

Banking on a Low-Carbon Future: Finance in a Time of Climate Crisis

Impact Report 2019



Contents

Methodology 3
Introduction 4
By the Numbers5
Summary Findings 6
Bank Performance 8
Progress Chart9
TCFD Alignment
Main findings
Climate Strategy 12
Risk Management 16
Opportunities 20
Conclusion 23
Call to Action24
Appendix
Industry Initiatives25
Survey Questions 26
Ranks Fngaged

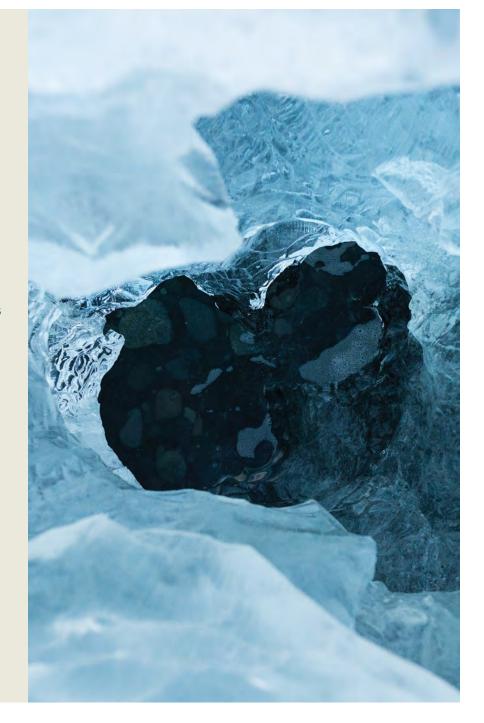
Banking on a Low-Carbon Future

November 2019

Author: Lauren Compere, Managing Director, Boston Common Asset Management

Acknowledgements

We wish to acknowledge the group of investors and organizations that have supported this journey for the past five years with special acknowledgment for our regional partners for this latest report: Stuart Palmer (Australian Ethical Investment), Laura Gosset (SHARE) and Yola Biedermann and Vincent Kaufman (Ethos). A special thanks to Christie Clune Persichetti, our shareholder engagement intern, who has tirelessly supported this project for the last eight months. Finally, thank you to the Boston Common team members who have dedicated their time, expertise, and passion in the fight for a low-carbon future and our own alignment with the Paris Agreement.



Methodology

This report is Boston Common's fifth annual study of how global banks are managing climate risks and opportunities. It builds on <u>last year's report</u>, which shifted emphasis from bank policies to implementation and action.

The sample of 58 banks, originally selected as the biggest financers to carbon-intensive sectors, is the same group we have engaged over the past five years. Seventy percent of the banks -41 out of 58 - responded to our letter or survey, while we analyzed the remaining 17 based on publicly available information.

Our core metrics from previous years cover:

- 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).

What's new?

This year we expanded our survey from 10 to 20 metrics. One question evolved to explicitly focus on the governance aspects of the Taskforce on Climate-related Financial Disclosures, and nine new metrics were added.

Seven of these new metrics concerned risk assessment, including the adoption of new scenario tools, such as science-based targets, an expanded focus on physical and transition risk, and explicit adoption of 1.5 or 2 degrees Celsius targets. We assessed how banks are addressing deforestation with borrowers who rely on soft commodities such as palm oil and timber, and we gauged whether they have adopted an integrated due diligence approach for the energy sector to include environmental and social issues.

The other two new metrics focused on how banks are using their public voice to promote progressive climate policies and whether banks are publicly disclosing their definition of "low-carbon" or "green" products. See appendix for a full breakdown of new and repeated metrics.

 $\mathbf{2}$

Introduction

In the 18 months since our last bank report, we have moved from "climate change" to "climate crisis." The Intergovernmental Panel on Climate Change (IPCC) has made this clear, highlighting that, "Based on current policies and commitments, global emissions are not estimated to peak by 2030 – let alone by 2020."

As such, the time for incremental change is over. We need to see transformation in the banking sector and the adoption of systems-level thinking. We are at a critical 12-month window between now and COP 26, where countries will be expected to increase the ambition of their emissions reduction pledges made in Paris in 2015.

Central banks and regulators are exploring mandatory climate risk disclosures and climate stress testing, while the Network for Greening the Financial System (NGFS) supports integrating climate risk into financial stability monitoring and supervision. The Adaptation Commission, managed by the World Resources Institute and the Global Center on Adaptation, is calling for a "year of action" and a "revolution in understanding, planning, and financing that makes climate risk visible."

The banking sector has a pivotal role to play in this effort, as well as in supporting innovation to assist in the low-carbon transition. There are also some common sense approaches related to fossil fuel exposure in lending and investing portfolios, where banks should not need a scenario tool to make prudent business decisions. Since the Paris Accord came into force we have seen almost \$2 trillion of bank financing for fossil fuels, an amount that dwarfs sustainable finance commitments during the same period.

But there have also been some positive developments with the launch of the <u>Principles for Responsible Banking</u> (PRB), the SBTi (<u>Science-based Targets</u>) financial sector pilot, more explicit scenario analysis tools like PCAF (<u>Platform for Carbon Accounting Financials</u>) and the CDP Financial Sector pilot, which will become mandatory for financial institutions in 2020. Boston Common Asset Management is a public supporter of TCFD and the Principles for Responsible Banking.

"The time for incremental change is over. We need to see transformation in the banking sector and the adoption of systems-level thinking."



By the Numbers



58
banks engaged



800

public and private organizations support TCFD, including financial firms with \$118 trillion in assets



Delays in tackling climate change could cost companies up to

\$1.2 trillion over the next 15 years

\$1.8 trillion investment in climate adaptation by 2030 could yield

\$7.1 trillion in benefits

Regional Breakdown



6 regions analyzed

Bank Progress Updates



82

progress updates (e.g. new policies or initiatives joined)

Summary Findings

We were encouraged that 37 of the banks we engaged provided substantive updates on progress made across all three categories. Companies have taken over 80 positive steps since our last engagement, which speaks to the intensive focus on building internal capacity to integrate the TCFD recommendations and to build out sustainable finance divisions.

Looking at our core metrics from previous years, we saw improvement in six metrics, but also deterioration in four, while one remained flat.

This points to some gradual progress, in particular with broader adoption of TCFD guidance as well as new risk assessment and scenario tools. But these actions have not accelerated the rate of decarbonizing lending and investment portfolios, nor broadened the strategic adoption of low-carbon and green products and services.

We see a reluctance to expand and deepen client engagement and requirements in high-carbon sectors on both transition and physical risk; and risk assessment is not necessarily leading banks to restrict or end financing or investing.

One striking gap is the low adoption rate of deforestation policies that move beyond palm oil — even in advanced markets like Europe. We have seen a greater willingness to engage in public policy and to work collaboratively on tools and knowledge-sharing, but this has not led to the transformative shift needed in the financial sector to meet the goals of the Paris Accord.



- 81% of banks are disclosing information on progressive climate-related public policy engagement – a slight increase from 2018 (71%) – but more progress is needed to ensure that trade associations are adopting progressive climate policies (55%) versus 2018 (41%).
- 71% disclosed TCFD governance and strategy which is much lower than 2018 (95%) when the metric was more broadly defined as overall climate governance.
- Two-thirds (67%) have adopted a group-wide climate strategy up slightly from (58%) in 2018.



- More than three-quarters (78%) are implementing risk assessments or 2°C scenario analysis – a marked improvement from less than half (49%) in 2018 – with almost two-thirds (64%) including transition and physical risk in these assessments.
- Less than a third (29%) have adopted an explicit 1.5 or 2°C Target in risk assessment or sector-level criteria, and only 60% disclosed their assessment led to new exclusion policies.
- While over 70% have adopted an integrated environmental and social (E&S) due diligence process for energy sector clients, only half (50%) are explicitly engaging them on low-carbon transition plans (the same as in 2018) and only 7 have asked clients to adopt the TCFD recommendations.
- More focus is needed with soft commodity clients, as only 16% of the banks have asked for no deforestation policies and 14% aligned with certification standards such as the Roundtable on Sustainable Palm Oil (RSPO).



- 84% are implementing robust due diligence or thirdparty assessment to ensure green products meet high sustainability standards – a marked increase from 2018 (66%).
- Only 55% have set explicit objectives/targets to increase or promote low-carbon products and services not much improvement with less than half (46%) in 2018.
- Only 40% have publicly defined "low-carbon" or "green" products which should be a key focus, with green taxonomy frameworks being defined by the UK, EU and other industry bodies.

"New tools have not accelerated the rate of decarbonizing lending and investment portfolios, nor broadened the strategic adoption of low-carbon and green products and services."



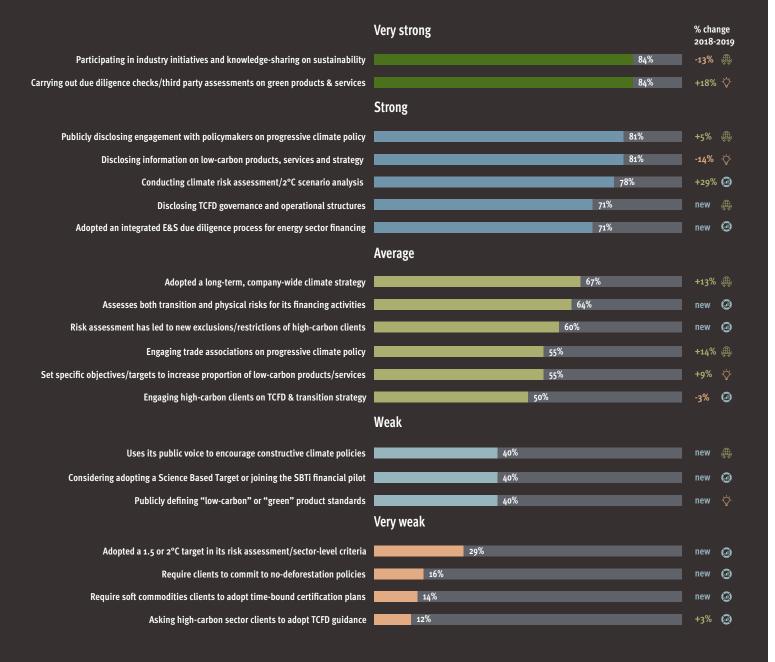
 $oldsymbol{\delta}$

Bank Performance

Climate Strategy







Progress Chart



Climate Strategy



Risk Management



Opportunities

Citigroup published its first TCFD report to disclose its climate-related financial risk and policies.

Credit Suisse has established a cross-divisional climate change program with the overall goal to address recommendations related to external disclosures of climate-related risks and opportunities.

PNC Financial now publicly discloses to what extent it engages with policymakers on legislative and regulatory changes supportive of the low-carbon transition.

Royal Bank of Scotland will no longer finance new coal fired power stations, new thermal coal mines, oil sands projects, Arctic oil projects, and unsustainable vegetation or peatland clearance projects.

MUFG declares that it will not provide financing for new coal-fired power generation projects, while forestry, palm oil, and mining (coal) are newly added to "Restricted Transactions".

National Australia Bank undertook work to integrate use of climate change scenarios to assess the 'stress' or impact of physical and transition risks on the Group's lending portfolio,

and **Westpac** completed scenario analysis for 1.5

degrees Celsius warming.

With a commitment to fund \$250 billion by 2030, **Morgan Stanley** is exploring areas for low-carbon investments and **Wells Fargo** has committed to \$200 billion by 2030 with more than half focused on clean technology and renewable energy.

Lloyds Bank has committed to align with the UK Government's Clean Growth Strategy via Green Finance commitments, including low-emission vehicle fleets and sustainable home financing.

National Bank of Canada established a sustainability bond Framework, which is in line with the ICMA Green Bond Principles and Social Bond Principles.

We were encouraged that 37 of the banks we engaged provided substantive updates on progress made across all three categories (Climate Strategy, Risk Management and Opportunities) from 2018 to 2019, with many highlighting key governance and strategy changes. These include the establishment of new senior management teams or cross business unit committees, the use of scenario analysis tools or new sector restrictions, and in some cases new green financing targets.

TCFD Alignment

Conducting climate risk assessment/ 2°C scenario analysis %



Strong

Disclosing TCFD governance and operational structures %



Engaging high-carbon clients on TCFD & transition strategy %



Average

Asking high-carbon sector clients to adopt TCFD guidance %



Very weak

Taskforce on Climate-related Financial Disclosures (TCFD)

To accelerate assessment and decarbonization of bank financing, we have publicly advocated for mandatory TCFD disclosure in regulation. We also call on banks to ask their high-carbon clients to implement the guidance. We have backed mandatory disclosure using TCFD because we have seen its effectiveness with French and Dutch banks, which have truly leapfrogged their peers in Europe and even more so in other regions of the world.

While we see more advancement of TCFD on the governance and strategy side – and many tools and scenarios being road-tested – we are not seeing enough impact on decision making.

According to the most recent TCFD Update from June 2019, over the last two years there has been a 15% increase in the number of companies reporting against some of the TCFD framework. Only about 25% of companies disclosed information which aligned with more than 5 out of the 11 recommended disclosures, and only 4% disclosed information aligned with at least 10 out of the 11 recommendations. The key conclusion from this latest report is that "not enough companies are disclosing decision-useful climate-related financial information."

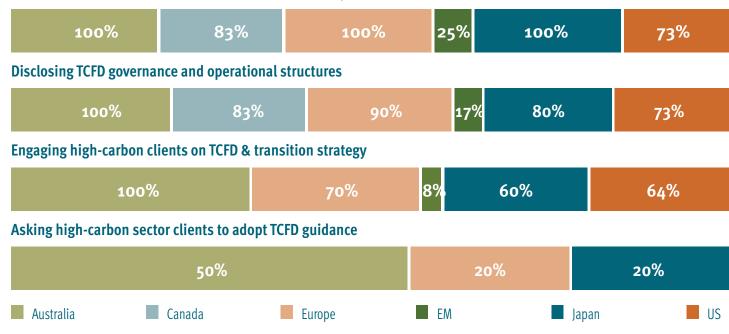
Our study did find some progress from last year, with 40 out of the 58 banks (up from 32) now endorsing the TCFD guidelines. This includes 12 banks (ANZ, Bank of America, Barclays, BNP Paribas, Citigroup, DNB, HSBC, ICBC, ING, Morgan Stanley, Standard Chartered, and UBS) whose CEOs have formally endorsed the TCFD recommendations.

At a regional level, all the Australian and Canadian banks covered in the report are TCFD supporters, as are 19 out of the 20 European banks. Less than half of the US banks have endorsed the guidance, however, and more Asian and Emerging Markets banks still need to take this step.

Disappointingly, only half of the banks (29) are engaging their clients on TCFD implementation – a similar figure to last year – and only seven banks have asked their clients to formally adopt TCFD guidelines. For example, HSBC developed a transition risk questionnaire to help identify customers that need to rapidly adapt to climate risks, and to spot potential business opportunities.

Regional Performance

Conducting climate risk assessment/2°C scenario analysis



"Disappointingly,
only half of the
banks (29) are
engaging their
clients on TCFD
implementation."



Climate Strategy

Participating in industry initiatives and knowledge sharing on sustainability %



Very strong

Publicly disclosing engagement with policymakers on progressive climate policy %



Strong

Adopted a long-term, company-wide climate strategy %



Average

Engaging trade associations on progressive climate policy %



Average

Overall, we have not seen enough progress in this area. Adopting a group-wide climate strategy has been a core metric since our first report in 2015, yet almost one third of the 58 banks have yet to do so.

On a regional level, it is not surprising to see the more advanced regions, Europe and Australia, emerge as leaders; 95% of the European banks and 100% of the Australian banks have adopted a group-wide climate strategy, followed by the US and Canadian banks. We need to see more widespread adoption by the Japanese banks (60%) and this is a key area for improvement by Emerging Markets with less than 10% of EM banks taking this step.

On TCFD alignment, we have seen more banks establish new governance structures to integrate TCFD and form senior executive committees and groups to address sustainable finance, but this has not yet translated in coordinated climate strategy across all business lines. Indeed, almost 30% still do not disclose TCFD governance.

This is surprising, since the draft TCFD guidelines have been available to banks since the beginning of 2016 and we are now past the end of a two-year implementation cycle of the final guidance, issued in June 2017.

Public Policy Engagement and Collaboration

As with past reports, a majority of the banks (84%) are participating in industry and multi-stakeholder collaboration on climate risk and solutions, including all the banks in Australia, Canada, Europe and Japan, and most in the US. More Emerging Market banks need to join their global peers to access knowledge-sharing and participate in new climate scenario tools.

We have seen some progress on public policy engagement, with 81% of banks disclosing involvement with progressive climate legislation. But more systematic engagement is needed with trade associations to ensure they are adopting progressive climate policies. Currently just 55% of banks are doing this.

The following Leading Practices page highlights recent developments in terms of banks joining the Principles for Responsible Banking (PRB), Platform for Carbon Accounting Financial (PCAF), Science-based Targets Initiative (SBTi) and others. These have the potential to accelerate decarbonization of bank lending portfolios, increase understanding of risks to people and planet and develop science-based approach to risk management.

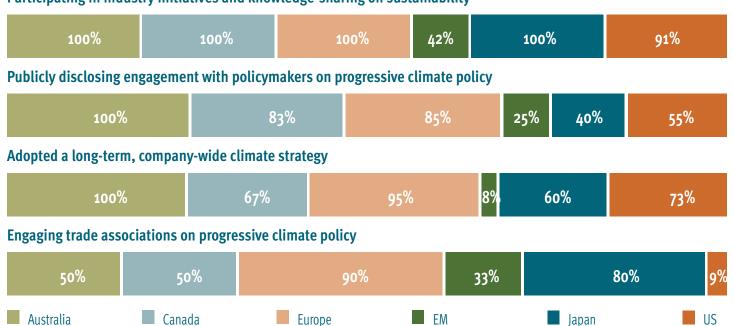
Alongside the technical tools, we must see a cultural shift within banks from the board all the way down to the front-line manager bringing in new business. This must include a willingness to walk away from clients or to no longer issue new financing once existing obligations are paid off.

We know this is possible, as we have seen Japanese banks move from fully endorsing coal to adopting coal restrictions in less than two years. This speaks to the critical role that governments and regulators play in setting the tone within a specific market – whether as an obstacle or enabler to adopting robust climate policies aligned with the Paris Agreement.

"We must see a cultural shift within banks from the board all the way down to the front-line manager bringing in new business.
This must include a willingness to walk away from clients."

Regional Performance

Participating in industry initiatives and knowledge-sharing on sustainability



Industry Initiatives

Since 2015 we have encouraged all banks to get involved in industry initiatives related to scenarios and other knowledge-sharing. These include:

Principles for Responsible Banking (PRB)

The Principles for Responsible Banking Principles are intended to support integration of climate strategy through the TCFD and Sustainable Development Goals (SDGs) frameworks. The initiative is supported by 130 banks, representing over \$47 trillion in assets under management – a third of global financing. But this includes just two of the largest global banks (Mitsubishi UFG Financial Group and Industrial and Commercial Bank of China) and only two US banks (Citigroup and Amalgamated). Boston Common Asset Management is a public supporter of PRB and in our outreach this summer we encouraged all 58 banks to consider joining.

Science-Based Targets initiative (SBTi)

It is critical that banks and other financial institutions adopt science-based targets to inform their sustainability management practices, including carbon emissions. Currently, only 16 banks have joined this pilot globally, including eight of our group of 58. We explicitly asked banks to consider joining the SBTi (Financial Services Pilot) as part of our outreach.

Carbon Accounting

We encouraged banks to **join the CDP Financial Sector Pilot** and **Platform for Carbon Accounting Financials (PCAF)** to inform their approach on carbon emissions or Scope 3 emissions. Twelve banks from our group have joined the CDP pilot, with greater US participation than in SBTi. However, we were disappointed to see in the 2019 CDP report that only 15% of responding banks were disclosing partial information on their Scope 3 emissions.

We were also disappointed to see none of the 58 banks are currently participating in PCAF despite this initiative going global in 2019 under the leadership of progressive banks like Amalgamated, supported by Navigant. This was an explicit ask in our outreach to all 58 banks.

Internal Carbon Pricing

One final risk management tool we support is the use of internal carbon pricing (ICP), promoted by the Carbon Pricing Leadership Coalition. According to a recent CDP report, financial institutions currently tend to use ICP in pilots or limit its application to the most carbon-intensive assets and companies. Interest is growing, however, with one-third of financial institutions that reported to CDP in 2017 using or planning to use an internal carbon price.

Please see full industry initiative chart on page 25.

Climate Strategy

Leading Practices

Integrated Climate Strategy

- Principles for Responsible Banking (PRB): We were encouraged to see that 15 out of the 58 banks have stepped up to join this initiative to support integration of climate strategy through the TCFD and Sustainable Development Goals (SDGs) frameworks, with the overwhelming number coming from Europe.
- The 15 signatories are BBVA, Banco Santander, Barclays, BNP Paribas, Citigroup, Industrial and Commercial Bank of China, ING Groep, Itaú Unibanco, National Australia Bank, Natixis, Nordea Bank, Société Générale, Standard Chartered, Sumitomo Mitsui Financial Group, Westpac Banking Corporation.

Partnership & Collaboration

- CDP Financial Sector Pilot: 12 banks (Bank of America, BMO, BNP Paribas, Citigroup, HSBC, Intesa Sanpaolo, Mizuho, NAB, Scotiabank, SMFG, US Bank, and Wells Fargo) have joined this CDP initiative to pilot metrics and disclosure on financing activities beginning in
- Science-Based Targets initiative (SBTi): Of our group of 58 banks, eight have already joined (BNP Paribas, BBVA, Crédit Agricole, HSBC, ING Group, Société Générale, Standard Chartered and Westpac), while over 40% of the responding banks indicated they will consider joining SBTi or adopting science-based targets as part of their next steps.

Risk Management

Adopted an integrated E&S due diligence process for energy sector financing %



Strong

Risk assessment has led to new exclusions/ restrictions of high-carbon clients %



Average

Require clients to commit to no-deforestation policies %



Very weak

Require soft commodities clients to adopt timebound certification plans %



Very weak

We were encouraged to see that more than three-quarters of the banks have conducted – or are committed to conducting – risk assessments or scenario analyses as outlined by the TCFD to align with a temperature rise below 2°C. It is also positive that over 60% are assessing both transition and physical risk.

Unfortunately, this has not resulted in broad adoption of additional sector restrictions or exclusions, and less than a third of all banks have adopted an explicit 1.5° or 2°C target in risk assessment or sector level criteria for high-carbon sectors. A recent Rocky Mountain Institute (RMI) report concluded that by 2035 it will be more expensive to run 90% of gas plants being proposed in the US than it will be to build new wind and solar farms, given new innovations in storage systems.

To explore more robust risk management, we also assessed the adoption of science-based targets and stricter guidelines on deforestation and soft commodity lending policies. With only 40% adopting or considering science-based targets, and under 20% adopting strict deforestation policies requiring certification, there is much room for improvement and future investor engagement.

Fossil Fuels

Over the past five years we have heard concerns from banks that they don't have the proper risk assessment tools or frameworks to make business-useful decisions. There is now a plethora of scenario tools for banks to assess transition risk in high-carbon sectors (PACTA), to assess the carbon emissions or Scope 3 emissions of a lending or investment portfolio (PCAF), or to integrate internal carbon pricing or science-based targets into the risk assessment process. We have seen industry groups like UNEP-FI, CDP and others step up to collaborate on the development of these tools.

We have also seen leadership from the Dutch and French banks on risk assessment, with ING being a lead partner with PACTA and other Dutch banks like ABN-AMRO and Triodos backing PCAF. Crédit Agricole has worked with others to refine its P9XCA methodology to estimate a portfolio's carbon footprint and to undertake sector and geographical mapping of its carbon emissions.

Despite these new tools and frameworks — and despite continued adoption by banks of new fossil fuel sector restrictions or enhanced due diligence processes — we have yet to see any decrease in global financing for fossil fuel sectors. Rainforest Action Network (RAN) has found that the 33 banks they assess have provided \$1.9 trillion of finance to the fossil fuel sector since 2015, with funding increasing each year.

Since our last report, we have seen the Japanese banks adopt coal sector restrictions, which is encouraging progress. In fact more than 100 financial institutions have adopted coal restrictions and there are coal **phase-out plans** in 31 countries. But what is not yet visible to investors is the implementation impact of these policies.

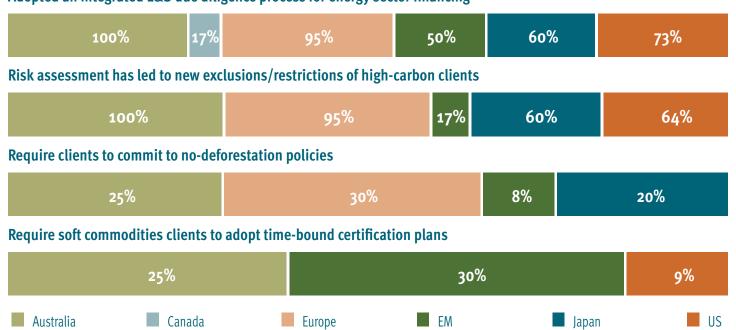
We have also seen a number of banks strengthen their oil sands policies. These include BNP Paribas, HSBC, Natixis and RBS, with ING and Natixis having the most robust policies. But we continue to see strong appetite for oil sands financing from US and Canadian banks.

It is also important to analyze human rights and social risks associated with fossil fuel financing, as demonstrated by the Dakota Access Pipeline controversy in 2016. We were therefore encouraged to see that over 70% of the banks now have an integrated environmental and social due diligence approach to energy sector policies. Application, however, varies widely by region, with Australia and Europe having the most comprehensive approach, whereas only half of US and Japanese banks are implementing such policies.

Indeed, Europe and Australia lead the way on most measures of risk assessment, including financing restrictions and implementation of climate scenarios and tools. While Canadian and US banks have improved, Asian and Emerging Market banks need to be more proactive and transparent on their efforts to implement TCFD and climate risk management with investors.

Regional Performance

Adopted an integrated E&S due diligence process for energy sector financing



Wider Climate Risk

Over the last two years we sought to go beyond fossil fuels to address physical and other risks associated with deforestation. Here we have advocated for a best practice framework that includes 'No Deforestation, No Peat, No Exploitation' (NDPE) policies and the protection of 'High-Carbon Stock' forests. We also encourage the application of these policies to all forest-risk commodities, not just palm oil.

Yet despite more than 469 companies adopting zero-deforestation or NDPE supply chain commitments, none are on track to meet their 2020 commitments. According to Global Canopy, financial institutions are even further behind, with 97% having no financing policy for any of the four key forest-risk commodities (palm oil, soy, cattle and timber).

Two new indicators related to deforestation had the lowest scores in our study, with only 16% of banks requiring clients to adopt no-deforestation policies and just 14% asking clients to adopt time-bound certification standards associated with soft commodities. Even in the relatively advanced markets in Australia and Europe, only about a third have required no-deforestation policies and even fewer have expanded these policies to all soft commodities. Strikingly, none of the US or Canadian banks – and few in emerging markets – require clients to adopt no-deforestation policies.

These findings indicate a systematic reluctance by banks to demand higher standards from high-carbon sector clients, despite the fact that doing so could vastly reduce bank risk and accelerate action on climate change. Reluctance by banks to go beyond fossil fuels is an area of intense investor engagement through groups like Ceres, PRI and ICCR.



Climate Scenario Tools

- CDP highlighted **Crédit Agricole S.A.** as the only bank in 2019 to assess carbon emissions for its entire lending portfolio, using a methodology known as P9XCA. Crédit Agricole has shared this methodology with its peers and P9XCA is now recommended for corporate and investment banks by Agence de l'environnement et de la maîtrise de l'énergie (ADEME), Observatoire sur la responsabilité sociétale des entreprises (ORSE), and by Association Bilan Carbone.
- BBVA, BNP Paribas, ING, Société Générale, and Standard Chartered endorsed the Katowice Commitment (December 2018), which commits to an open-source, science-based approach to financing aligned with the Paris Accord. The commitment includes a pledge to work with their clients on the low-carbon transition.

Raising the Bar on High-Carbon Sectors: Restrictions, Enhanced Due Diligence, & Client Engagement

- Palm Oil: In 2014 HSBC decided only to finance customers that were already partly certified under RSPO and that aimed to complete certification by the end of 2018. Customers were also required to provide evidence of independent verification of their NDPE policies. As a result of HSBC's engagement, a number of clients introduced NDPE policies. Those that did not will see their relationship with HSBC discontinued once existing loans are paid.
- Fossil Fuels: Barclays and National Australia Bank updated their environmental policies to address environmental and human rights risks associated with drilling in the Arctic Refuge. BNP Paribas, HSBC, and Société Générale have commitments to proactively restrict financing for oil and gas production in the Arctic Refuge. No US bank has adopted a similar policy to date.
- Deforestation: The Soft Commodities Compact (coordinated by the Banking Environment Initiative (BEI)) includes Barclays, BNP Paribas, Deutsche Bank, JPMorgan, Lloyds, RBS, Santander, Société Générale, Standard Chartered, UBS, and Westpac. Its aim is to look at ways in which banks can assist their clients to achieve net zero deforestation in the key soft commodities (palm oil, soy, beef, timber products) by 2020. JP Morgan issued its first report in 2017 and continues to release updates on progress. Standard Chartered just issued their first report this fall.
- Shipping: The Poseidon Principles were established in 2019 as the world's first global, self-governing climate agreement between financial institutions for assessing and disclosing the climate alignment of ship finance portfolios. The aim is to reduce shipping's total annual GHG emissions by at least 50% by 2050. Founding signatories include Citigroup, DNB, and Société Générale, and represent close to \$100 billion in ship financing or close to 22% of industry financing.
- Japan: MUFG has adopted restrictions such as no financing for new coal-fired power generation projects or coal mining using mountaintop removal (MTR), while SMFG is participating in the TCFD Consortium of Japan and is engaging clients on TCFD disclosure.

Opportunities

Carrying out due diligence checks/third party assessments on green products & services %



Very strong

Disclosing information on low-carbon products, services and strategy %



Strong

Set specific objectives/targets to increase proportion of low-carbon products/services %



Average

Publicly defining "low-carbon" or "green" product standards %



Weal

A new report issued by the Adaptation Commission calculates that investing \$1.8 trillion by 2030 could reap \$7 trillion in benefits. We are encouraged, therefore, to see more global focus on sustainable finance commitments. For example, the green bond industry has grown from just \$1 billion a decade ago to over \$200 billion in 2019 alone, and regulators in the UK and the EU are working on green taxonomy frameworks.

What is concerning is that green financing commitments are still dwarfed by investment in fossil fuels. Critics have also argued that some of the big green finance commitments by banks do not represent new financing but merely re-allocations or rebranding of existing commitments.

However, we have seen marked progress in this area since our last report. Over 84% of banks now use third party assessment or certification for green products, and over 80% disclose information on their low-carbon products and services.

Where we need more concerted action from banks is in setting explicit targets to increase and promote low-carbon products and services – and this needs to be tied to the bank's overall climate strategy. Just over half (55%) of all banks assessed have now done this, up slightly from 46% in 2018.

From a regional perspective, all of the Australian banks have set targets and objectives, followed closely by Europe (80%). US banks (64%) need to step up, while Canadian and EM banks lag behind, with only a third establishing any targets or metrics. As we have seen with Japan, there is increased disclosure focused on sustainable finance, but now the banks must take the next step to establish public targets and metrics. Currently just one fifth have done so.

A new area assessed in this year's survey was whether banks are publicly defining "clean and green" finance commitments. This is a standard even the advanced European banks have not systematically met, with only 60% of the banks providing public definitions. Globally, the figure is just 40%, indicating a need for further investor engagement.

One tool that investors can now access is the World Resources Institute (WRI) Green Targets Tool – an interactive platform to explore the proportion of sustainable finance commitments relative to their overall financing activities. While we have asked banks for this information since our first report almost 5 years ago, it is still not systematically disclosed.

On a regional basis, we are seeing Canadian banks step up to sustainable finance commitments. TD Bank announced a financing target of C\$100 billion in low-carbon lending, financing, asset management, and other initiatives by 2030. This was followed by RBC's commitment to provide C\$100 billion in sustainable finance by 2025 and CIBC's recent commitment to provide C\$150 billion in environmental and sustainable finance by 2027.

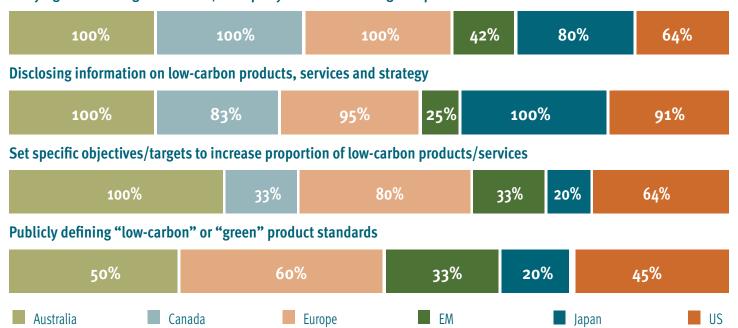
However, while some banks with strong climate policies (BNP Paribas, Citigroup, and Crédit Agricole) have committed to finance hundreds of billions of dollars in sustainable finance in years to come, it is also important to factor in the financing trajectory to the fossil fuel sector. Significant sustainable finance commitments do not necessarily correlate with a reduction in financing to high-carbon sectors.

This highlights the need for systematic adoption of taxonomies that address both brown and green financing (such as the color-coding system developed by Natixis) to assess the true level of risk across banks' portfolios — as well as true alignment with the goals of the Paris Agreement.

"Green financing commitments are still dwarfed by investment in fossil fuels."

Regional Performance

Carrying out due diligence checks/third party assessments on green products & services



Opportunities Leading Practices

Green & Sustainable Financing in Asia and Emerging Markets

We are seeing more concerted focus on developing internal frameworks and third-party certification for sustainable and green financing. These include ICBC's publication of a Green Bond Framework, China Construction Bank's pre-and post-certification of green, social and sustainability bonds, State Bank of India's new Green Banking Policy and BRI's Sustainable Finance Plan. Mizuho has recently set related KPIs and objectives for green finance & sustainable finance.

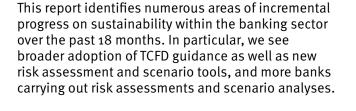
Sustainable Finance

- Australian banks ANZ and NAB have committed \$12 billion and \$41 billion, respectively
- Canadian banks stepped up to adopt sustainable finance commitments in 2019. TD Bank announced a financing target of C\$100 billion in low-carbon lending, financing, asset management, and other initiatives by 2030. This was followed by **RBC**'s commitment to provide C\$100 billion in sustainable finance by 2025 and CIBC's commitment to provide C\$150 billion in environmental and sustainable finance by 2027.
- MUFG announced a cumulative total of 20 trillion yen in Sustainable Finance (8 trillion yen specifically for the environment) between FY2019 and FY2030.

Behind a Green Taxonomy: Natixis Case Study

Natixis has implemented a color-coding rating system to promote climate-friendly financing by evaluating the environmental risk involved in each financial transaction. This system contains a variety of criteria specific to each high-carbon sector, with Natixis aiming to assign ratings to its entire portfolio be the end of 2019. The color rating assigned to each financing line follows a seven point scale, ranging from dark brown (activities with an extremely harmful effect on the climate and the environment) to dark green (activities with a highly positive impact).



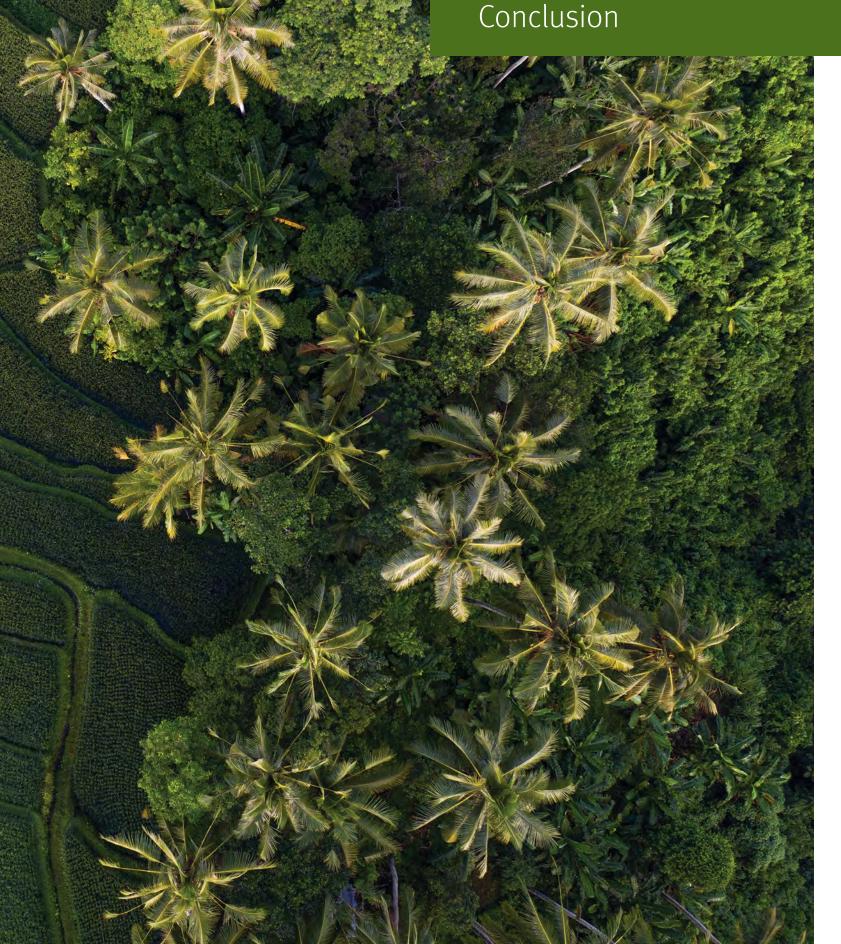


But these have had little impact on commercial behavior. Green financing commitments are still dwarfed by investment in fossil fuels, and few banks are restricting lending to high-carbon clients or those involved in deforestation.

The scale of the climate emergency demands a more radical transformation of the banking sector. Shareholders own the residual risks of all loans, and are uniquely vulnerable to bank failures resulting from substantial correlated defaults, and systemic failure resulting from "business as usual." To succeed, and be relevant, viable financial intermediaries, banks need to reboot their products, procedures and corporate policies to be future-appropriate.

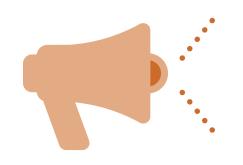
Fossil fuel producers and high-carbon users will become worse credit risks as their business models become obsolete; so lending to them embeds worsening credit risk into bank balance sheets, setting up for high levels of non-performing assets and defaults. Similarly, changing consumer preference and push back as well as climate change itself will lead to deforestationdependent businesses to lose out. Not factoring these risks into financing decisions is short-sighted.

As stewards of capital, we call for capital reallocation in support of new business models. We commend the leaders in this space, but call for boards and managements to take on much more ambitious, decisive change. This is necessary to manage the significant, imminent risks of climate-related risks affecting all businesses and assets they finance, while also enabling and profiting from the significant opportunities in society's transition to a low-carbon future.



Call to Action

Specifically, we call on banks to:



Transform corporate culture and mindsets:

- Adopt group-wide climate strategies overseen by the board, with robust implementation throughout the organization from the C-Suite down to frontline managers.
- Invest in internal climate champions.

Change financing priorities and procedures

- Adopt clear imminent timelines for restrictions and phase-outs of financing for fossil fuel development, high-carbon sectors, deforestation-linked sectors.
- Demand TCFD implementation as a prerequisite for financing or investment for all sectors with broad climate risks and for sectors indirectly linked to deforestation.
- Embed TCFD recommendations in all financial transactions, as well as in business relationship risk assessment and regional risk assessment.
- Move climate scenario tools from pilot to practice: Use scenario analysis to impact strategic decision making.

Measure, Report, Reward

- Set group-wide targets and metrics that address disclosure of financed emissions (including Scope 3), decarbonization of balance and lending portfolios, and sustainable finance products.
- Tie these to performance goals and compensation.
- Publicly disclose targets and metrics for investors and regulators to have a clear understanding of the trajectory and scope of financing of brown and green relative to overall financing activities.

Engage and Collaborate

- Systematically engage high-carbon sector clients on TCFD implementation.
- Partner with industry peers to co-create new climate scenario tools, taxonomies of both brown and green financing.
- Commit to making 2020 a "year of action" in alignment with the Paris Accord, focused on decarbonization goals and climate solutions.

Speak!

- Publicly commit to science-based targets (SBTi), carbon accounting, and assessment of risk to people and planet as per the Principles for Responsible Banking.
- Integrate clear public policy positions on climate into an overarching climate strategy.
- Urge trade associations to adopt progressive climate policies.
- Use the company's public voice to promote progressive climate policy with governments and regulators.

Industry Initiatives

"Focus"

Initiative Name

Carbon Pricing Leadership Coalition

Organized by the World Bank and launched at COP21, this multilateral group of over 163 businesses, 34 governmental organizations, and 82 other strategic partners aims to advance the implementation of carbon pricing worldwide.

Green Bond Principles

Voluntary guidelines adopted by 330 financial organizations, focused on disclosure, reporting, and transparency to raise capital for the development of the Green Bond market and environmentally beneficial ventures.

PACTA

With 17 pilot members, the main objectives of this initiative are:

- To allow investors to conduct climate scenario analysis of their portfolios;
- To measure the alignment of financial assets, portfolios, domestic financial institutions, and stock markets with the Paris Agreement goals, and to provide options to align financial flows;
- To indicate potential risks associated with the transition to a low-carbon economy.

Principles for Responsible Banking

With 130 current signatories, these Principles intend to inform banks how to align business strategy with society's goals, in contributon to the SDGs and the Paris Climate Agreement.

SBTi (Financial Services Pilot)

Initiative focused on the implementation of science-based targets to inform a company's sustainability management practices, currently supported by 16 financial institutions.

UNEP FI Pilot Program

Focused on the establishment and implementation of transition and physical assessment models and metrics, this program encourages its 275 participants to conduct scenario-based, forward-looking assessment and disclosure of climate-related risks and opportunities.

CDP's Financial Services

Collecting data from 26 firms within the financial services indsutry, this CDP report informs the redirection of capital to finance the transition to a sustainable, low-carbon economy. Specifically concentrated on indirect financing impacts.

Participating Banks

BMO Financial Group, BNP Paribas, CIBC, HSBC, National Australia Bank, Nordea Bank, Scotiabank, TD Bank

Agricultural Bank of China, Australia and New Zealand Banking Group, Axis Bank, BBVA, Banco Santander, Bank of China, Bank of Montreal, Barclays, BNP Paribas, Canadian Imperial Bank of Commerce, Citigroup, Crédit Agricole, Credit Suisse, Deutsche Bank, DNB ASA, HSBC Holdings, ING Groep, JPMorgan Chase & Co., Lloyds Banking Group, Mitsubishi UFJ Financial Group, Mizuho Financial Group, Morgan Stanley, National Australia Bank, Natixis, Nomura Holdings, Nordea Bank, Royal Bank of Canada, Royal Bank of Scotland, Skandinaviska Enskilda Banken, Société Générale, Standard Chartered, The Bank of Nova Scotia, The Goldman Sachs Group, The PNC Financial Services Group, Toronto-Dominion Bank, UBS, Unicredit, Wells Fargo & Co., Westpac Banking Corporation

Pilot members: Barclays, BBVA, BNP Paribas, Citigroup, Credit Suisse ING, Itaú Unibanco, Nordea, Santander, Société Générale, Standard Chartered, UBS, UniCredit

BBVA, Banco Santander, Barclays, BNP Paribas, Industrial and Commercial Bank of China, ING Groep, Itaú Unibanco, National Australia Bank, Natixis, Nordea Bank, Société Générale, Standard Chartered, Sumitomo Mitsui Financial Group, Westpac Banking Corporation

BNP Paribas, Crédit Agricole, HSBC, ING Group, Westpac, BBVA, Standard Chartered, Société Générale

Australia and New Zealand Banking Group, BBVA, Banco Santander, Barclays, Bank of Montreal, BNP Paribas, CIBC, Citigroup, Commonwealth Bank of Australia, Credit Suisse, Deutsche Bank, DNB ASA, HSBC, ICBC, Industrial Bank (China), ING, Intesa Sanpaolo, Itaú Unibanco, Lloyds Banking Group, Natixis, MUFG, Mizuho, National Australia Bank, National Bank of Canada, Nomura Holdings, Nordea Bank, Northern Trust, Royal Bank of Canada, Royal Bank of Scotland, Scotiabank, SEB, Société Générale, Standard Chartered, SMFG, TD Bank, UBS, UniCredit, Westpac Banking Corporation

Mizuho, SMFG, NAB, HSBC, BNP Paribas, Intesa Sanpaolo, Bank of America, BMO, Citibank, Scotiabank, US Bank, Wells Fargo

Survey Questions

Section I: Risk Assessment and Management

Change from 2018

(+)

(

(+)

(

(+)

(

(

(

- Has the bank conducted any risk assessment or scenario analysis as outlined by the TCFD to align with a <2°C economy or committed to do so publicly?
 - a. If yes, how this assessment informed decision making related to additional exclusions or enhanced due diligence for high-carbon sectors?
 - b. Has the bank explicitly adopted a 1.5 or 2 degrees Celsius target in its risk assessment or sector level criteria?
 - c. If not already disclosed, is the bank assessing both transition and physical risk in 2019 for its financing activities?
 - d. If not already disclosed, is the bank considering adopting a Science Based Target or joining the SBTi Financial Service sector pilot project?
- 2. Does the bank have any exclusion policies (beyond enhanced due diligence) related to:
 - a. Does the bank require all clients to commit to no-deforestation and disclose the percentage of its portfolio that is aligned with this commitment?
 - b. Does the bank require all soft commodities clients to have time-bound plans to achieve 100% certification using multi-stakeholder sustainability standards and disclose the percentage of portfolio that is aligned with this requirement?
 - c. Has the bank adopted an integrated E&S due diligence process for energy sector financing (projects and corporate financing)?
- 3. Is the bank engaging its corporate clients particularly those in high-carbon sectors (including oil and gas, utilities, automakers, land use etc.) to align with a <2°C economy and adopting low-carbon transition strategies? If yes, how? How does the bank report on this engagement?
- 4. Has the bank specifically asked its high-carbon sector clients to adopt TCFD guidance?

Section II: Strategy and 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?
- Does the bank provide information on its TCFD 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 and Services

- 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 specific objectives and targets outlining the extent to which the bank plans to increase and promote exposure to low-carbon and climate-resilient sectors, as well as a rationale for those targets?
- 3. Does the 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?
- 4. Does the bank publicly define what "low-carbon" or "green" products are? Are concepts like Circular Economy or Just Transition included in this definition?



Section IV: Policy Engagement and Collaboration with Other Actors

- Does the bank publicly disclose to what extent it engages with policymakers on legislative and regulatory changes supportive of the low-carbon transition?
- Does the bank ensure these industry groups and trade associations they are members of 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?
- 4. Does the bank use its public voice on climate policies and issues to encourage constructive public discussion and progress? If so, how?



Banks Engaged

Agricultural Bank of China Ltd.#

Australia and New Zealand Banking Group (ANZ)*

Axis Bank Ltd.#

Banco Bilbao Vizcaya Argentaria SA (BBVA)*

Banco Santander SA*

Bank of America Merrill Lynch*

Bank of China#

Bank of Communications Co.#

Bank of Montreal (BMO)#

Barclays Plc.*

BNP Paribas SA*

Canadian Imperial Bank of Commerce (CIBC)*

China CITIC Bank Corporation (CCBC)#

China Construction Bank (CCB)*

China Industrial Bank Co.*

China Merchants Bank Co. (CMB)#

Citigroup Inc.*

Commonwealth Bank of Australia (CBA)*

Crédit Agricole CIB#

Credit Suisse Group AG*

Deutsche Bank AG*

DNB ASA*

Fifth Third Bancorp*

HSBC Holdings Plc.*

Industrial and Commercial Bank of China Limited (ICBC)#

ING Groep NV*

Intesa Sanpaolo SpA*

Itaú Unibanco Holding SA#

JPMorgan Chase & Co.*

Lloyds Banking Group Plc.*

Mitsubishi UFJ Financial Group, Inc.*

Mizuho Financial Group, Inc.*

Morgan Stanley*

National Australia Bank*

National Bank of Canada*

Natixis SA#

Nomura Holdings, Inc.#

Nordea Bank AB#

Northern Trust Corporation#

ORIX Corporation*

PT Bank Rakyat Indonesia Tbk (BRI)*

Royal Bank of Canada (RBC)*

Royal Bank of Scotland Group Plc. (RBS)*

Skandinaviska Enskilda Banken (SEB)#

Société Générale SA*

Standard Chartered Plc.*

State Bank of India (SBI)#

Sumitomo Mitsui Financial Group, Inc.*

SunTrust Banks, Inc.*

The Bank of Nova Scotia (Scotiabank)#

The Goldman Sachs Group, Inc.*

The PNC Financial Services Group, Inc.*

Toronto-Dominion Bank (TD)*

UBS AG*

UniCredit SpA*

US Bank*

Wells Fargo & Co.*

Westpac Banking Corporation*

- * received formal company responses [41]
- # conducted background research based on public disclosure [17]

27



The information in this document should not be considered a recommendation to buy or sell any security. There is no assurance that any securities discussed in this report will remain in a strategy at the time you receive this document. The securities discussed do not represent an entire strategy and may represent only a small portion of a strategy. It should not be assumed that any securities transactions we discuss were or will prove to be profitable. Past performance does not guarantee future results. All investments involve risk, including the risk of losing principal.



inspire all businesses to compete not only to be the best in the world, but

to be the best *for* the world.

Boston Common Asset Management, LLC 200 State Street Suite 940 Boston, MA 02109

(617) 720-5557 telephone (617) 720-5665 fax

invest@bostoncommonasset.com www.bostoncommonasset.com



ASSET MANAGEMENT