



How policymakers and the financial services  
can help the sustainable finance market to scale

# FINANCING A MORE SUSTAINABLE FUTURE



Written by

The  
Economist

INTELLIGENCE  
UNIT

# CONTENTS

<b>3</b>	About This Report
<b>4</b>	Foreward From Pillsbury Winthrop Shaw Pittman LLP
<b>6</b>	Executive Summary
<b>8</b>	An Inflection Point for Sustainable Finance
<b>12</b>	Sustainability Influences Financial Strategy
<b>16</b>	A More Holistic Approach to Climate Change
<b>21</b>	Harnessing Sustainable Finance's Potential
<b>26</b>	Building the Future of Sustainable Finance
<b>29</b>	References
<b>30</b>	About Pillsbury

# ABOUT THIS REPORT

*Financing a more sustainable future: How policymakers and the financial services can help the sustainable finance market to scale* is a report written by The Economist Intelligence Unit (EIU) and sponsored by Pillsbury Winthrop Shaw Pittman LLP. Through comprehensive desk research, literature reviews and expert interviews, the report explores how governments, policymakers and the financial services industry can develop the right market and regulatory conditions to improve the attractiveness and availability of sustainable finance products to meet the needs of both corporates and investors to transition to a low-carbon future.

We would like to thank the following experts for their time and insights:

- Amy Domini, Founder and Chair, Domini Impact Investments
- Mindy Lubber, CEO and President, Ceres
- Nathan Fabian, Chief Responsible Investment Officer, UN Principles for Responsible Investment
- Neil Brown, Senior Fellow at the Atlantic Council Global Energy Center
- Sean Kidney, Co-founder and CEO, Climate Bond Initiative

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# FOREWORD



## A SHIFTING PLAYING FIELD

Sustainable finance—purposeful efforts to consider and address environmental impact as part of investment and lending decision-making—has inarguably become a central tenet of global business strategy. From institutional shareholders pouring record amounts into environmental, social and governance (ESG)-conscious funds and companies, to corporates focused on staying relevant within the context of the ongoing climate change conversation, the topic has quickly shifted from simply worthy of discussion to requiring meaningful action.

It is not just businesses and investors who have established sustainable finance as important to the success of the global economy, however. Increasingly, governments around the world are turning their attention to both regulating and incentivizing more environmentally responsible decision-making from

the private sector. Development of more effective government policies is essential to the continued growth of sustainable finance, serving to normalize and improve rigor around sustainable finance principles and enable greater trust in the strategies and financial products that rely upon them.

## US ACCELERATES PACE TO PARALLEL EU

To date, Europe has been the leading governmental voice when it comes to implementing and standardizing sustainable financial products. In late April 2021, the European Commission announced new measures designed to encourage sustainable investing across the Union, including the EU Taxonomy Climate Delegated Act and the Corporate Sustainability Reporting Directive, as well as a raft of amendments to prior Delegated Acts requiring that financial firms “include sustainability in their procedures and their investment advice to clients.” These developments

followed a March 2021 step-up of the EU’s Sustainable Finance Disclosure Regulations—originally implemented in 2019—which further clarified ESG reporting standards by requiring EU firms to make entity-level and financial product-level disclosures.

Though the U.S. has ground to make up to catch its European counterparts, the financial capital of the world has clearly prioritized the intersection between climate and environmental stewardship and economic growth. U.S. President Joe Biden has repeatedly doubled-down on his plan for the United States to achieve net-zero emissions by 2050, consistently noting the importance of identifying public and private financing needs to achieve this ambitious goal. U.S. Treasury Secretary Jannet Yellen has likewise acknowledged her critical role in taking “this ‘whole-of-government’ approach [to climate change] and turn[ing] it into a ‘whole-of-economy’ approach.” Accomplishing this will require both incentives and regulation, and progress is being made in both regards.

## THE BIDEN ADMINISTRATION FACTOR

A May 2021 Executive Order from Biden directs the U.S. Financial Stability Oversight Council to assess the climate-related risks to the overall stability of the U.S. financial system and seeks recommendations to improve climate-related disclosures and incorporate climate-related financial risk into regulatory and supervisory practices. The U.S. Securities and Exchange Commission is actively working to implement greater transparency on ESG issues, with former SEC acting chair Allison Herren Lee stating in early 2021 that “no single issue has been more pressing... than ensuring that the SEC is fully engaged in confronting the risks and opportunities that ESG [issues] pose to investors, the financial system and our economy.”

In terms of encouragement of sustainable finance, similarly positive indicators in the U.S. abound. The Federal Energy Regulatory Commission has signaled its willingness to approve regional grid operator plans that incorporate carbon pricing into their rate structures, thereby encouraging a market-based approach to reducing greenhouse gas emissions. Similar action is being taken at the state level, such as New York’s recently finalized “Value of Carbon” guidance, which will help State agencies estimate the value of reductions

in carbon and other greenhouse gas emissions. The recently introduced Clean Energy for America Act serves as another potentially important milestone, creating emissions-based incentives to spur growth in clean power, clean transportation, and energy efficiency and allowing power producers to qualify for either a production tax credit or an investment tax credit for facilities with zero or net-negative carbon emissions.

## A MARKET DRIVEN BY INNOVATIVE SOLUTIONS

Unsurprisingly, increased interest in aligning financial goals with sustainability focused ones has resulted in the development and growth of a variety of new, environmentally (and socially) responsible financial products. Traditional investment instruments have been converted to include ESG-compliant characteristics, with green bonds, sustainability-linked loans, green private placements and myriad other emerging financial products seeing increasing interest from the market.

In addition to driving development of newer, greener financial products, sustainability concerns are also forcing market participants to scrutinize existing investments. Lenders and investors are carefully evaluating their

current commitments to determine whether they adequately account for climate and environmental factors. The expanding carbon footprint associated with blockchain mining marks one prominent example. For highly volatile cryptocurrency markets to become more stable as they grow, the industry must acknowledge and solve for their collective environmental impact.

With every indication climate-minded financial tools and investment strategies will serve as the tip of the spear for our global economy going forward, it is imperative that corporate stakeholders and investors embrace sustainable finance fully. We are pleased to present this report—written by The Economist Intelligence Unit—to help business leaders in all industries understand the rapidly evolving regulatory and financial framework that governs sustainable finance and capitalize on the vast opportunity this emerging area presents.

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# EXECUTIVE SUMMARY

The sustainable finance market has grown significantly in the past year. This stems from a range of factors, from the COVID-19 pandemic to the election of a new administration in the US to the development of new financial tools to an increasing consensus around standards for sustainable finance instruments and disclosure of environmental, social and governance (ESG) factors. It is underpinned by a growing consensus among governments, business, and the public that climate change represents a clear and present threat to human welfare and natural resources, as well as to asset portfolios.

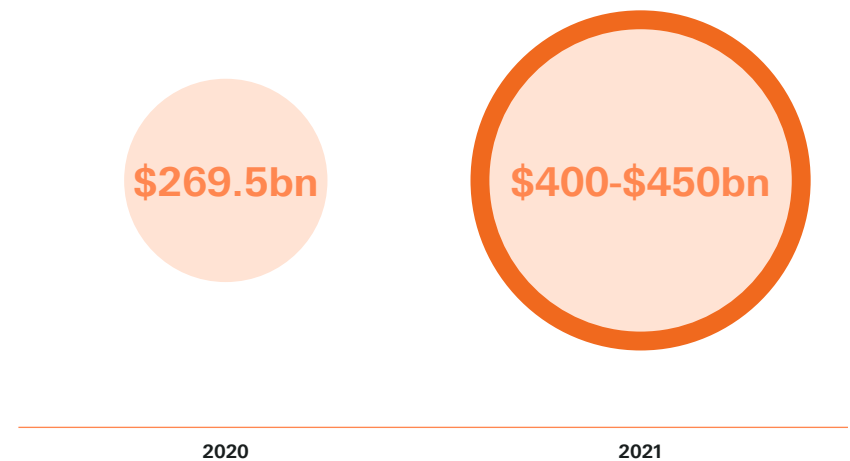
This report, based on desk research and expert interviews, will look at how policymakers and the financial services industry can enhance the value of sustainable finance tools to create ecosystems where these products can scale. Key findings include:

- Global green bond issuance reached \$269.5bn in 2020 and is predicted to hit \$400-\$450bn in 2021.

Sustainability bonds also saw strong growth in 2020, with issuance 81% higher than the previous year, at \$68.7bn. The green bond market remains just 3.5% of the broader bond market, but by traditional liquidity measurements—market growth, new issuance activity, dealer inventories and bid/offer spreads—the signs of growth are encouraging.

- Demonstrating the US government’s shift in focus on climate change, Treasury Secretary Janet Yellen has called it “an existential threat” and the biggest risk to the health of the US financial system. The Treasury, Federal Reserve (the Fed) and the Securities and Exchange Commission (SEC) now are considering how to identify corporate and systemic risks from climate change, how both financial services companies and corporates should disclose their performance on ESG factors, and what other tools they can use to encourage greater private sector involvement in the transition to a low-carbon economy.

## Global green bond issuance



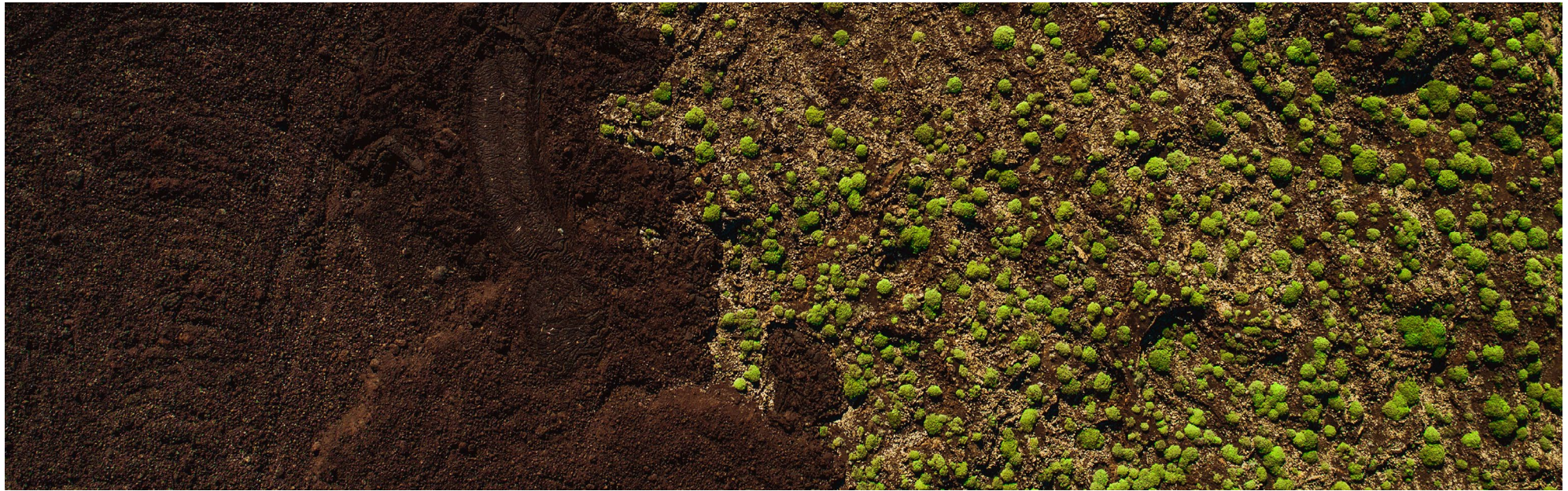
Source: Reuters

- The financial services industry is stepping up with pledges from banks to use ESG criteria to inform their lending, and from asset managers and owners to reach net zero. They are also innovating with new products such as sustainability-linked bonds and transition bonds.
- Covid-recovery plans from governments—including US President Joe Biden’s \$2trn infrastructure plan—will be a major source of investment in green infrastructure and incentives to crowd in greater private sector investment.
- Challenges remain in the form of a lack of agreed global definitions of sustainable finance tools, but the EU’s taxonomy for sustainable activities and the Green Bond, Social, Sustainability and the Sustainability-Linked Bond Principles are expected to provide greater clarity about how to define sustainable investments, with the US also looking at how to advance a consensus.

Efforts by governments, supranational organizations and the financial services industry are helping the sustainable finance market to scale, making these instruments more attractive both to corporate issuers and investors. Companies are now looking at how they can use sustainable finance to transition their businesses for the low-carbon future, including investments in carbon technology by large energy consumers such as technology companies.

# AN INFLECTION POINT FOR SUSTAINABLE FINANCE





While the COVID-19 pandemic has caused unprecedented disruption to economies and societies, it also has underscored the opportunity for the private sector to help governments in addressing global systemic risks. The rapid growth of sustainable finance instruments to battle the pandemic, the government stimulus planned to support economic recovery with green investments, and the innovative new uses of these instruments by governments and corporates has created a supportive environment for sustainable finance. Although challenges to greater adoption remain, the growth of the market is increasing liquidity and the attractiveness of such instruments for companies looking to issue.

At the beginning of global lockdowns in March 2020, the International Capital Market Association highlighted the relevance of social bonds to address the pandemic and provided guidance for eligible projects such as coronavirus-related healthcare and medical

research, vaccine development, and medical equipment investments. A flood of social bonds followed, including a £1bn bond from the International Finance Corporation to fund its response to coronavirus and a \$3bn Fight COVID-19 issuance from the African Development Bank. Issuance of social bonds jumped more than sevenfold in 2020, from about \$20bn in 2019 to \$147.7bn.

Now, as governments around the world put together stimulus packages to help their economies with the impact of COVID-19 lockdowns, they are using the disruption of the pandemic as an opportunity to accelerate efforts to address the growing threat of climate change. By financing a green recovery, governments are seeking to address both global crises while setting the economy on a more sustainable growth trajectory.

In the US, with a new administration returning focus to climate change, the \$2trn recovery package

offers an opportunity for major progress in shifting to a low-carbon economy with investments in clean energy. In March, the SEC announced the creation of a new task force focused on climate and ESG issues,<sup>1</sup> while the Fed and the Treasury, led by Secretary Yellen, are looking at how they can spearhead changes to financial markets through fiscal and monetary policy. In May, President Biden reinforced this effort when he issued an executive order which takes steps toward developing a whole-of-government strategy on climate-related financial risk, which could touch every sector of American industry.

“Every federal agency is being asked by the Biden Administration... to use every power of the government to build back better and create a clean energy future.”

**Mindy Lubber**  
CEO and President, Ceres

Mindy Lubber, CEO and President of sustainability nonprofit organization Ceres, says: “Every federal agency is being asked by the Biden Administration to come up with what they could do, how they could procure low-carbon or zero carbon materials and resources, use different suppliers committed to net zero, buy electric fleets—how to use every power of the government to build back better and create a clean energy future.”

Despite the increased focus on using sustainable finance to address systemic risks like COVID-19 and climate change, governments and businesses on both sides of the Atlantic are still struggling with defining what constitutes a sustainable investment (see box). The EU’s taxonomy for sustainable activities, a new classification system, due to be finalized mid-2021, is seen as an important enabler to discourage greenwashing, scale up sustainable investment, and encourage similar criteria in the US and elsewhere.

Nathan Fabian, Chief Responsible Investment Officer at the UN Principles for Responsible Investment and Chairperson at the European Platform on Sustainable Finance, worries that green recovery packages may be less effective without defined environmental criteria. “Nobody needs help to identify that a wind farm is green, but for most of the rest of the economy, it’s not always clear how green an activity is,” he says. “And that’s where many jobs are, in industry, in transport, in agriculture. So where do you draw the line on where to support recovery from an environmental perspective? All governments will struggle, even with the best of intentions.”

## PERSPECTIVE: SUSTAINABILITY-LINKED DEBT PRODUCTS (SLDs)



New principles for sustainability-linked bonds and loans—from the International Capital Market Association and Loan Syndications and Trading Association, respectively—offer an important standardization methodology for ESG investors. These sustainability-linked debt products offer:

- Flexibility, so proceeds can be used for a wide range of corporate purposes, as opposed to green bonds and sustainability bonds, proceeds from which must be spent only to finance or refinance the ESG projects themselves;
- Incentives, in the form of lower interest rates, so long as the borrower meets sustainability performance targets that are “material, quantitative, pre-determined, ambitious, regularly monitored, and externally verified...within a predefined timeline”; and

- Reputation enhancements, including disclosures that enhance credibility and support for higher ESG ratings.

SLDs offer a modest price advantage, but flexibility is their most significant draw: a standard corporate revolving credit facility can be linked to sustainability, so there is no need for the borrower to apply the proceeds toward a specific green activity. Yet for all their flexibility, SLDs incentivize achieving outcomes, not just activities. So investors interested in sustainability may be more attracted to the promise of results. Metrics such as target CO2 emissions are familiar. But the cost of financing for a wind farm could be tied to gender equity at its developer, for example.

In the absence of strict definitions, the green bond market has seen strong growth. Global green bond issuance reached \$269.5bn in 2020 and is predicted to hit \$400-\$450bn in 2021.<sup>2</sup> Sustainability bonds also saw strong growth in 2020, with issuance 81% higher than the previous year, at \$68.7bn.<sup>3</sup>

New instruments like sustainability-linked bonds are also helping to fuel the market, but come with their own challenges. “Sustainability-linked bonds are interesting because of the mechanism—of changing the coupon based on meeting a sustainability goal,” says Mr. Fabian. “The idea of finding finance for environmental improvement is not a new idea, but changing the pricing based on whether or not it’s successful is interesting. The challenge you get is that companies could issue this instrument for any goal, and who’s to say whether it’s a worthwhile goal, or whether it puts the company’s activities in line with the performance improvements you need in this new goal-aligned world that we’re in. This is a problem that environmental performance criteria can help address.”

The growth of sustainable finance instruments is vital to make these markets more liquid, and therefore more commercially viable for potential issuers. As of 2019, the green bond market remained just 3.5% of the broader bond market,<sup>4</sup> but by traditional liquidity measurements—market growth, new issuance activity, dealer inventories and the bid/offer spreads—the signs are encouraging.<sup>5</sup>

Sean Kidney, CEO of the Climate Bonds Initiative, says: “The market growing is important, as it’s only when it becomes liquid that you start to see price differentials [between green and regular corporate bonds] and the benefits of issuing green bonds.” He adds: “Green bonds remained liquid in the secondary market in March last year while the rest of the bond markets froze. In downturns, they tend to hold their value while other bonds collapse. So that is stoking demand, even from fund managers who don’t care about climate change.”

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**Sean Kidney**

Co-founder and CEO, Climate Bonds Initiative

# SUSTAINABILITY INFLUENCES FINANCIAL STRATEGY

‘Larry Fink didn’t write his climate letters because he had a conversion on the road to Damascus — he did it because asset owners said “this is what we are doing and get with the program or we take our business away”.’

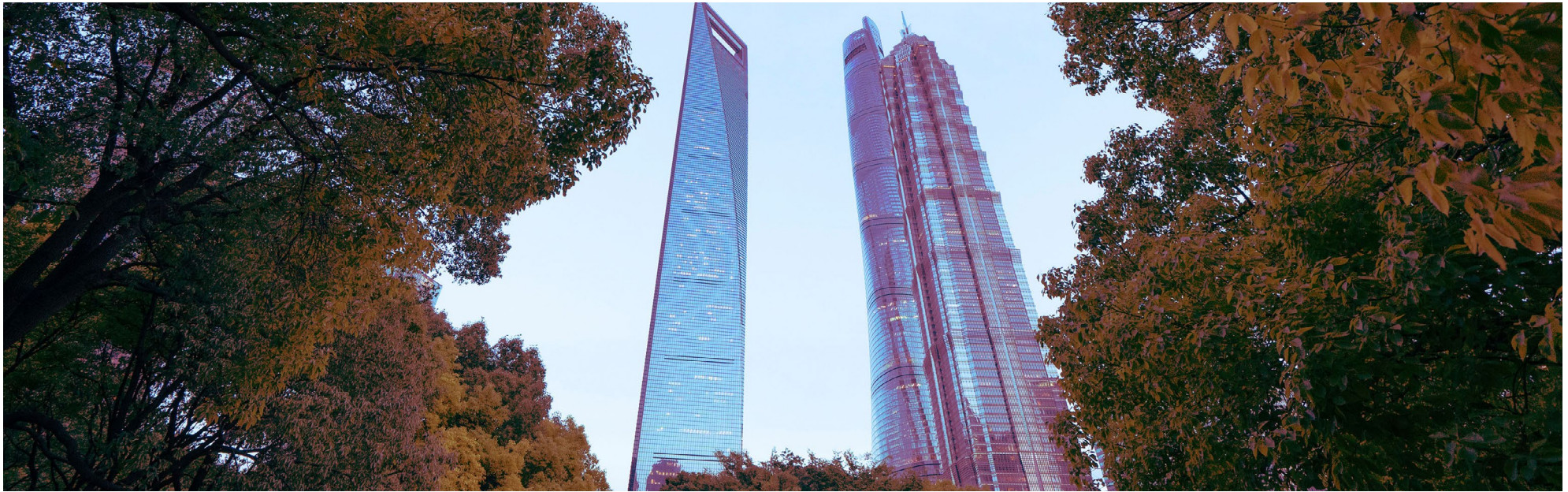
**Sean Kidney**

Co-founder and CEO, Climate Bonds Initiative

The growth of sustainable finance instruments has been driven by demand from a range of market participants. Large asset owners such as pension funds and sovereign wealth funds, which by necessity must think long term, have often led the charge by integrating ESG criteria into their investment processes. Demand also has come from retail investors increasingly interested in what their savings are funding.

Investors of all stripes have been won over by the growing body of evidence—including a 2015 study by Harvard Business School<sup>6</sup>—indicating that ESG investments achieve comparable or even better financial returns than conventional investments, usually with a lower risk profile as well. The asset managers who serve investors have had to adapt to meet their requirements, and incorporating ESG criteria into investment analysis is increasingly seen as consistent with fiduciary responsibilities.

“There is definitely a growing appreciation of risk on the part of investors and asset owners in particular, which cascades down the financial tree, eventually influencing the asset managers,” says Sean Kidney, CEO of the Climate Bonds Initiative. ‘Larry Fink didn’t write his climate letters because he had a conversion on the road to Damascus—he did it because asset owners said “this is what we are doing and get with the program or we take our business away”.’



Banks and other financial institutions—on both sides of the pond—are now jumping on the bandwagon, using ESG criteria to inform their lending practices. Mr. Kidney says: “Similarly, with banks that are pushing the envelope, they’re doing it because their shareholders and their bondholders are pushing them.”

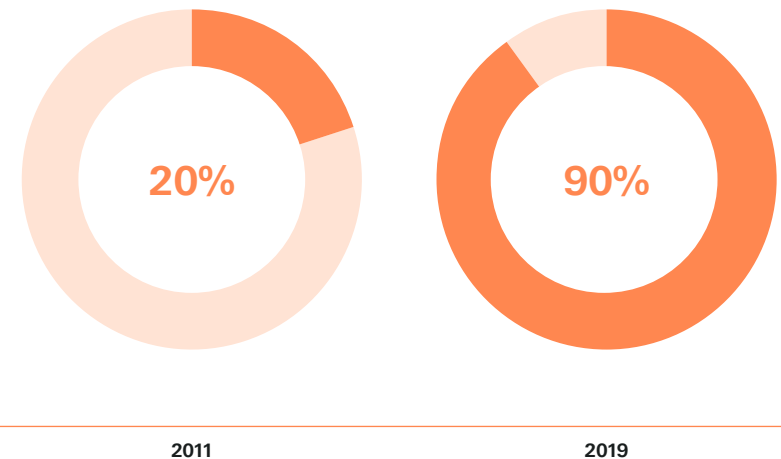
Investors are becoming increasingly vocal with companies as well. The 2019 proxy season was the third consecutive year when ESG topics dominated the shareholder proposal landscape.<sup>7</sup> Nearly 70% of resolutions addressed risks related to environmental or social issues, far outweighing governance concerns.<sup>8</sup> Investors are requiring more and better disclosure of ESG factors and pushing boards to take risks such as climate change more seriously—to the point of appointing different directors, as at Exxon.<sup>9</sup>

This pressure is resulting in greater disclosure by companies. The number of companies that publish

sustainability reports has increased significantly—90% of S&P 500 companies did so in 2019, up from 20% in 2011,<sup>10</sup> and 65% of the companies in the Russell 1000 did so in 2019, up from 60% in 2018.<sup>11</sup>

“What’s driving the use of ESG is a combination of factors,” says Neil Brown, Senior Fellow at the Atlantic Council Global Energy Center. “Organizations with private equity or infrastructure funds see this as an opportunity to enhance returns by enhancing ESG performance and, in some cases, to raise funds from investors that want to see ESG impact as part of the investment thesis. There also are considerations of public opinion, shareholder interest, and broader stakeholder engagement. ESG consciousness in investing can also help firms attract top talent and motivate existing employees. Finally, there’s government pressure, which is very important in setting rules of the road but is often a lagging indicator of public interest.”

**The share of S&P 500 companies that publish sustainability reports**



Source: Globe Newswire

The pressure from governments has been strongest in the EU. The EU Action Plan for Sustainable Growth was released in March 2018 and requires ESG integration by financial market participants. It has three goals: reorienting capital flows towards sustainable investment; mainstreaming sustainability into risk management; and fostering transparency and long-termism. These objectives, supported by 10 policy initiatives, will help the market scale and boost the commercial appeal for both issuers and investors.

Those initiatives include the EU's taxonomy for sustainable activities (see box), as well as other standards and labels for sustainable financial products, requirements for better disclosure by both financial services and other companies, and measures to improve the efficiency and impact of sustainable

finance instruments to help the market scale.

The Sustainable Finance Disclosure Regulation, which is designed to improve transparency and comparability around the sustainability characteristics of financial products, is another central plank of the EU's action plan.

By contrast, there has been little action from the US government, particularly during the previous administration. Mr. Fabian says: "In the US, there have been green bond issuances by municipal governments, but there has not yet been a lot of regulatory or policy developments in the recent past."

In 2010, for example, the SEC provided guidance for climate-related disclosures for public companies. In 2015, the Department of Labor issued guidance to

US pension funds, acknowledging that ESG factors could directly impact an investment's financial and economic value,<sup>12</sup> clearing the way for them to consider ESG factors in their investment decisions.

More has happened at the state level. Renewable Portfolio Standards, regulations that require the increased production of energy from renewable energy sources, have been adopted in 29 states and the District of Columbia.<sup>13</sup> Other state-level actions aim to accelerate sustainable investment, including Green Banks in over a dozen states<sup>14</sup> and a variety of initiatives such as the California Solar Initiative and the California Climate Credit.

With a new administration, the US is now poised for more action, particularly from the federal government.

## Setting the bar: The EU taxonomy and Green Bonds Standard as a guide for better utilization of sustainable finance

The taxonomy for sustainable activities is how the EU answers "what is green?" It provides clarity on what is an environmentally sustainable activity material to achieving a sustainable future, enabling investors to measure the degree to which an investment product or company meets these standards.

The taxonomy has six interlinked objectives: climate change adaptation, climate change mitigation, transition to a circular economy, pollution prevention and control, sustainable use and protection of water and marine resources, and protection and restoration of biodiversity and ecosystems. It covers three types of activities: those which contribute substantially to one of the six objectives; transitional activities where there are no technologically and economically feasible low-carbon alternatives, but that support the transition

to a climate-neutral economy; and activities that enable those in the first category.

According to Nathan Fabian, Chief Responsible Investment Officer at the UN Principles for Responsible Investment and Chairperson at the European Platform on Sustainable Finance, "the top 7000 listed companies in Europe, starting January 2022, must disclose the proportion of their turnover, CAPEX and, if relevant, their OPEX, that's aligned with this environmental performance benchmark. That is quite a big deal. Our expectation is that the obligation to report that at a company level is going to lead to companies saying, 'we need to improve our environmental performance to meet these criteria, let's go and raise some capital to do it'."

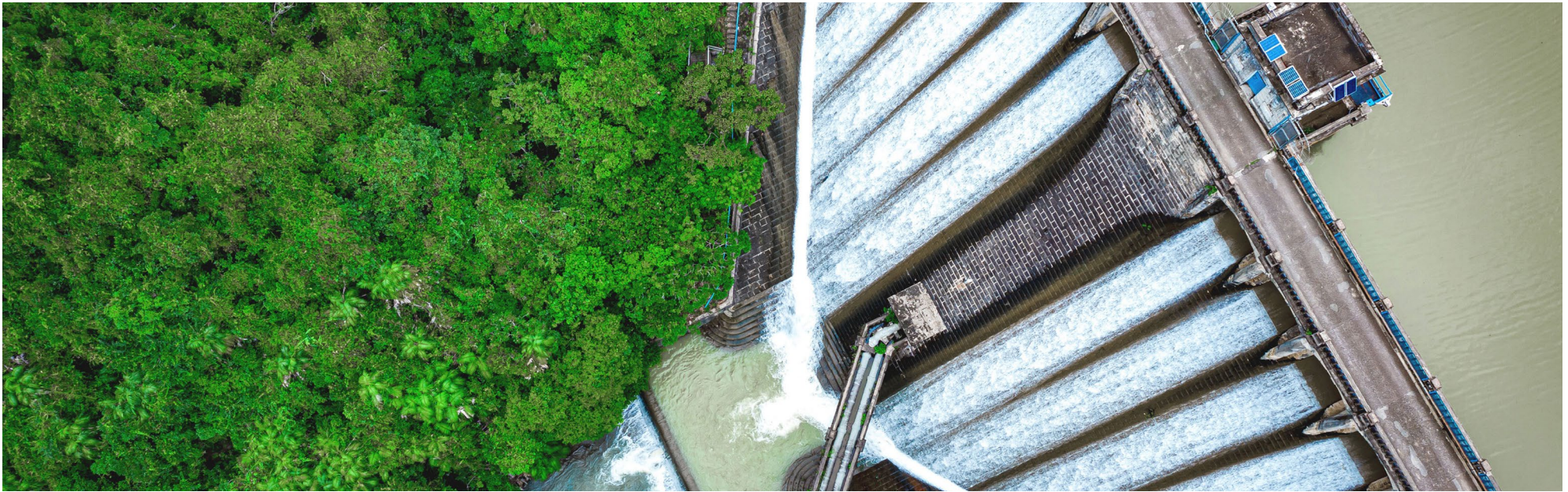
The EU Green Bond Standard requires green investments to follow taxonomy criteria and that issuers publish a Green Bond Framework, allocation and impact reporting and verification. Although voluntary, it is a practical guide for companies interested in utilizing green bonds and provides confidence to investors in these instruments.<sup>15</sup>

"If the EU Green Bond Standard is used, investors can have confidence that the proceeds are going to meet the performance expectations or requirements of the list," says Mr. Fabian. "That's quite a big change in the way the market works. And I think we've learned with financial markets, if you want financial products to scale, you need standardization. The taxonomy is a really important piece of the puzzle."

# A MORE HOLISTIC APPROACH TO CLIMATE CHANGE







While there was little regulatory or policy action that might support sustainable finance from the previous US administration, the new government is actively looking at multiple ways to tackle climate change. The Biden administration has demonstrated its focus on environmental issues with the selection of climate-minded leadership, including former Secretary of State John Kerry as Special Presidential Envoy for Climate, Congresswoman Debra Haaland as Secretary of the Interior, former EPA Administrator Gina McCarthy as National Climate Advisor, Pete Buttigieg as Secretary of Transportation, Jennifer Granholm as Secretary of Energy and Jigar Shah as Director of the Department of Energy's Loan Program Office.<sup>16</sup>

Secretary Yellen will lead the Financial Stability Oversight Council (FSOC), which was established by the 2010 Dodd-Frank Act to help regulatory authorities better identify and respond to threats within the financial system. The first meeting of

the FSOC—which also includes the chairs of the Fed, SEC and a range of other financially focused agencies—covered climate-related financial risks. The FSOC is expected to play a leading role in developing the regulations necessary to “assess and mitigate” climate-related financial risks.<sup>17</sup>

Action from the Fed, Treasury and SEC will shape how the financial services industry, investors and corporates play a role. Ms. Lubber sees interest from multiple agencies. “We put out a report recommending more than 50 regulatory changes that do not need congressional action, that would make a material financial difference in buffering the economy from climate, and we could barely keep up with the enquiries from different agencies and commissions,” she says. “The background is completely different. There is clear interest in acting on climate at the SEC, FSOC, CFTC, the Fed and many others.”

At the Fed, a Financial Stability Climate Committee has been created to address climate-related risks to stability across the financial system, as well as a Supervision Climate Committee, which will deal with firm-level supervision. Scenario analysis has been suggested to gauge the strength of a bank to withstand different hypothetical climate shocks, helping financial institutions and regulators to better understand and manage those risks.<sup>19</sup>

Fed Chairman Jerome Powell says this is consistent with the existing mandate of supervision of financial institutions. He added that the Fed is “at a very early stage of understanding the risks to regulated financial institutions from climate change” but that “the financial institutions are very much actively doing this on their own. It’s not something we’re forcing them to do.”<sup>20</sup>

Mr. Kidney is pleased the Fed is now looking at climate risk. “If you’re a central banker, you now have a big class of debt and equity assets, which looks shaky. It’s as if you’re in 1999 and you could see that the dot com crash was coming,” he says. “We’re looking at substantial volatility risk for the financial sector—stranded assets, all of these things which could throw over the financial system because it is so dependent on high carbon investments. The legacy financial assets in those areas are deeply problematic. If Exxon is going to go bust, that is incredibly dangerous, because Exxon is a big chunk of people’s investments.”

He sees many tools the Fed could utilize in this space. “There are many things that central banks can do, like green quantitative easing, which are being considered by the ECB [European Central Bank]. Or what about repos, can we do something in that area?” he asks. “We’d also like the idea of risk weighting in the capital ratio requirements for banks to shift them to green—make it more valuable for a bank to hold a green bond portfolio because they get a higher leverage ratio.”

At the Treasury, Secretary Yellen has been tasked with advancing goals on lowering emissions and ending the global financing of fossil-fuel-based energy sources. She will work with international partners like the G20 and International Monetary Fund (IMF) to tackle the climate crisis and sees a potential new allocation of the IMF’s emergency reserves—

Special Drawing Rights—as part of a broader package of assistance to low-income countries.<sup>21</sup>

While Secretary Yellen has stated that the FSOC would not have a role in telling the industry what kind of lending it can do, she has advocated for better data collection and financial disclosures.<sup>22</sup>

Climate and ESG-related risks are also a priority at the SEC, and acting chair Allison Herren Lee has created a Climate and ESG Task Force in its Division of Enforcement to identify potential misconduct related to ESG-related disclosures. Its first step is to pinpoint any material gaps in issuers’ disclosure of climate risks under existing rules—it has already identified inconsistencies within many companies’ disclosures—as well as assess disclosure and compliance of the ESG strategies of investment advisors and investment funds.<sup>23</sup> It has solicited public input to shape its view of what information is necessary, the materiality of climate-related disclosures, and the costs and benefits of different regulatory approaches.<sup>24</sup>

Ms. Lubber is excited about the prospect of better disclosure. “We need mandatory climate risk disclosure, and for regulators to deem climate risk a material financial risk,” she says. “If we’re able to get the SEC to mandate disclosure, it will impact where investors put their money.”



The SEC also is examining existing policies to ensure proxy voting practices align with the best interests of shareholders. “We need to roll back the rules adopted last year under the Trump Administration making it harder for shareholders to file shareholder resolutions,” says Ms. Lubber. Other ideas floated include a carbon border adjustment, which would help reduce the risk that companies will relocate to jurisdictions with less stringent rules.<sup>25</sup> Mr. Brown says, “that is very significant because pricing carbon emissions at the border can start to capture global supply-chain emissions.”

Tax incentives are also critical, and the US government’s COVID-19 recovery package includes investment tax credits, production tax credits and Section 45Q tax credits for carbon sequestration.<sup>26</sup> “Fossil fuels exploration and development have been incentivized for five decades, six decades,” says Ms. Lubber. “We need to not have fits and starts on incentives for batteries, for wind, for solar—we need production and construction tax credits for renewable energy and storage that go out for five or 10 years, as fossil fuel has benefited from.”

The carbon border adjustment, tax incentives and carbon pricing (see box) are several ways the government can stimulate the private sector activity which will ultimately yield change. At a recent meeting of the Institute of International Finance, Climate Envoy Kerry said, “I was convinced, and I remain convinced, no government is going to solve this problem. The solution is going to come from the private sector, and what [the] government needs to do is create the framework within which the private sector can do what it does best, which is allocate capital and innovate and begin to take the framework that’s been created.”<sup>27</sup>

Public-private partnerships (PPPs) may be another tool to bring in private finance to support the building of green public infrastructure. “To generate

green investments, it doesn’t take new ideas but adapting current instruments, like PPPs. We need to be creative with financing models,” says Mr. Kidney. Mr. Brown adds: “The challenge for the US is that using PPPs is not very common—PPPs as a proportion of infrastructure spending in the US versus the UK or Australia is very small. There are many reasons for it, but it’s part of the political culture. Progress has been slow to normalize use of PPPs with public officials at various levels of government where funding decisions are made, but the climate change debate can help accelerate PPPs because the need for investment is so significant.”

Ms. Lubber agrees with Climate Envoy Kerry that the public sector cannot do this alone—“the numbers are too big, they need the private sector”—and is encouraged by the recent pledges made by major financial services organizations. “The world has shifted, there is a reset for sure, in that the largest global banks have set goals for getting to net zero,” she says. “Now that the big banks have made commitments, I don’t think they’re going to run away from them, they do not want that reputational harm.”

She is hopeful that the pledges by financial institutions will encourage corporates to shift their behavior in order to continue to get funding, whether through bank lending or bonds, as well as spur innovation in sustainable finance products. “I think they’ll come up with packages that we’ve never heard of—figuring out how to bundle this credit and do this swap,” she says.

Banks are not the only ones making public pledges—companies across industries from technology to energy are also making commitments. There are now coalitions of asset managers and asset owners that have promised to work towards net-zero emissions in their portfolios. The effect is being felt—endowments and pension funds have divested \$14trn from fossil fuels since 2011, according to the Carbon Tracker Initiative.<sup>28</sup>

Amy Domini, Founder and Chair of Domini Impact Investments, also sees a role for stock exchanges to influence corporate behavior. “If you believe that investors have an important role to play in harnessing financial assets to provide a future, it’s going to take real regulation, which may not be specific to a nation,” she says. “It may come from stock exchanges instead. The International Organization of Securities Commissions [IOSCO]—that would be the kind of a place to put standards in place.” Currently, about half (56) of the 107 stock exchanges tracked by the Sustainable Stock Exchange Initiative have published ESG reporting guidance for their listed companies.

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Founder and Chair of Domini Impact Investments

# Carbon pricing

Carbon pricing is a market-based strategy that puts a price on emissions so that the true cost of climate impacts is better reflected in production, consumption and investment choices.<sup>29</sup> As Mindy Lubber, CEO and President of sustainability nonprofit organization Ceres, explains: “Right now, we have dishonest market signals—we have tens of billions of dollars’ worth of damage from carbon and we price that at zero. Well, when something’s free, we all know we get a lot more of it.”

Accurately pricing carbon would have the effect of making carbon-intensive companies less attractive investments, pushing capital to more sustainable companies and investment products.

The EU has had a carbon pricing system, the EU Emissions Trading System, since 2005 and the concept is now being considered in the US at the federal level. The Special Presidential Envoy for Climate, John Kerry, has stated that a carbon price is “one of the most significant ways that we can address climate change”, while the Treasury’s Secretary, Janet Yellen, commented that “we cannot solve the climate crisis without effective carbon pricing.”<sup>30</sup>

As a first step, the Federal Energy Regulatory Commission (FERC) issued a policy statement in April 2021 clarifying how it will consider market rules proposed by regional grid operators that want to incorporate carbon prices, following up a September 2020 conference that found broad consensus that pricing carbon is a cost-effective way to drive down emissions while promoting grid reliability.<sup>31</sup> However, as FERC’s remit does not cover

environmental regulations, any proposals will need to be based on fostering more cost-effective markets.<sup>32</sup>

While the concepts of carbon taxes and emissions trading systems<sup>33</sup> have been around for years, implementation remains spotty. Currently, 46 national and 35 sub-national jurisdictions put a price on carbon, and 64 carbon pricing initiatives are under way or planned for implementation.

Carbon pricing faces numerous challenges to wider adoption, including the public perception that it raises prices; lobbying from businesses, especially those dependent on fossil fuel; policy overlap or inconsistency; ineffective use of revenues; and the implication on international trade, as goods imported from countries with a lower or no carbon tax would have an advantage over domestic goods in countries with a tax.

“It’s very hard to get industry to agree to carbon prices that make a difference. So there is a continual lag in the effectiveness of the pricing schemes relative to the environmental objective, because everything is negotiated with industry. It’s not a lot more complex than that,” says Nathan Fabian, Chief Responsible Investment Officer at the UN Principles for Responsible Investment and Chairperson at the European Platform on Sustainable Finance. “It also is really hard to connect markets internationally. Carbon pricing schemes are so idiosyncratic in specific regions, it’s very hard to agree on the rules on how to connect them. So markets can’t scale and are therefore not liquid enough to support trading.”

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Chief Responsible Investment Officer, UN Principles for Responsible Investment (PRI),  
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# HARNESSING SUSTAINABLE FINANCE'S POTENTIAL

# PERSPECTIVE: ESG BOARD ADVISORY CHECKLIST



Amid unprecedented investment in environmental, social and governance-conscious funds and companies, boards of directors are looking to design and implement business strategies that can produce a more sustainable future. Set forth below is an ESG checklist that boards can use to help formulate their ESG strategy.

## *Set Appropriate Committees*

Determine which board members have this expertise and which committees have responsibility. In addition, some companies are appointing ESG committees.

## *Review Charters*

If necessary, amend corporation charters to add this responsibility and appoint appropriate members to such committees.

## *Make Diversity a Business Imperative*

Create programs to ensure that you have a workforce that is representative—at every level—of the diversity of your customers, your investors, communities and partners. Add new diverse board members where expertise is needed.

## *Track Costs & Success*

Review specific ESG measurables that relate to your business. Track costs of ESG activities and evaluate success of these activities across all business units.

## *Retain ESG Measuring Firm*

Retain a third-party ESG measuring firm so you have an outside barometer to measure your progress and to give your program credibility.

## *Assign Management Responsibility*

Assign responsibility for your ESG program to one person: general counsel, head of investor relations, CFO or chief ESG officer.

## *Incentivize Compensation Plans*

Add ESG progress as an individual performance factor, together with company performance, in short-term incentive plans for executive officers.

## *Access ESG Capital*

Define an outreach program to access the major pools of capital that are investing in ESG-friendly companies. Consider whether a green bond is right for your company.

A company that is already generating sustainability reports or ESG disclosures will find it easier to identify ways in which sustainable finance can support positive change. As governments require greater disclosure and supranational organizations push for greater standardization of that disclosure, this will provide a boost to the use of sustainable finance instruments.

“The one thing that is going to help companies most is the serious push for standardization on sustainability accounting and reporting standards globally with IFRS [International Financial Reporting Standards] and IOSCO,” Mr. Fabian says. “If we can actually pull this off, companies will be cheering, as it will reduce their costs, drive efficiencies in the way capital and companies find each other and help investors make informed views about the prospects of an enterprise.”

Sustainability reporting can help embed these issues across the company, which will make it a more attractive investment for ESG-minded investors. Some investors will not buy a green bond from a company that is not adhering to sustainable principles more broadly.

“Issuance of a green bond is not the only one way to interpret the prospects of an issuer, they need to have other things—a genuine transition plan, targets, the right governance,” says Mr. Fabian. “That’s how investors are starting to square the circle—if we see a green bond issuance that is not located within a clear transition plan, with targets on emissions performance in sort of five or 10-year increments, it seems more of an aberration. Markets are getting more serious, investors are getting more sophisticated in what they expect to see from a company. Just one green bond is not sufficient.”

Some companies will issue a green bond or other sustainable finance instruments as a signal that they plan to change. “This is especially true in oil and gas, in electricity generation and resources,” says Mr. Fabian. “Companies will issue some green finance to signal to the market that they understand that there needs to be some reallocation of the balance sheet. But while often these are marginal relative to the activities of the company, it doesn’t necessarily change the core strategy or the exposures of the company.” However, that does not invalidate some actions, it is a good start. Once again, it is what accompanies the green bond issuance in terms of strategy, targets and governance that matter, Mr. Fabian continued.

The necessity of transitioning to a low-carbon business model, the potential of getting stuck with stranded assets, and the need to use sustainable finance instruments to support a shift are becoming stark issues. “To put it in really plain terms, for

climate mitigation-related transition, most industrial activities will have one or two investment cycles between now and 2050,” says Mr. Fabian. “If your next round of investment puts your performance well above the emissions reduction curve for your sector, then you’ve got the risk of stranded assets and stranded capital. So it’s becoming quite acute.”

To help companies make this change, transition bonds have been introduced. A Hong Kong electricity generation company was one of the first to adopt these, using a transition bond in 2017 to finance construction of a new 550MW combined cycle gas turbine generation unit. Other notable examples include transition bonds from Snam, an Italian gas company, Marfrig Global Foods, a Brazilian beef producer, and Cadent Gas, a UK gas distributor.<sup>34</sup>

These bonds can have a high impact in industries that may not be able to change their business models entirely to become green, such as mining, heavy industry, certain utilities, transport and mobility companies.<sup>35</sup>

“It costs money to go through economic transitions, so we want to make sure there’s available resources for companies to do make needed changes to their business models, to transition to the net zero economy we’re headed towards,” says Ms. Lubber. “But they [transition bonds] have to be designed well and have the right accountability system, and that’s partially the role of government regulators as well.”

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Mr. Fabian suggests a new type of bond specifically to help carbon-intensive industries—an asset exit bond. “We need tools that support the exit of highly polluting industries and assets. This is a way to square the thorny problem of wanting to minimize the economic disruption of withdrawing supply and important activities in areas like energy,” he says. “We know we don’t want these assets to operate forever so if there was a legitimate, environmentally friendly asset exit bond, this would encourage investors to support assets to closure. This is really critical, because there are polluting assets we need out of the system, and it’s legitimate for investors to take the return from managing those assets. But there has to be a clear plan for exiting.”

Until recently, sustainable finance instruments have mainly been used by corporates to finance sustainability projects ranging from renewable and clean energy, to water efficiency improvements, reforestation, supply-chain resiliency and manufacturing emission-free vehicles. For example, Verizon became the first US telecom company to issue a green bond in 2019, raising \$1bn for renewable energy, energy efficiency, green buildings, sustainable water management, and biodiversity and conservation.

Tech companies also are utilizing green bonds. Apple has issued four to support global efforts in carbon emissions reductions—the first in 2016 for \$1.5bn, a second of \$1bn in 2017 and two in Europe in 2019 of €1bn each (approximately totaling \$2.2bn). The money is funding new projects that support low carbon design and engineering, energy efficiency, renewable energy, carbon mitigation and carbon sequestration.<sup>36</sup>

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**Mindy Lubber**  
CEO and President, Ceres



Apple also has launched a \$200m Restore Fund in conjunction with Conservation International and Goldman Sachs, which will invest in forestry projects to remove carbon from the atmosphere that will also generate a financial return. In a press release, Lisa Jackson, Apple's vice-president of Environment, Policy and Social Initiatives, said: "Through creating a fund that generates both a financial return as well as real and measurable carbon impacts, we aim to drive broader change in the future—encouraging investment in carbon removal around the globe. Our hope is that others share our goals and contribute their resources to support and protect critical ecosystems."

Tech companies are funding carbon technologies as well. Amazon has the most corporate on-site solar panels in the US, according to the Solar Energy Industries Association, and is investing in wind farms, with over 70 sites generating more than 5.3 million MWh of energy annually. Google, the world's largest corporate purchaser of renewable energy, has matched 100% of its electricity consumption

with the purchase of renewable energy since 2017. And Microsoft has set up a climate innovation fund to invest in companies developing technologies for carbon reduction, capture and removal.<sup>37</sup>

New technology is seen by the US government as key to meeting emissions targets—and to creating new companies, jobs and wealth. Climate Envoy Kerry has predicted a "race to new technology, whether it's direct-air capture or better and more affordable storage, more effective geothermal ... there are technology opportunities that are going to create enormous wealth for those that are venturesome and go out and chase those gold pots."<sup>38</sup>

Companies are getting more creative in how they finance these technologies. In 2020, Irish-American fintech company Stripe announced a plan to let businesses that process payments through its online payments platform to divert a portion of their revenue from each sale to carbon capture technologies and carbon removal projects.<sup>39</sup>

Other recent financing innovations include sustainability-focused special purpose acquisition companies (SPACs), which are shell corporations listed on a stock exchange to raise capital in order to acquire a private company. While SPACs are not new, they have recently surged in popularity as a means of financing disruptive technologies. In the first six weeks of 2021, SPACs raised \$33bn—greater than the total of all SPACs before 2020.<sup>40</sup>

ESG lending is also a growth area, according to Mr. Brown. "Data indicate that 2020 set another record for ESG-relevant debt issuances. That includes continued growth in green bonds, and we saw several coronavirus recovery social finance instruments issued. You're also seeing public institutions like the European Investment Bank and US Development Finance Corporation stepping up their financial engagement. While most volume is currently driven by national governments and supranational organizations, we are also seeing more activity and creativity by private sector financial institutions to use credit vehicles to promote ESG initiatives."

CONCLUSION

# BUILDING THE FUTURE OF SUSTAINABLE FINANCE



As the sustainable finance options for corporates grow, there is also the expectation that governments will increasingly utilize these tools. Greater use by governments supports the wider market by demonstrating commitment to sustainable finance, and by increasing market liquidity. “The growth sector is sovereigns,” according to Mr. Kidney. “It’s still a tiny base—about \$100bn of sovereigns, out of a market of \$55trn—so we have a long way to go before it’s significant. But the UK government has announced £15bn of green bonds each year, starting this year, and the European Commission has announced \$250bn of green bonds to fund the recovery resilience program.”

The amount of money pouring into this space has some worried that the market is at risk of a green bubble. “Investors now know they need to allocate more capital to companies that have low carbon activities, so they’re out there searching,” says Mr.

Fabian. “This is why every green bond of any quality is 10 times oversubscribed. It’s a seller’s market when it comes to issuers at the moment, bringing green assets and green activities to market, because we’ve got a lot of capital looking for a green home.”

Mr. Brown notes that risk may be downplayed. “The reality is that in many power markets renewables and emerging clean technologies are still heavily subsidized either directly through financial subsidies or through policy instruments such as clean energy mandates. If those policies change unexpectedly as a result of more volatile politics or fiscal strain, that can introduce risk that may not have been adequately understood or mitigated by an investor.”

There also is the issue of what these investments are funding. Some critics of the US recovery plan note that it may increase the supply of clean-energy projects and products at the expense of forcing

much-needed reductions in fossil fuel consumption.<sup>41</sup> Mr. Kidney is not so worried about that. “We need to massively grow green and with that drive down costs further, as we’ve already done in solar; fossil fuel investments are then going to wither on the vine,” he says. “The key is whether the green investment is adequately green. If you’re reducing emissions in one area, you’re actually blocking other CAPEX that could reduce emissions even more. For example, Volkswagen might build an improved diesel car factory, which will reduce emissions. But that means they are actually taking CAPEX away from electric cars, so they’re blocking a steeper reduction in emissions. That’s counterproductive. Happily, they are actually building electrics!”

On top of the concern that too much money is piling into green investments, there are concerns that money intended to support sustainability is not doing so—that financial services firms are greenwashing, or saying that an investment is green when it is not. With no single global standard or recognized legal definition, and most criteria based on voluntary compliance, it can be difficult to conclusively say if some bonds are green or not, leading to a growing skepticism of some sustainable finance instruments. “There can be a risk to capital markets because the money influx is not waiting for regulation or these benchmarks to be in place. You could end up with some very disappointed investors who find themselves in a fund that they didn’t expect,” says Mr. Brown.

This is a concern not just with green bonds and investments but other sustainable finance instruments too. “Social bonds are a positive development in the market, but we suffer from some of the same limitations that we’re now finding in the green market—who decides how good is good enough to make this claim,” says Mr. Fabian. “Europe is sponsoring the development of a potential social taxonomy as well, to try and provide, again, a comparative benchmark on how good is good enough for social finance.”

This is where governments have a clear way of supporting the growth of sustainable finance markets. And as the EU takes the lead on defining what constitutes a green or social bond, the US has begun working with IOSCO

to create an international reporting standard for sustainability-related disclosures.<sup>42</sup>

With the Fed now looking at climate risk both at the bank and system level, the Treasury at ESG disclosure by the financial services industry, the SEC at corporate disclosure and the FERC at carbon pricing—among many other areas—the US government is now investigating the best ways to compel the private sector to play its role in transitioning to a low-carbon economy.

The role of the financial services industry is to make it easier both for corporates to issue sustainable finance instruments and for investors to understand what they are investing in. While jumping on the ESG bandwagon might result in short-term gains, financial services companies need to guard against greenwashing, which could damage the reputation of sustainable investments. Instead, they should continue to utilize their ability to create innovative financial products that can help expand the sustainable finance market.

Corporates should also embrace the wider shift in priorities or risk being left behind. As regulation is implemented, any business that is not already decarbonizing will begin to lose market share and miss out on the time and opportunity to transition in a way that allows them to grow and innovate. Just as once mighty corporations went the way of the dinosaurs by failing to embrace digitization, there is now a risk to those that do not take advantage of the opportunities presented by the transition to a low-carbon economy.

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We pride ourselves on developing innovative solutions and can advise on the emerging financial strategies gaining traction worldwide, such as sustainability-linked debt products, ESG, sustainable buildings, carbon credits and impact investing structures. These types of arrangements have been driving global capital investments and help support the cost of sustainable economic recovery, which the International Energy Agency currently projects to be \$1 trillion a year in the next three years.

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