Banking on a Low-Carbon Future:

Are the World's Largest Banks Stepping Up to the Risks & Opportunities of Climate Change?







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Methodology

Boston Common's outreach to 59 global banks in 2017 was supported by over 100 investors with almost \$2 trillion in assets under management (AUM).

This is the same group of banks we have engaged over the past four years, which includes some of the largest lenders to carbon-intensive sectors. This year, we worked closely with regional partners ShareAction (UK) whose European bank research supported our analysis, SHARE (Canada), and Australian Ethical Investment. We appreciate the support of a number of investors for actively engaging during this phase including Ethos (Switzerland), First Affirmative Financial Network (US), Hermes (UK), and the Interfaith Center on Corporate Responsibility (US).

Our analysis and engagement is aligned with the TCFD with a particular focus on i) Climate Strategy (Governance, Public Policy Engagement & Collaboration); ii) Risk Management (Assessment/Scenario Analysis, Carbon Intensive Sector Restrictions & Engagement); and iii) Opportunities (Disclosure, Targets & KPIs and Due Diligence/Third-Party Certification).

Over 80% of the banks – 47 out of 59 – responded to our letter or survey. Boston Common analyzed the remaining 12 based on publicly available information to gauge progress since our first outreach in September 2014.

Compared to our reports in 2015 and 2017, which looked primarily at bank climate policies, this report focuses on implementation and action. Given rising investor expectations, we have progressively raised the bar with metrics which demonstrate how a bank is embedding climate strategy at the group level focused on risks and opportunities, board-level oversight, and explicit targets and metrics linked to compensation.

We have also asked explicit questions on TCFD adoption and expanded our focus on progressive climate public policy engagement, industry collaboration and knowledge sharing to accelerate the pace of change globally. Finally, where possible, we have included some regional highlights.

Introduction

Banks are exposed to climate-related risks through their lending and financial service activities, including project finance, equity and debt underwriting. These risks are real and wide-ranging. A recent <u>study</u> estimates that the value at risk for investors from climate change, under a business-as-usual scenario, may be equivalent to a permanent reduction of up to 20% in portfolio value in just over a decade.

In contrast, the opportunity for banks is substantial. Some <u>\$12 trillion of investment</u> is needed by 2030 in renewable power generation alone to limit global warming to 2°C. <u>Green bond</u> <u>issuance is predicted to reach \$250 billion in 2018</u>, according to Moody's. Banks that finance the transition to a low carbon economy stand to benefit across all business functions.

Despite such immense opportunity, bank lending to and investment in carbon-intensive sectors continues at a significant rate. According to a report from environmental groups, between 2014 and September 2017, the global banking sector provided \$600 billion in financing for the top 120 coal plant developers.

Addressing the challenges of climate change requires urgent action, the mobilization of vast sums of private capital and a break from business as usual. This report, which is the latest in a series of analyses undertaken since 2014, examines the progress of 59 of the world's largest banks in making this critical business shift.

Our 2017 analysis, led by Boston Common Asset Management in collaboration with non-profit ShareAction and other partners, looked at three key areas of climate-related disclosure by banks:

Climate-relevant strategy and implementation (including public policy engagements);

Climate-related risk assessments and management; and

Opportunities for low-carbon banking products and services.

These areas align with the new standard framework for reporting by all companies and financial institutions set out by the G2Osupported Task Force on Climate-related Financial Disclosures (TCFD). The TCFD was chaired by financial leaders Mark Carney (Governor of the Bank of England and Chairman of the G2O's Financial Stability Board) and Michael Bloomberg, (the US businessman and former mayor of New York) and, although its recommendations are voluntary, we believe the TCFD recommendations may prove to be a game-changer that brings climate disclosure to the mainstream.

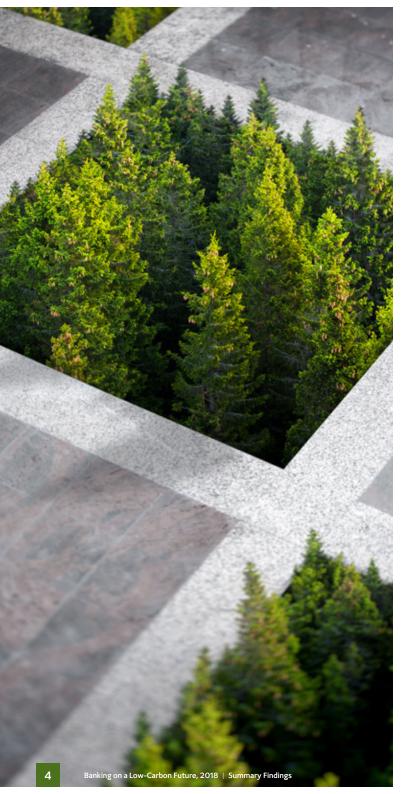
Our report finds notable progress in a number of areas from wider industry collaboration to higher levels of support for low-carbon products and services. More banks have also adopted policies that exclude funding to carbon-intensive sectors.

We have yet to see widespread adoption of comprehensive climate strategies covering all business functions and intentional commitments to reduce exposure to carbon-intensive sectors backed by explicit targets and timelines. We found limited evidence of banks taking systematic approaches to promoting low-carbon products and services. Furthermore, most of the banks engaged do not appear to be taking a progressive approach to public climate policy. This last component is an obstacle to creating necessary incentives and infrastructure required by the market in order to align with the Paris Agreement commitment.

"This report finds some progress in the banking sector's response to climate change but also urgent shortcomings that threaten to undermine efforts to align with the Paris Accord to keep global warming below 2°C."

Summary Findings

This year's analysis of the banking sector's response to climate change found both encouraging progress in all three categories, as well as urgent shortcomings that threaten to undermine efforts to align with the Paris Accord to keep global warming below 2°C. Among the 59 banks analyzed:



Climate Strategy

- Almost all (97%) are involved at some level in industry or multi-stakeholder groups to advance knowledge-sharing and collaboration around climate risks and solutions.
- ✓ 95% have adopted specific climate governance.
- × Only 58% have a group-wide climate strategy in place.
- Less than half (41%) ensure the trade associations or industry groups of which they are members adopt progressive climate policies in line with their own.

Risk Assessment

- 71% have adopted public exclusion policies linked to carbon-intensive practices.
- Only 53% engage carbon-intensive sector clients on low-carbon transition plans, and only two have asked for these clients to report on climate risk as recommended by the TCFD.
- Less than half (49%) are implementing risk assessments or 2°C scenario analysis, which means decision-making on portfolio shifts is not supported by robust data.

Opportunities

- ✓ 95% provide some disclosure on low-carbon products and services.
- Around one-third (34%) have not performed robust due diligence or employed third-party assessments to ensure green products meet the highest sustainability criteria.
- Less than half (46%) have set explicit objectives/targets to increase or promote low-carbon products and services.

"From the Paris treaty to the TCFD, the pace of the transition to a low carbon economy is speeding up and the message from investors to the banking sector is very clear. It is time to align."

Geeta Aiyer President, Boston Common Asset Management

TCFD: Bringing Climate Disclosure into the Mainstream

The G20 Task Force on Climate-related Financial Disclosures (TCFD) was mandated by the influential financial system monitoring body the Financial Stability Board, to develop climate-related disclosures that could promote more informed investment, credit (lending) and insurance underwriting decisions.

A key focus of the TCFD was to find a standardized way to monitor climate risk that includes "the resilience of an organization's strategy, taking into consideration different climate-related scenarios, including a 2° Celsius or lower scenario." It finalized its recommendations in June 2017, calling for companies and financial institutions to organize climate-risk disclosure around governance, strategy, risk management and targets, and to use scenario analysis to assess how climate risk may affect them in future.

Boston Common Asset Management has publicly supported the TCFD, as we believe it will help drive higher quality and more relevant climate change disclosures across all sectors. In particular, we have engaged 59 global banks over the last year through our Banking on a Low-Carbon Future initiative, encouraging them to adopt the TCFD recommendations and to engage their own high-carbon sector clients to do the same. We have also organized joint dialogues with investors and a dozen oil and gas companies together to raise their understanding of the TCFD-aligned climate risk disclosures needed by investors. As investors, we encourage the TCFD to expand its supplemental guidance to banks to move beyond a narrow definition of carbon-related assets (i.e. the power sector) to include carbon-intensive agriculture and other sectors contributing to deforestation.

This year's analysis found that just over half the banks analyzed (32) mentioned TCFD implementation at some level. Fourteen of the more advanced banks analyzed have joined the <u>UNEP FI pilot program</u> to develop analytical tools and indicators to strengthen assessment and disclosure of climate-related risks and opportunities. These include ANZ, Barclays, BBVA, BNP Paribas, Citigroup, DNB, Itaú Unibanco, National Australia Bank, Royal Bank of Canada, Santander, Société Générale, Standard Chartered, TD Bank, and UBS. The pilot program will first develop and detail climate change scenarios, and then translate those scenarios to sector and segment performance.

Prior to our initial outreach, Boston Common identified gaps between the TCFD guidance and current bank practices. Based on insights derived from this process, we created specific, customized "TCFD asks" for each bank. In some cases, we specifically advocated for them to join the UNEP FI working group. In others, we asked them to align their own assessment processes and disclosures with the TCFD. We also asked whether they have formally asked their carbon-intensive sector clients to adopt the TCFD recommendations. Although we found this last practice to be very limited (only two banks responded that they had asked clients to adopt the TCFD recommendations), asking this question was important for signalling emerging investor expectations.

We received a spectrum of responses related to TCFD implementation. In total, 32 out of the 59 banks (54%) referred to TCFD and provided some level of support for the initiative in their responses. Some banks, such as Westpac, have committed to using the framework in its 2017 reporting. Others indicated a more tiered approach, setting out a two-, three- or even five-year timeline for full adoption.

Summary in Numbers

CLIMATE STRATEGY



of banks have some form of Climate Governance and Oversight in place

O RISK MANAGEMENT

Less than 50%

have implemented 2 degrees scenario analysis or other Risk Assessments

OPPORTUNITY

Only 46%

have explicit objectives and targets for low carbon products and services



banks engaged



banks responded

106

investors with almost \$2 trillion in AUM



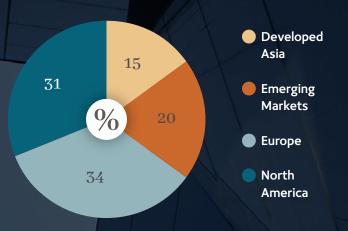
More than half of banks support TCFD at some level

\$12 trillion

investment needed in clean power by 2030

6

BREAKDOWN OF BANKS ENGAGED BY REGION



ENGAGEMENT METRICS



Overall Bank Performance

CLIMATE STRATEGY

RISK MANAGEMENT

OPPORTUNITIES



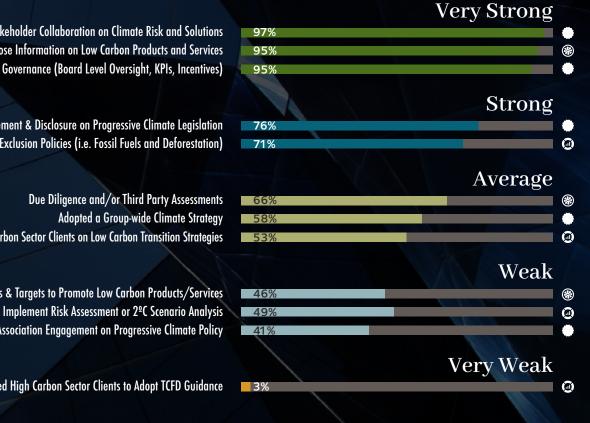
Industry & Multi-Stakeholder Collaboration on Climate Risk and Solutions **Disclose Information on Low Carbon Products and Services**

Public Policy Engagement & Disclosure on Progressive Climate Legislation Implement Exclusion Policies (i.e. Fossil Fuels and Deforestation)

Due Diligence and/or Third Party Assessments Adopted a Group-wide Climate Strategy Engagement with High-Carbon Sector Clients on Low Carbon Transition Strategies

> **Objectives & Targets to Promote Low Carbon Products/Services** Implement Risk Assessment or 2ºC Scenario Analysis Trade Association Engagement on Progressive Climate Policy

Asked High Carbon Sector Clients to Adopt TCFD Guidance



7

Key Findings

The 59 banks analyzed were assessed in terms of their performance in three areas: Climate Strategy, covering strategy, governance, public policy engagement, and collaboration; Risk Management, including risk assessment, exclusion policies, and high-carbon engagement; and Opportunities, assessing their low-carbon product offering, targets, and green product due diligence. The following pages present the findings of our analysis, and examples of leading practice.

i. Climate Strategy



Governance (Board Level Oversight, KPIs, Incentives) %



Climate Legislation %



Over the last three years, we have seen improvements in disclosure on climate governance and oversight. This is unsurprising, given that 50 out of the 59 banks surveyed have disclosed on this issue through CDP (formerly the Carbon Disclosure Project) for many years. This year, CDP's climate survey will be 100% aligned with the TCFD guidance for non-financial sectors.

The quality of bank disclosure and implementation varies widely, with European and North American banks demonstrating better performance than their Asian counterparts (with the exception of Australian banks). We are seeing progress: 95% of banks have adopted specific climate governance measures, for example. However, 42% have yet to adopt a climate strategy.

European banks are clearly leading on climate strategy, with North American banks somewhat behind and on par with those in developed Asia. One exception to this regional trend is **Itaú Unibanco** in Brazil, which worked with the International Finance Corporation to raise \$400 million to finance climate mitigation projects, including renewable energy, water efficiency, and energy efficiency. This is the largest–ever financing raised by a Latin American bank specifically for such projects.

In general, however, emerging market banks need to catch up to their developed market peers. This is a clear area for investor engagement.

Public Policy Engagement and Collaboration

Banks in general, and European banks especially, have demonstrated a willingness to lobby governments for progressive climate policies. What is surprising is the level of engagement we found with emerging market banks, such as those in China and Brazil. There has been significant focus by these banks on ensuring the right regulatory incentives and market environment to promote the low-carbon transition.

Within developed Asia, Australian banks outperform their Japanese peers on policy and industry engagement. This should be of concern to investors, given the Japanese government's continued support for coal.

During this cycle, we saw banks participate in the public TCFD consultation through their trade associations – even in Japan – and endorse G20 public policy statements supporting the Paris Agreement. A number of the US banks – Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, and Morgan Stanley – joined 30 other CEOs in signing an open letter in the Wall Street Journal encouraging the Trump Administration to stay in the Paris Climate Accord.

Trade Association or Industry Association Engagement on Progressive Climate Policies %



Industry & Multi-Stakeholder Collaboration on Climate Risk and Solutions %



We had an almost 100% response rate from banks on our question regarding industry and multi-stakeholder collaboration. These included newer initiatives such as the UNEP FI TCFD pilot project, the Green Bond Principles, and the long-standing CDP. Some banks supported the TCFD process through industry groups such as the Japanese Bankers Association and the Swedish Bankers Association. Other banks engaged policymakers as members of the Institutional Investors group on Climate Change, to promote robust and consistent reporting standards for energy-intensive sectors and financial institutions aligned with the TCFD's recommendations.

All the French banks surveyed demonstrated strong support for the TCFD, reflecting the influence of new mandatory financial disclosure of climate risks. Although only one US bank, **Citigroup**, is part of the UNEP FI pilot project, others, such as **JPMorgan Chase**, participated in the TCFD Advisory Committee; it is reviewing TCFD implementation. For more examples, see the Industry Initiative Chart on page 18.

Where we saw banks fall short was in encouraging trade associations and industry groups to advocate for progressive climate policies at least in line with their own policies. By not actively engaging with their own trade associations, they could be undermining prospects for business opportunities linked to progressive market regulations and subsidies to support the low-carbon transition.

"For companies and investors the need for comprehensive and comparable climate disclosure has reached a tipping point, and that will have a profound impact on the banking sector in the years to come. CDP has integrated the TCFD framework into its disclosure platform and believes all banks should put in place a plan to align their climate risk reporting with this framework"

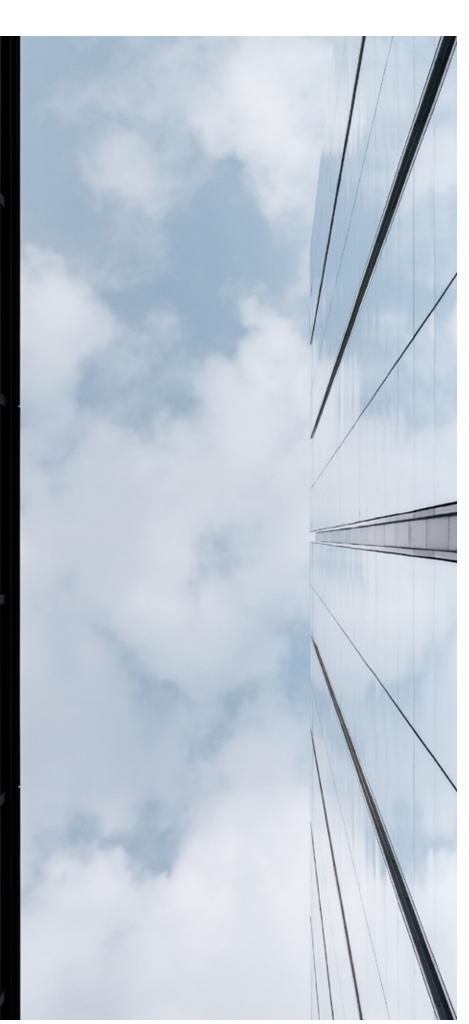
Jane Stevensen Task Force Engagement Director, CDP

Leading Practices

Barclays has taken notable steps to advance the adoption of disclosure in line with the TCFD. As a first step, the bank has performed a gap analysis to compare its disclosures against the TCFDrecommendations and peer banks.

Standard Chartered has established a board-level committee involved in the development of its policies, targets and approach to climate change.

CIBC has set up an Environmental Risk Management group charged with implementing the bank's climate strategy and monitoring the potential risks and opportunities associated with climate change. In 2015, this group reviewed and advised on 827 transactions.



ii. Risk Management

Implement Risk Assessment or 2°C Scenario Analysis %



Implement Exclusion Policies (i.e. Fossil Fuels and Deforestation) %



High Carbon Sector Client Engagement on 2°C Scenario or Low Carbon Transition Strategies %



Asked High Carbon Sector Clients to Adopt TCFD Guidance %



We saw a wide regional variation in terms of banks undertaking climate-risk scenario assessments. In total 80% of the European banks – led by the French – conduct scenario analysis or risk assessments, compared with an average of 33% across the other three regions. This is a clear area for investor engagement and highlights the need for faster uptake of the TCFD's recommendations.

Explicit criteria for excluding specific high-carbon sectors (such as tar sands) are becoming an industry norm, although regional performance varies. European banks demonstrate a higher level of specificity and coverage compared to those in other regions, although there were positive surprises from some emerging markets banks. This is in part due to the adoption of green credit policies by Chinese banks under the 2013 Common Commitment of Chinese Banking on Green Credit and exclusion criteria related to sectors tied to tropical deforestation and destruction of peat in Brazil and Indonesia.

In the last three years, we have seen the widespread adoption of policies restricting business with coal companies, primarily by Australian, European, and US banks. At least 23 out of the 59 banks have some type of coal restriction, ranging from **PNC Financial's** exclusion of companies involved in mountain-top removal, to **HSBC's** commitment to only finance the most efficient coal-fired power plants, to the 'exceptions only' in developed economies policy followed by **Barclays.**

What is not apparent, however, is widespread adoption of de facto prohibition for all coal funding, such as the commitment from **Natixis** to end "financing for coal mining and coal power projects worldwide." **ING's** announcement to cease financing to clients in the utilities sector that are over 5% reliant on coal-fired power by 2025 is ambitious and noteworthy. ING's policy states that only new clients with 10% or less coal reliance will be supported, and even then they must have a strategy in place to reduce their coal use to close to zero by 2025.

"Bank financing of controversial pipeline projects such as the Dakota Access Pipeline, Kinder Morgan's TransMountain, TransCanada's Keystone XL and others have seen a lack of proper due diligence regarding climate risk and Indigenous Peoples rights make front page news. As scrutiny increases, investors and other stakeholders want to know not only about a project's financial feasibility but whether banks have considered the potential for these to become stranded assets, or harm a bank's reputation with the loss of its client's social license to operate."

Steven Heim Director of ESG Research, Boston Common Asset Management

Wider Climate Risk

In this report, we also looked beyond fossil fuels at sector-specific guidance that addresses deforestation and protected regions such as the Arctic. In deforestation, best practice focuses on "NDPE" (No deforestation, no peat, no exploitation) policies, with more than 365 companies globally adopting zero-deforestation or NDPE supply chain commitments.

In finance, **HSBC's** agricultural commodities policy is one of the most comprehensive, but its NDPE policy only focuses on palm oil. While such policies are gaining traction with other banks, such as **BNP Paribas** and **Standard Chartered**, lack of adoption and disclosure of exclusion criteria by Asian banks that align with NDPE represents a key area for investor engagement. We need to see banks adopt comprehensive NDPE policies, which also protect investment in 'High Carbon Stock' forests, and which cover not only palm oil but all forest-risk commodities linked to deforestation.

TD Bank also offers an example of a wider approach that goes beyond fossil fuels. Its financing exclusions include activities within World Heritage sites, activities that would result in the degradation of protected critical natural habitats, purchase of timber from illegal logging, and mountaintop removal coal mining.

We are observing more banks engage their carbon-intensive sector clients on climate risk and transition strategies, although this is more common in Europe than in other regions. With the TCFD's sector guidance, banks now have the opportunity to step up their engagement with corporate clients to reduce climate risk and redeploy lending to those sectors and companies that are better positioned for a low-carbon future.

One approach we see being taken by some banks is to align their client questionnaires and environmental and social due diligence with the TCFD recommendations. This is something we would encourage all banks to do, especially for carbon-intensive sectors such as Energy, Utilities, Transport, Materials, and Agriculture.



Leading Practices

Citigroup has conducted environmental stress testing and climate scenario analysis, and is looking at ways to potentially incorporate 2°C scenarios into future stress tests. The bank also recently conducted qualitative analysis of global utilities and their differing strategies for transitioning to a 2°C world. The bank views this work as an opportunity for client engagement.

BNP Paribas has leading exclusion policies. For example, it will no longer do business with companies whose principal activity is the exploration, production, distribution, marketing, or trading of oil and gas from shale or oil from tar sands. The bank is also ceasing project finance for oil and gas exploration or production in the Arctic and has aligned its palm oil sector financing with NDPE.

Westpac has conducted TCFD-aligned climate change scenario analysis to understand long-term impacts on the Australian economy and the bank itself. Three scenarios were considered, representing plausible pathways based on different approaches to global cooperation and timing of action on climate change. This analysis was conducted by external experts and was overseen by the Westpac Steering Committee. Results were reported in 2016 and have informed the bank's updated Position Statement.

Industrial and Commercial Bank of China (ICBC) has conducted environmental stress testing, releasing its initial findings in 2016, making it the first Chinese financial institution to implement a "bottom-up" review of climate risk. Furthermore, ICBC collaborated with Trucost and China's Green Finance Committee to issue a report on the topic, which includes a sensitivity analysis tool for investors to assess the potential internalized costs and environmental risks of their investments in China's aluminum sector.

iii. Opportunities

Disclose Information on Low Carbon Products and Services %



Set Objectives and Targets to Increase and Promote Promote Low Carbon Products/Services %



Due Diligence and/or Third Party Assessments %



Leading banks see enormous opportunities from the provision of financial products and services to the low-carbon transition, whether helping clean technology companies raise equity or debt, or in financing the trillions of dollars of green infrastructure that will be needed to meet the goals of the Paris Agreement.

Overall, 95% of the banks participate in and report on the provision of low-carbon products and services, with an increasing focus on green product due diligence, and broad adoption of the Green Bond Principles.

There are many examples of banks seizing low-carbon financing opportunities. A couple of banks doing this include **UniCredit** and **Crédit Agricole**, which both offer low-cost retail loans to promote home energy efficiency. The latter offered more than more than 100,000 interest-free "eco-loans" to retail clients to finance home energy efficiency improvements between 2009 and 2016. In 2017, Barclays launched an inaugural green bond framework to detail how proceeds of an issuance would be assigned to residential mortgages on energy efficient properties.

In Japan, we have seen banks start to enter the green/SRI bond space, with **MUFG** issuing its first green bond in 2016 and **Nomura** involved in underwriting a variety of SRI bonds worth ¥46 billion in 2016-2017.

In terms of the third-party assessment and certification of low-carbon products, we saw some of the more advanced players, including **Barclays**, **ING**, **SEB**, and **TD Bank** focus on this. However, while almost every European bank undertook some sort of internal or external due diligence for their green products, only half of North American banks did – representing an area for investor engagement. In total, 34% (19) of the 59 banks have not adopted robust due diligence or used third-party assessments to ensure that green products meet the highest sustainability criteria.

Furthermore, less than half the banks (46%) analyzed have set explicit targets and objectives to support a strategic approach to low-carbon products and services. The quality of disclosure varied quite significantly by region, with nearly two-thirds (65%) of European banks doing so, compared to just 17% of their Emerging Markets peers. Some banks, such as **Bank of America, Citigroup, JPMorgan Chase** and **Wells Fargo**, have set specific targets in the hundreds of billions of dollars, while others simply disclose more general support for low-carbon products and services.

In order to better understand which banks are best positioned to seize climate-related opportunities, investors would like to see clear targets and commitments, with a robust strategy backing their implementation. **BNP Paribas**, for example, has committed to double green investments by 2020, provide \$15 billion in financing for renewable energy projects by 2020, and allocate \$100 million in start-up finance for low-carbon technologies. We do not see enough banks setting such clear objectives and targets for promoting sectors supporting the low-carbon transition.

Leading Practices

TD Bank recently issued a \$1 billion (USD) green bond to support the transition to a low-carbon economy, which has received external verification from DNV GL for alignment with the Green Bond Principles. TD has committed to obtaining secondparty opinions for each future green bond issuance, and will obtain assurance of the allocation of proceeds on an annual basis. These statements will be made publicly available. TD has also announced a C\$100 billion target for low-carbon lending, financing, asset management, and other programs by 2030.

Goldman Sachs has a 2025 target of \$150 billion in clean energy financing and investing, which is one of the largest commitments to date. It also released an innovative Clean Energy Impact Report in 2016, which assessed the impacts of the bank's initial \$41 billion in green financings and investments.

SEB follows the Green Bond Principles and has made third-party verification part of its standard process when advising on green bonds. In 2016, SEB obtained an independent assessment from the Center for International Climate and Environmental Research – Oslo (CICERO) on its overall Green Bond Framework.









Regional Spotlights



Spotlight on Canada

As a group, Canadian banks have made some progress in addressing climate-related risks and opportunities, but there remain key areas where further steps need to be taken to accelerate the alignment of bank policies and practices with the low-carbon transition.

All six Canadian banks responded to the survey, illustrating that climate change is a priority issue and that the banks recognize the importance of communicating to investors about their approaches.

While none have yet conducted scenario analyses for climate risk, the Royal Bank of Canada (RBC) and TD Bank are participating in the UNEP FI pilot study on the implementation of the TCFD recommendations. Three other Canadian banks have said they are watching the pilot process closely and will consider implementing its recommendations.

In addition to improving their climate risk management, Canadian banks have an opportunity to strengthen disclosure of how their business strategies align with the goals set out in the Paris Agreement, and to establish and disclose targets to increase exposure to low-carbon and climate-resilient sectors. RBC and TD have taken important steps in this regard, with RBC releasing a <u>Climate Change</u> <u>Position Statement</u> that outlines nine commitments for how it will contribute to the transition to a low-carbon economy.

For its part, TD announced a <u>financing target of C\$100 billion</u> in low-carbon lending, financing, asset management, and other initiatives by 2030. TD is the first Canadian bank to disclose this kind of target and we hope that more will follow its lead in 2018.

Shannon Rohan Director of Responsible Investment, SHARE

Spotlight on Europe

In December 2017, ShareAction published a survey of the European banking sector, ranking the 15 largest banks based on how they manage climate-related risks and opportunities. Encouragingly, the findings show that all surveyed banks have begun considering climate-related issues and have adopted policies, introduced processes and launched a number of green finance products as a result. There was a 100% response rate to the survey, which shows that European banks are becoming increasingly aware of the issue.

One key finding of this research is that the progress of French banks on climate change is relatively advanced compared to their European peers. This finding, which appears related to the introduction of legislative and regulatory measures such a France's Article 173 disclosure requirement, has important implications for policymakers and regulators in other countries.

Across the European banking sector, there has been widespread support for the TCFD recommendations, and the expectation is that a large proportion of the surveyed banks will begin implementing them in their upcoming annual reports. This is an encouraging development, but it will be crucial that banks' shareholders monitor these disclosures and engage in follow-up discussions as necessary.

However, it is important to note that, despite progress in some areas, European banks are overall still doing far too little in terms of ensuring their sector and client engagement policies are aligned with the goals of the Paris Agreement. They have not yet done enough to reduce exposure to fossil fuels, and there is little evidence that banks are holding their clients to account through any kind of measurable objectives or timelines. This leaves many European banks with significant exposures to climate-related liabilities and risks.

Sonia Hierzig Project Manager, ShareAction

Spotlight on Australia

Following Paris, all four major Australian banks said they would support the transition needed to limit warming to 2°C. During 2017, the banks offered a range of additional disclosures and commitments to help explain how they plan to do so.

Potential new coal lending was in focus given the heavily politicised nature of the energy policy debate in Australia. In June, Westpac ruled out any lending to new thermal coal projects unless in existing coal basins and in the top 15% of coal quality by energy content. In November, Commonwealth Bank of Australia said it expected its funding of coal to continue to decline. National Australia Bank (NAB) finished the year with an announcement that it will no longer finance any new thermal coal mining projects. The 2017 financial year reporting of all four banks showed significant reductions in their exposure to coal mining.

The Australian banks also announced new or increased low-carbon lending targets, although direct comparison is challenging because of the different low-carbon definitions and time frames used.

Westpac and ANZ have started using the TCFD's disclosure framework in their climate reporting. We expect the depth and quality of all four banks' climate reporting to continue to improve, as they and their clients work through the implications of the TCFD recommendations. ANZ and NAB are participating in UNEP FI's TCFD pilot project. Westpac's 2017 Climate Action Plan was underpinned by its 2016 climate scenario analysis work. ANZ completed its testing of thermal coal customers against the International Energy Agency's 'New Policies' and '450' scenarios. They reported finding "varying degrees of resilience for our thermal coal customers in managing the transitional risks."

Stuart Palmer Head of Ethics Research, Australia Ethical Investments

Chart: Industry Initiatives

Industry Initiative	Focus	Bank Participation
CARBON PRICING LEADERSHIP COALITION	Organized by the World Bank and launched at COP21 this group aims to advance the implementation of carbon pricing worldwide.	BNP Paribas, Canadian Imperial Bank of Commerce (CIBC), HSBC, National Australia Bank (NAB), Nordea, Royal Bank of Canada (RBC), Scotiabank, TD Bank.
GREEN BOND PRINCIPLES	Voluntary guidelines focused on transparency and disclosure to support the development of the Green Bond market.	Agricultural Bank of China, Australia and New Zealand Banking Group, Axis Bank, Bank of America Merrill Lynch, Barclays, BBVA, Bank of China, Bank of Montreal, BNP Paribas, CIBC, Citi, Credit Agricole, Credit Suisse, Deutsche Bank, DNB, Goldman Sachs, HSBC, ING, JP Morgan Chase, Lloyds, Mitsubishi UFJ, Mizuho, Morgan Stanley, MUFG, National Australia Bank, Natixis, Nomura, Nordea, PNC, RBC, Royal Bank of Scotland, Santander, Scotiabank, Skandinaviska Enskilda Banken (SEB), Societe Generale, Standard Chartered, TD Bank, UBS, UniCredit, Wells Fargo, Westpac.
MONTRÉAL CARBON PLEDGE	Financial institutions including banks commit to measuring and disclosing the carbon footprint of its portfolios on an annual basis.	BNP Paribas Investment Partners, HSBC Global Asset Management, Nordea, SEB Investment Management, DNB Asset Management.
PARIS PLEDGE FOR ACTION	Banks communicate their support of the Paris Agreement to limit global temperature rise to less than two degrees Celsius.	Barclays, BNP Paribas, Deutsche Bank, HSBC, ING, Nordea, RBS, Skandinaviska Enskilda Banken (SEB), Standard Chartered, Westpac.
PORTFOLIO CARBON INITIATIVE, TECHNICAL WORKING GROUP	A joint program of the World Resources Institute (WRI), the UNEP Finance Initiative (UNEP FI), and the 2 Degrees Investing Initiative to develop a methodology for reporting on financed emissions.	Bank of America Merrill Lynch, Barclays, JPMorgan Chase, Mizuho, National Australia Bank, RBS, UBS, Westpac.
POSITIVE IMPACT INITIATIVE	This initiative convened by UNEP FI and the Banking Commission calls for the financial sector to adopt a new financing paradigm that "verifiably produces a positive impact on the economy, society or the environment".	BNP Paribas, ING, Itau Unibanco, National Australia Bank (NAB), Skandinaviska Enskilda Banken (SEB), Societe Generale, Standard Bank, Westpac.
UNEP FI'S TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD), PILOT PROGRAM	This group of 16 banks will develop scenarios, models and metrics to enable scenario-based, forward-looking assessment and disclosure of climate- related risks and opportunities as part of the pilot programme.	ANZ, Barclays, BBVA, BNP Paribas, Citi, DNB, Itaú, National Australia Bank, Royal Bank of Canada, Santander, Société Générale, Standard Chartered, TD Bank Group and UBS.

Conclusion

Limiting global warming to less than 2°C is not just an environmental issue. It is in the financial interests of banks and their shareholders. Achieving the 2°C goal requires a major shift in the way banks operate. In this report, we have identified some leading practices, highlighted key gaps in current bank performance, and shared areas for specific investor engagement.

Below, we set out our Call to Action: the disclosures, policies, strategies, product development and engagement that we expect to see banks undertake as their contribution to the low-carbon transition. We are encouraged by progress within the banking sector in recent years, but progress can be accelerated if banks heed the calls laid out below.

We will be using the results of our analysis to support collaborative engagement in 2018 with all the banks surveyed and to support faster adoption and uptake of TCFD. We ask you to join us in calling on the banking sector to drive this critical business shift and reallocate capital flows to support the path to a climate-secure future.

2018 Call to Action

1. Risk Management

TCFD provides an agreed global framework for financial institutions to report their climate-related risks. Banks must use it. Investors expect each bank's climate disclosure to include at least:

- i) An overall assessment of their climate risk;
- ii) A list of any climate-related exclusions e.g. of fossil fuels, forest-risk commodities or intensive agriculture; and
- iii) A description of any engagements with high-carbon sector clients to encourage them to adopt strategies aligned with the low-carbon transition.

2. Strategy

Banks should publish a company-wide, forward-looking strategy aligned with the Paris Agreement to keep global warming below 2°C. Each bank should also be transparent about the governance and operational structures in place, from Board-level oversight to bonus payments, to ensure the strategy is implemented.

3. Low-Carbon Products and Service

Investors expect banks to systematically identify and develop low-carbon products or services for all business functions. Each bank should also have clear objectives and quantitative targets to increase and promote their exposure to low-carbon and climateresilient sectors. Finally, banks should conduct robust due diligence (including third-party assessments), to ensure that green products and services adhere to best practice.

4. Collaboration with Policymakers and others

Climate change is a complex issue and banks must be part of a co-ordinated global effort to meet the challenge. Banks should therefore disclose public policy positions related to climate change and report on any individual or collaborative engagement with policymakers on the issue. Investors expect each bank to also disclose its participation in any climate initiatives with peers or other actors, and membership of related trade associations, including whether the bank is influencing those associations to take progressive positions on climate legislation.



Appendix 1: Bank Survey Questions

Section I:

Risk Assessment & Management

- 1. Has the bank conducted any risk assessments or 2°C scenario analysis as outlined by the TCFD or committed to do so publicly?
- 2. Does the bank have any exclusion policies related to:
 - a) Phasing out exposure to companies dependent on extreme fossil fuels (coal, tar sands, coal-fired power plants)? Are these publicly available?
 - b) Companies that facilitate other destructive high-emission activities, such as tropical deforestation or destruction of peat.
- 3. Is the bank engaging its corporate clients, particularly those in high-carbon sectors (including oil and gas, utilities, auto-makers, land use etc.) to align with a less than 2°C economy and adopting low-carbon transition strategies? If yes, how?
- 4. Has the bank specifically asked its high-carbon sector clients to adopt TCFD guidance?

Section II:

Strategy & Implementation

- 1. Has the bank adopted a long-term, company-wide climate strategy, including an outline on how this is aligned with the goals of the Paris Agreement? Has the company committed to providing investors with regular progress updates?
- 2. Does the bank provide information on its governance and operational structures, including how the strategy is implemented internally (for example, board-level oversight, employee engagement or training, and KPIs and incentives)?

Section III:

Low-carbon Products & Services

- 1. Does the bank disclose information on its low-carbon products and services, including how the bank is developing a systematic approach to identifying, developing and integrating low-carbon opportunities across all business functions?
- 2. Does the bank have objectives and targets outlining the extent to which it plans to increase and promote exposure to low-carbon and climate-resilient sectors, as well as a rationale for those targets?
- 3. Does that bank conduct due diligence to ensure that green products and services adhere to best practice sustainability criteria, such as the Green Bond Principles and third-party assessments?

Section IV:

Policy Engagement & Collaboration

- 1. Does the bank publicly disclose to what extent it engages with policymakers on legislative and regulatory changes supportive of the low-carbon transition?
- 2. Does the bank ensure that industry groups and trade associations of which they are members take progressive positions on climate legislation?
- 3. Is the bank participating in industry initiatives and knowledge sharing on climate risks and solutions with other actors? If so, which?

Bank	Country
Agricultural Bank of China Ltd.*	China
Australia and New Zealand Banking Group (ANZ)	Australia
Axis Bank Ltd.*	India
Banco Bilbao Vizcaya Argentaria SA (BBVA)	Spain
Banco Santander SA	Spain
Bank of America Merrill Lynch	United States
Bank of China*	China
Bank of Communications Co.*	China
Bank of Montreal (BMO)	Canada
Barclays Plc.	United Kingdom
BNP Paribas SA	France
Canadian Imperial Bank of Commerce (CIBC)	Canada
China CITIC Bank Corporation (CCBC)*	China
China Construction Bank (CCB)	China
China Industrial Bank Co.*	China
China Merchants Bank Co. (CMB)*	China
Citigroup Inc.	United States
Commonwealth Bank of Australia (CBA)	Australia
Crédit Agricole CIB	France
Credit Suisse Group AG	Switzerland
Deutsche Bank AG	Germany
DNB ASA	Norway
Fifth Third Bancorp	United States
HSBC Holdings Plc.	United Kingdom
Industrial and Commercial	-1.
Bank of China Limited (ICBC)	China
ING Groep NV	Netherlands
Intesa Sanpaolo SpA	Italy
Itaú Unibanco Holding SA	Brazil
JPMorgan Chase & Co.	United States
Legg Mason Inc.*	United States

Bank	Country
Lloyds Banking Group Plc.	United Kingdom
Mitsubishi UFJ Financial Group, Inc.	Japan
Mizuho Financial Group, Inc.	Japan
Morgan Stanley	United States
National Australia Bank	Australia
National Bank of Canada	Canada
Natixis SA*	France
Nomura Holdings, Inc.*	Japan
Nordea Bank AB	Sweden
Northern Trust Corporation*	United States
ORIX Corporation	Japan
PT Bank Rakyat Indonesia Tbk (BRI)	Indonesia
Royal Bank of Canada (RBC)	Canada
Royal Bank of Scotland Group Plc. (RBS)	United Kingdom
Skandinaviska Enskilda Banken (SEB)	Sweden
Société Générale SA	France
Standard Chartered Plc.	United Kingdom
State Bank of India (SBI)*	India
Sumitomo Mitsui Financial Group, Inc.	Japan
SunTrust Banks, Inc.	United States
The Bank of Nova Scotia (Scotiabank)	Canada
The Goldman Sachs Group, Inc.	United States
The PNC Financial Services Group, Inc.	United States
Toronto-Dominion Bank (TD)	Canada
UBS AG	Switzerland
UniCredit SpA	Italy
US Bank	United States
Wells Fargo & Co.	United States
Westpac Banking Corporation	Australia

*12 banks analyzed using publicly available information only

Appendix 3: Investor Signatories

3Sisters Sustainable Management, LLC 444S Foundation Addenda Capital Inc. Adrian Dominican Sisters, Portfolio Advisory Board Aegon Asset Management AGF Investments* Andover Newton Theological School As You Sow Australian Ethical Investment Aviva Investors Bank J. Safra Sarasin Bâtirente Caisse de Prévoyance des Interprètes de Conférence (CPIC) Candriam Investors Group CAP Prévoyance Christopher Reynolds Foundation CIEPP – Caisse Inter-Entreprises de Prévoyance Professionnelle Clean Yield Asset Management Cometa Pension Funds Committee on Mission Responsibility Through Investment of the Presbyterian Church U.S.A. Consumer Health Foundation Dana Investment Advisors Deaconess Community of the ELCA Declaration of Trust of William Gee Dignity Health Domini Impact Investments LLC Ecofi Investissements EdenTree Investment Management Ltd. Edward W. Hazen Foundation Elo Mutual Pension Insurance Company Environment & Sustainability strategy, Jupiter AM **Environment Agency Pension Fund** Etablissement Cantonal d'Assurance (ECA VAUD) Ethos Foundation, Switzerland Everence and the Praxis Mutual Funds First Affirmative Financial Network* Folksam

Friends Fiduciary Corporation Green Century Capital Management* Hermes Investment Management Hexavest* Interfaith Center on Corporate Responsibility JLens Investor Network Manaaki Foundation Maryknoll Sisters Mennonite Education Agency Mercy Investment Services Midwest Coalition for Responsible Investment Missionary Oblates - OIP Trust Natural Investments NEST Nest Sammelstiftung NN Investment Partners Northwest Coalition for Responsible Investment Nova Scotia Pension Services Corporation OceanRock Investments Inc. Öhman Fonder Pax World Funds Pensionskasse Caritas Pensionskasse der Stadt Winterthur Pensionskasse Unia Polden-Puckham Charitable Foundation* Prévoyance Santé Valais (PRESV) Prévoyance.ne **Progressive Investment Management** Prosperita Stiftung für die berufliche Vorsorge Region VI Coalition for Responsible Investment Reynders, McVeigh Capital Management, LLC Royal London Asset Management School Sisters of Notre Dame Cooperative Investment Fund Seattle City Employees' Retirement System Seventh Generation Interfaith Inc. Shareholder Association for Research and Education ShareAction Sierra Club Foundation

Sister of the Presentation of the BVM, Aberdeen SD Sisters of Charity of Saint Elizabeth Sisters of Providence -Mother Joseph Province Sisters of Saint Joseph of Chestnut Hill, Philadelphia, PA Sisters of St. Dominic/Racine Dominicans Sisters of St. Joseph of Boston Sisters of the Humility of Mary* Sisters of the Precious Blood Solaris Investment Management Stiftung Abendrot Storebrand Asset Management Swift Foundation The Barrow Cadbury Trust The Church of Sweden The Joseph Rowntree Charitable Trust The LankellyChase Foundation The Park Foundation Thomson, Horstmann and Bryant, Inc. Threshold Foundation Trillium Asset Management Trilogy Global Advisors, LP Unitarian Universalist Association United Church of Canada UU Congregation at Shelter Rock Veris Wealth Partners Walden Asset Management Wallace Global Fund Wetherby Asset Management Wilburforce Foundation Zevin Asset Management

Note that some investor signatories have supported Boston Common Asset Management's program on engagement with global banks over a number of years whereas others have supported a letter to the CEOs of the leading banks in September 2017. This letter and the list of investors can be found at <u>https://shareaction.org/</u> <u>banking-on-a-low-carbon-future/</u>

*Signed a subset of the bank letters

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Appendix 4: Regional Breakdown

			CLIMATE STRA	TEGY		
	# Banks	Adopted a Group-wide Climate Strategy	Governance (Board-Level Oversight, KPIs, Incentives)	Public Policy Engagement & Disclosure on Progressive Climate Legislation	Trade Association or Industry Association Engagement on Progressive Climate Policies	Industry & Multi- Stakeholder Collaboration on Climate Risk and Solutions
Developed Asia	9	56%	89%	67%	44%	100%
Emerging Markets	12	25%	92%	58%	33%	92%
Europe	20	80%	100%	100%	50%	100%
North America	18	56%	94%	67%	33%	94%
Total	59	58 %	95%	76%	41%	41 %

RISK MANAGEMENT				
	Implement Risk Assessment or 2°C Scenario Analysis	Implement Exclusion Policies (i.e. Fossil Fuels and Deforestation)	High-Carbon Sector Client Engagement on 2°C Scenario/ Low-Carbon Transition Strategies	Asked High-Carbon Sector Clients to Adopt TCFD Guidance
Developed Asia	33%	33%	33%	0%
Emerging Markets	17%	83%	8%	0%
Europe	80%	90%	85%	10%
North America	44%	61%	56%	0%
Total	49 %	71%	53%	3%

		OPPORTUNITIES	
	Low-Carbon Products and Services Disclosure	Set Objectives and Targets to Increase and Promote	Due Diligence and/or Third Party Assessments (i.e. Green Bond Principles)
Developed Asia	100%	44%	67%
Emerging Markets	92%	17%	42%
Europe	100%	65%	95%
North America	89%	44%	50%
Total	95%	46%	66%

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