for all low-carbon assets	2 points	
	Third party / independent reviews for some low-carbon assets followed up with regular update reports	2 points	
	Third party / independent reviews for some low-carbon assets	0.5 points	
	None of the above	0 points	
24. Does the bank disclose information publicly to allow stakeholders to assess the environmental sustainability of low-carbon products and services?	Yes, for all low-carbon assets	2 points	2 points
	Yes, for some low-carbon assets	1 point	
	No	0 points	
Policy engagement and collaboration with other actors (max. 27 points)			
Policy and regulatory framework (max. 15 points)			
25. a. Is the bank engaging with policymakers on any legislation or policy designed to reduce GHG emissions or to promote an orderly transition to a low-carbon economy?	Yes	2 points	7 points
	No	0 points	
b. Is the bank engaging with policymakers and regulators on financial regulation to ensure the rules governing the banking sector incentivise the sector's support for a low-carbon economy?	Yes, on an international level	2 points	
	Yes, on a national level	1 point	
	No	0 points	
c. If you answered yes to questions a/b, please provide an example.	Engagement on GHG reductions / transition to a low-carbon economy:	Up to 1 point	
	Engagement on financial regulation:	Up to 1 point	
d. Is this information disclosed publicly?	Yes	1 point	
	No / Partly	0 points	
26. Are there time and resources within the public affairs team specifically allocated to supporting the transition to a low-carbon economy?	Yes, and staff have been encouraged to bring up climate change as a concern in each meeting with policymakers or regulators.	2 points	2 points
	Yes	1 point	
	No	0 points	
27. Does the bank publish its position on the following climate-related policy and/or regulatory issues?	Subsidies for fossil fuel companies	1 point	6 points
	Incentives for low-carbon growth	1 point	
	Introduction of climate-related concerns into capital requirements regulation	1 point	
	Introduction or enhancement of a carbon tax / other carbon pricing mechanism	1 point	
	Climate-related disclosure requirements	1 point	
	Other (please elaborate)	Up to 1 point	

Question	Possible Answers	Points	Max. Points
Trade associations (max. 3 points)			
28. a. Please list the trade associations the bank is a member of.		Unscored	2 points
b. Is this information disclosed publicly?	Yes	1 point	
	No	0 points	
29. Does the bank ensure the climate policies of the trade associations it is a member of are not inconsistent with its own?	Yes - please briefly outline how this is achieved	1 point	1 point
	No	0 points	
30. Does the bank actively promote support for the low-carbon transition as a topic for policy engagements within the trade associations it is a member of?	Yes (please specify)	1 point	1 point
	No	0 points	
Other initiatives (max. 9 points)			
31. Is the bank a member/signatory of any of the following climate-related initiatives?	Banking Environment Initiative	0.5 points	4 points
	Equator Principles	0.5 points	
	United Nations Environment Programme Finance Initiative (UNEPFI)	0.5 points	
	United Nations Environment Programme Finance Initiative (UNEPFI) banking sector initiative on TCFD recommendations	0.5 points	
	Carbon Disclosure Project (CDP)	0.5 points	
	Green Bond Principles	0.5 points	
	Science-Based Targets	0.5 points	
	Other (please specify)	Up to 0.5 points	
32. Does the bank engage with credit rating agencies on the issue of climate change?	Yes, ongoing engagement (please describe this engagement)	2 points	2 points
	Yes, this has been a topic of interaction (please decribe the nature of this interaction)	1 point	
	No	0 points	
33. How does the bank engage with NGOs, think tanks and academics on the issue of climate change?	Regular meetings or phone calls	0.5 points	2.5 points
	Regular reporting	0.5 points	
	Collaborative initiatives (please elaborate)	0.5 points	
	Consultations (please give an example)	0.5 points	
	Stakeholder committee	0.5 points	
	Other (please specify)	Unscored	
	None of the above	0 points	
34. Please give an example of when a climate-related engagement with an NGO, think tank or academic has influenced and changed a policy or practice at the bank.		0.5 points	0.5 points

Question	Possible Answers	Points	Max. Points
Governance, strategy and implementation (max. 27 points)			
Strategy (max. 13 points)			
35. a. Does the bank have a strategy on climate change?	Yes, and t is a group-wide commitment aligned with the Paris Agreement	3 points	9 points
	Yes, and it is a group-wide commitment	2 points	
	Yes, and it is aligned with the Paris Agreement	2 points	
	Yes	1 point	
	No	0 points	
b. Is this strategy comprehensive, ie. does it address all areas which are relevant for banks in terms of climate change?	The policy addresses all of the following: climate-related risks, climate-related opportunities, policy engagements / collaborative initiatives, governance / implementation	3 points	
	The policy addresses three of the following: climate-related risks, climate-related opportunities, policy engagements / collaborative initiatives, governance / implementation	2 points	
	The policy addresses one or two of the following: climate-related risks, climate-related opportunities, policy engagements / collaborative initiatives, governance / implementation	1 point	
c. Is this strategy publicly available?	Yes	1 point	
	No	0 points	
d. Are progress updates about this strategy disclosed?	Yes, at least annually.	2 points	
	Yes, less than annually.	1 point	
	No	0 points	
36. a. Is the bank planning to implement the recommendations of the Task Force on Climate-related Financial Disclosures?	Yes	2 points	4 points
	No (please explain)	0 points	
b. If yes, by what date is the bank intending to fully report against the recommendations?	The bank is already doing so	2 points	
	2017 Annual Report	1 point	
	2018 Annual Report	0.5 points	
Governance and implementation (max. 14 points)			
37. Is there board-level oversight of the climate strategy?	The board is a driving force in advancing climate-related concerns within the organisation (please provide an example of this) and there is at least one board member with specific climate-related expertise	3 points	3 points
	The board is a driving force in advancing climate-related concerns within the organisation (please provide an example of this)	2.5 points	
	The board is involved in development of policies and targets (please outline this process)	1.5 points	
	The board approves policies and targets	1 point	
	No	0 points	

Question	Possible Answers	Points	Max. Points
38. a. How is awareness of climate-related risks and opportunities and the role of the banking sector in contributing to the low-carbon transition raised across the organisation?	E-learning	0.5 points	6 points
	Seminars and workshops	0.5 points	
	Conferences and other events	0.5 points	
	Internal roadshows	0.5 points	
	Other (please specify):	Up to 1 point (0.5 points each)	
b. What percentage of employees has receieved training on climate-related risks and opportunities and the role of the banking sector in contributing to the low-carbon transition?	Please indicate percentage.	Depending on percentage of employees trained: less than 20% - 0 points, 20% to 50% - 1.5 points, above 50% - 3 points	
39. Are there any climate-related Key Performance Indicators (KPIs) or objectives for individuals or teams?	Yes, for the executive board and for employees in retail banking, commercial banking, corporate banking and investment banking	2.5 points	2.5 points
	Yes, for employees in retail banking, commercial banking, corporate banking and investment banking	1 point	
	Yes, for the executive board	1 point	
	No	0 points	
40. Are those KPIs or objectives, if existent, translated into incentive structures and remuneration policies?	Yes, for the executive board and for employees in retail banking, commercial banking, corporate banking and investment banking	2.5 points	2.5 points
	Yes, for employees in retail banking, commercial banking, corporate banking and investment banking	1 point	
	Yes, for the executive board	1 point	
	No	0 points	
			162 points

Endnotes

1 ShareAction (2017). Banking on a Low-Carbon Future – An investor guide for engaging with banks on climate change. Available online at: https://shareaction.org/wp-content/uploads/2017/02/Banking-on-Low-Carbon_ShareAction.pdf, [accessed 21 November 2017].

2 Task Force on Climate-Related Financial Disclosures (2017). Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017). Available online at: https://www.fsb-tcfd.org/publications/final-recommendations-report/, [accessed 13 November 2017].

3 Murray James (2017). Government launches Green Finance Taskforce in bid to cement UK's position as 'clean growth investment hub', Business Green. Available online at: https://www.businessgreen.com/bg/news/3017521/government-launches-green-finance-taskforce-in-bid-to-cement-uks-position-as-clean-growth-investment-hub, [accessed 13 November 2017].

4 Legifrance (2015). Article 173. Available online at: https://www.legifrance.gouv.fr/affichTexteArticle.do?idArticle=JORFARTI000031045547&cidTexte=LEGITEXT000031047847&categorieLien=id, [accessed 13 November 2017].

5 Clark Pilita (2017). Bank of England to probe banks' exposure to climate change. Available online at: https://www.ft.com/content/ec4d3446-52a1-11e7-a1f2-db19572361bb, [accessed 13 November 2017.

6 De Nederlandsche Bank (2017). DNBulletin: Increasing climate-related risks demand more action from the financial sector. Available online at: https://www.dnb.nl/en/news/news-and-archive/dnbulletin-2017/dnb363837.jsp#, [accessed 23 November 2017].

7 European Commission (2017). Sustainable Finance. Available online at: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en, [accessed 23 November 2017].

8 ShareAction (2017). Banking on a Low-Carbon Future. Available online at: https://shareaction.org/banking-on-a-low-carbon-future/, [accessed 13 November 2017].

9 ShareAction (2017). Banking on a Low-Carbon Future. Available online at: https://shareaction.org/wp-content/uploads/2017/02/Banking-on-Low-Carbon_ShareAction.pdf, [accessed 13 November 2017].

10 Ibid.

11 Task Force on Climate-Related Financial Disclosures (2017). Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017). Available online at: https://www.fsb-tcfd.org/publications/final-recommendations-report/, [accessed 13 November 2017].

12 For carbon-related assets, the survey referred to the preliminary definition provided by the TCFD, namely those assets tied to the energy and utilities sectors under the Global Industry Classification Standard, excluding water utilities and independent power and renewable electricity producer industries: Task Force on Climate-related Financial Disclosures (2017). Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, p. 24. Available online at: https://www.fsb-tcfd.org/wp-cotent/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf, [accessed 19 November 2017].

13 High Carbon Stock Approach (undated) .The High Carbon Stock Approach. Available online at: http://highcarbonstock.org/the-high-carbon-stock-approach/, [accessed 16 November 2017].

14 Global Investor Coalition on Climate Change (2015). Low Carbon Investment (LCI) Registry – Taxonomy of Eligible Investments. Available online at: http://globalinvestorcoalition.org/wp-content/uploads/2015/10/LCI-Registry-Taxonomy_3rd-Release_211015.pdf, [accessed 24 November 2017].

15 S&P Global Market Intelligence (2015). Europe's 50 largest banks - The top 50 by assets, retrieved April 2016. Available online at: http://www.hitc.com/en-gb/2016/04/26/sp-global-market-intelligence-ranks-europes-50-largest-banks-by/page/1/, [accessed 24 November 2017]/

16 Legifrance (2015). Article 173. Available online at: https://www.legifrance.gouv.fr/affichTexteArticle.do?idArticle=JORFARTI000031045547&cidTexte=LEGITEXT000031047847&categorieLien=id, [accessed 13 November 2017].

17 French Treasury (in collaboration with the Banque de France and the Autorité de Contrôle Prudentiel et de Résolution). (undated) Assessing climate change-related risks in the banking sector. Available online at: https://www.tresor.economie.gouv.fr/Ressources/File/433465, [accessed 15 November 2017].

18 Gov.uk (2017). UK support for low carbon innovation. Available online at: https://www.gov.uk/guidance/green-finance, [accessed 15 November 2017].

19 Laura Noonan (2017). EBA shift expected to weaken UK role in regulation, Financial Times. Available online at: https://www.ft.com/content/53e66070-cec9-11e7-9dbb-291a884dd8c6, [accessed 24 November 2017].

20 TCFD (2017). The Use of Scenario Analysis in Disclosure of Climate-Related Risks and Opportunities. Available online at: https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Technical-Supplement-062917.pdf, [accessed 15 November 2017].

21 Task Force on Climate-related Financial Disclosures (2017). Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, p. 24. Available online at: https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf, [accessed 19 November 2017].

22 NASA (2017). Facts. Available online at: http://climate.nasa.gov/causes/, [accessed 16 November 2017].

23 Oil Change International (2016). The Sky's Limit. Available online at: http://priceofoil.org/content/ uploads/2016/09/OCI_the_skys_limit_2016_FINAL_2.pdf, [accessed 16 November 2017].

24 Pasha-Robinson, Lucy (2017). "China scraps construction of 85 planned coal power plants," The Independent. Available online at: http://www.independent.co.uk/news/world/asia/china-scraps-construction-85-coal-powerplants-renewable-energy-national-energy-administration-paris-a7530571.html, [accessed 16 November 2017].

25 Urgewald (2017). Methodology. Available online at: https://coalexit.org/methodology, [accessed 16 November 2017].

26 RAN, BankTrack, Sierra Club, Oil Change International (2017). Banking on Climate Change – Fossil Fuel Finance Report Card. Available online at: https://coalexit.org/methodology, [accessed 16 November 2017].

27 High Carbon Stock Approach (undated) .The High Carbon Stock Approach. Available online at: http://highcarbonstock.org/the-high-carbon-stock-approach/, [accessed 16 November 2017].

28 FSB TCFD (2016). Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures. Available online at: https://www.fsb-tcfd.org/wp-content/uploads/2016/12/17_0106_TCFD-AnnexLetter.pdf, [accessed 4 February 2017].

29 Climate Bonds Initiative (2016). Bonds and Climate Change The state of the market in 2017. Available online at: https://www.climatebonds.net/files/files/CBI-SotM_2017-Bonds&ClimateChange.pdf, [accessed 19 November 2017].

30 International Energy Agency (2015). Energy Technology Perspectives 2015 – Mobilising Innovation to Accelerate Climate Action. Available online at: https://www.iea.org/publications/freepublications/publication/EnergyTechnologyPerspectives2015ExecutiveSummaryEnglishversion.pdf, [accessed 17 November 2017].

Disclaimer

This publication and related materials are not intended to provide and do not constitute financial or investment advice. ShareAction makes no representation regarding the advisability or suitability of investing in any particular company, investment fund or other vehicle or of using the services of any particular entity, pension provider or other service provider for the provision of investment services. A decision to use the services of any pension provider, or other entity should not be made in reliance on any of the statements set forth in this publication. Whilst every effort has been made to ensure the information in this publication is correct, ShareAction and its agents cannot guarantee its accuracy and they shall not be liable for any claims or losses of any nature in connection with information contained in this document, including (but not limited to) lost profits or punitive or consequential damages or claims in negligence. ShareAction did not assess banks according to financial performance or metrics.

The research in this report was carried out between August and November 2017. During the period of analysis, the entities surveyed were informed of the answer options selected for them by email and were given the opportunity to comment on or ask questions on these to make additional disclosures or to provide clarification. Any notifications of changes, information or clarification not drawn to ShareAction's attention prior to the deadlines are not included in the report.

About ShareAction

ShareAction (Fairshare Educational Foundation) is a registered charity that promotes responsible investment practices by pension providers and fund managers. ShareAction believes that responsible investment helps to safeguard investments as well as securing environmental and social benefits.

shareaction.org info@shareaction.org
+44 (0)20 7403 7800

16 Crucifix Lane
London, United Kingdom
SE1 3JW

About Asset Owners Disclosure Project

The Asset Owners Disclosure Project is a ranking of global asset owners and asset managers that is managed by responsible investment charity ShareAction. The objective of the AODP is to protect retirement savings and other long-term investments from the risks posed by climate change by improving disclosure and industry best practice.

Contact

Toby Belsom
Head of Investor Research & Analytics
toby.belsom@shareaction.org

Sonia Hierzig
Project Manager – Banking
sonia.hierzig@shareaction.org

ShareAction»