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Environmental Finance

WINTER 2020

Are banks really going green, or just greenwashing?

The key themes of 2021

The big debate: transition bonds

The case for natural capital

Market Rankings winners revealed

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Taking the long view on climate data

HSBC's analysts have been collecting climate data since 2007. Piers Butler and Ashim Paun explain the bank's approach, how the data is used – and what comes next

***Environmental Finance:* HSBC's Climate Solutions Database is one of the longest running corporate climate datasets in the market. Can you explain its genesis?**

Piers Butler, head of Global Research Direct: The bank has long recognised the threat posed by climate change and the responsibility of the finance sector to play its part in addressing it. We established the Climate Change Centre of Excellence in 2007 and, in the same year, HSBC Global Research launched the HSBC Climate Solutions Database.

We screen listed companies of all market caps across all global markets for climate revenue exposure. The database is run jointly by the ESG and Equity Strategy teams, and it involves a year-round process of manual gathering of relevant climate data.

EF: What is unique about the database, and how is it used by your clients?

Ashim Paun, global co-head, ESG Research: The database offers a toolkit that enables identification of climate change-themed investment opportunities. Its long history of curated data shows how themes, corporate activity in climate technologies, and country- and regional-level cleantech industries have developed over time.

Our taxonomy is detailed. The database currently includes 21 climate themes, which are further divided into more than 80 sub-themes and over 100 product categories. From a starting universe of around 14,000 companies, just over 3,000 are currently found to have some climate revenue and enter the database for a detailed analysis.

The raw data can help signed-up clients to identify opportunities, integrate climate change into investment management processes and determine the climate exposure of their portfolios.

We publish related research notes. These may include analysis of market trends in climate themes – i.e. those which look fundamentally more attractive than others. We also publish baskets of companies which give revenue exposure to policy changes, country and regional markets, or to trends, such as the clean transport transition and climate-smart cities.

EF: Its focus on climate-linked revenues is similar to the approach taken by the EU Taxonomy – how aligned are the two approaches?

Piers Butler

Ashim Paun

AP: Almost all the climate themes and technologies in our framework are covered in the EU Taxonomy, including solar, wind, geothermal, marine, hydro, bioenergy, building efficiency and transport efficiency. The six environmental objectives of the EU Taxonomy – climate mitigation, adaptation, sustainable water use, transition to a circular economy, pollution prevention and ecosystem protection – are all also covered, to a considerable extent, by our framework.

However, the two approaches are somewhat different, with the EU Taxonomy also addressing negative ESG impacts, which our Climate Solutions database does not currently do. However, we continually enhance our process, methodology and framework, and this is something we are examining.

EF: Presumably such a broad and long-running dataset generates some useful insights into how the climate theme is evolving – what signals is it sending?

PB: We've seen a substantial increase in the number of companies which our database picks up as generating climate-related revenues – up around four-fold since 2008. There have been particularly sharp rises in companies from emerging regions – LatAm, MENA and Asia.

The total amount of climate revenues generated by companies globally has also been increasing, up by one sixth in the last five years of data. We've also seen a growing number of themes and products as the industrial response to demand for economy-wide decarbonisation has grown and evolved. One we're watching particularly closely is the rise of the hydrogen economy: we see an ecosystem of clean hydrogen production emerging to meet demand from across the economy, including from transport, heavy industry as well as domestic heat.

EF: What plans do you have to develop HSBC's sustainability-related data offering?

AP: Our ESG Database, a new proprietary offering, includes 10 key environmental, social and governance metrics for companies under HSBC coverage. This includes around 1,900 companies globally, with half in Asia Pacific. Data collection is based on publicly available information and undergoes a rigorous normalisation process. The database has a three-year history, from 2016-18.

The 10 key metrics were selected to give a broad indication of the status of ESG information disclosure at companies covered by HSBC Global Research. Using this disclosure as a starting point, our equity analysts look in more detail at sector-specific ESG issues and work towards integrating ESG into their financial analysis.

Our Fragile Planet series of notes and underlying framework of metrics is an additional proprietary offering. It explores climate change vulnerability and resilience across 67 developed, emerging and frontier markets. In our most recent cut, we use 54 datapoints which explore transition risks associated with fossil fuel use and economic dependence, cleantech and industrial innovation potential, physical climate risks and aspects of climate governance.

Our clients can then look at where they have asset exposure across corporate equity and debt, sovereign debt and real assets, to identify either positive drivers or negative risks around specific metrics.

We publish reports each year in which we update the methodology and provide the underlying data to clients. In the most recent, Finland was best placed overall, given a relatively good score on physical risks and very low air pollution, strong institutional quality to govern environmental risks and high levels of innovation in climate-relevant sectors. ■

For more information, please email: askresearch@hsbc.com

Sustainability-linked bonds are 'more powerful than green bonds'

The 'use of proceeds' model adopted by most green bonds came under attack, at a panel at *Environmental Finance*'s *ESG in Fixed Income Europe 2020* virtual conference, amid allegations that it is susceptible to 'greenwashing'.

Speaking at the panel 'Is the use of proceeds model fit for purpose', Jakob Thomae, managing director for Germany at the 2 Degrees Investing Initiative (2DII), described investing in controversial corporates through green bonds, as being "a little bit like having a cousin who is going to school and also taking drugs.

"So, I tell myself I'm just going to give him pocket money for school books [the green bond]. And, meanwhile, the other money he makes he's spending on his drug habit, but I can be happy because I'm just giving him the book money."

The debate over the use of proceeds model comes as a range of new sustainability labels have been introduced in the sector in recent years, including transition bonds, which adopt the use of proceeds model, and sustainability-linked bonds, which do not.

Responding to Thomae's comments, Johanna Koeb, head of responsible investment at Zurich Insurance Company, said: "I do disagree with the examples he made about green bonds because it's somewhat makes them sound like they're all useless, and they're all greenwashing and it's connected to companies as if taking drugs. So that kind of language, I know is nice and provocative, but I think it does injustice to the market.

"The idea of integrity is not necessarily tied to the instrument. Both the 'use of proceed' and the sustainability-linked models are focused around transparency and integrity, and I think both come in more ambitious and in less ambitious forms. It's the duty of investors to make up their minds [about the credibility of the issue]."

Jakob Thomae, 2DII

Johanna Koeb, Zurich Insruance

Ben Caldecott, Oxford University

This year the International Capital Market Association (ICMA), which administers the Green Bond Principles, introduced principles for sustainability-linked bonds, while guidelines on transition bonds were released in December.

Ben Caldecott, director of Oxford University's Sustainable Finance Programme, said: "Sustainability-linked bonds, and indeed sustainability-linked loans, are a really significant development for the future of sustainable finance, and are much more powerful and important than most of the green 'use of proceeds' stuff out there in the market.

"The reason for that is very simple, which is that it creates a clear economic incentive for issuers to change their behaviour. The magic happens when a key performance indicator (KPI) is found that both reduces credit risk, but also improves environmental and social outcomes."

He advocated that the market should pivot away from green bonds and towards sustainability-linked bonds.

But Jens Hellerup, senior director, head of funding and investor relations at Nordic Investment Bank, the largest issuer of green bonds in the region, defended the 'use of proceeds' model: "When we have been speaking with investors, they have been vocal that they would like to get some impact. And that's where the green bond or the use of proceeds bond has been transparent, for showing the impact on where the investor's money is going, and that's why I still think there is room for the use of proceeds [model]."

Eusebio Garre, head of funding at IDB Invest, said: "Both models have their own merits, both for issuers and for investors. The KPI-linked model innovates by appealing to issuers because it does provide them with full flexibility on the use of proceeds, as long as they can commit in a transparent and consistent way to improve very specific KPIs.

"However, I think the jury's still out about how many issuers are going to be able to deliver such a consistent and credible message."

The EU's forthcoming green bond standard also came under fire. Thomae said it was possible that under the standard a corporate could issue a 'use of proceeds' bond while the overall carbon output of the business rises. He described this as "an unfortunate choice". EF

The panel discussion was moderated by Tanguy Claquin, head of sustainable banking, Crédit Agricole CIB

S&P's ESG capabilities boosted by $44bn IHS Markit merger

Financial services giant S&P has agreed to merge with data provider IHS Markit, in a mega deal that will boost S&P's already-considerable environmental, social and governance (ESG) firepower.

The all-stock merger values IHS Markit at $44 billion, including $4.8 billion of net debt. Upon completion, current S&P Global shareholders will own approximately 67.75% of the combined company, while IHS Markit shareholders will own approximately 32.25%.

Both companies have been steadily increasing the ESG-related products and services they offer, so the move will have ramifications for the rapidly consolidating and expanding ESG data market.

Assets that will become part of S&P's operations include IHS Markit's ESG Reporting Repository, an online platform for the collection, storage and dissemination of corporate ESG data and reports.

IHS Markit earlier this year launched country-level data for more than 200 countries with a 10+ year observation period for 40 key sovereign risk factors. In 2019, it developed a service to provide ESG information specifically for private equity firms, their investors and their portfolio companies.

In the same year, IHS Markit launched a Global Carbon Index which tracks the performance of the largest and most liquid carbon markets – the European Union's Emissions Trading System, the California Cap-and-Trade Programme, and the Regional Greenhouse Gas Initiative on the east coast of the US.

IHS Markit is also a registry provider for the voluntary carbon markets, a role for which it has regularly been recognised in *Environmental Finance*'s Voluntary Carbon Market Rankings.

Meanwhile, S&P's sprawling business consists of credit ratings, financial markets data, Platts energy data and indices. It also provides ESG services such as its Global ESG Scores and green bond assessments, the S&P Global Ratings Green Evaluation.

Currently S&P's Global ESG Scores assess the industry-specific ESG factors expected to have an impact on a company's growth, profitability, capital efficiency and risk exposure. The scores contain coverage of 7,300 companies, representing approximately 95% of global market capitalisation.

The scores are powered by the SAM Corporate Sustainability Assessment (CSA), an annual engagement capturing around 1,000 data points per company. A media and stakeholder analysis further captures a company's involvement and management of ongoing ESG issues or crisis situations. S&P bought SAM's ESG research capability from Robeco earlier this year, the latest in a series of ESG-related acquisitions.

In 2016, S&P Dow Jones Indices (DJI) acquired environmental data provider Trucost. EF *Christopher Marchant*

COMPREHENSIVE SOLUTIONS		S&P GLOBAL	IHS MARKIT
DATA & PLATFORMS	ESG scores with time series data	✔	
	Workflow and reporting platforms		✔
	Emissions database		✔
BENCHMARKS	ESG equity indices	✔	
	ESG fixed income indices		✔
	ESG evaluations	✔	
	Price benchmarks (carbon, hydrogen)	✔	
ANALYTICS	Climate and transition scenarios	✔	
	Plastics circularity		✔
	Asset valuations		✔

▲ Company offerings (Source: S&P Global)

Deutsche Börse buys majority stake in ISS

German financial exchange operator Deutsche Börse has acquired a majority stake in Institutional Shareholder Services (ISS), valuing the corporate governance and environmental, social and governance (ESG) data provider at over $2.2 billion.

The Frankfurt Stock Exchange operator said the partnership of its Qontigo arm – which combines its STOXX and DAX index business with its Axioma analytics unit – with the capabilities at ISS will provide additional ESG opportunities for growth in the fast-growing sector. In particular, the deal will allow Deutsche Börse to provide stiffer competition for MSCI and other providers of ESG indexes. Ironically, MSCI preciously owned ISS.

Deutsche Börse chief executive Theodor Weimer said: "Together, ISS and Deutsche Börse have complementary ingredients to become one of the globally leading ESG players of the future."

ISS has been one of the most acquisitive players in the ESG data market. In February 2019, it bought CAER, a provider of ESG research on Australasian companies. Two and a half years ago, ISS bolstered its ESG offering through the acquisition of German ESG data provider and second opinion provider Oekom. The deal came just months after ISS bought the investment climate data division of South Pole Group. In 2015, it acquired green advisory firm Ethix, expanding its environmental services. *Ahren Lester*

Looking ahead to 2021

Peter Cripps assesses some of the key trends in sustainable finance to look out for over the next year

1. COP26

Whether it turns out to be a success or a failure, one of the key moments of 2021 will be COP26, in Glasgow in November.

The landmark Paris Agreement, at COP21 in 2015, allowed countries to set their own targets. But as part of the deal, countries were expected to ratchet up their commitments every five years.

That was supposed to happen in 2020 at COP26, but it was delayed a year because of the coronavirus. Now there is even more urgency surrounding the event.

Being held in the UK, it is hoped that this COP will have a particularly strong focus on finance, led by former Bank of England governor Mark Carney, who has been appointed the Prime Minister's Finance Adviser for COP26. Climate finance and the role of financial institutions and central banks will therefore be under the spotlight.

Another key aspect to watch will be how Article 6 is progressed. It should clear up the role of carbon markets in the agreement, including the extent to which countries are allowed to use offsets to help hit their targets.

Also, look out for developments on the Just Transition (see below).

2. Race to net-zero carbon

A Race to Zero Campaign was launched in June by the UNFCCC, as pressure mounts to take action ahead of the COP.

There have already been numerous net-zero commitments in recent weeks, including:

- The UK in December raised its 2030 target to 68% compared to 1990 levels, up from 53% previously, to help it meet its 2050 net zero target. It claims this would be the fastest rate of decarbonisation of any major economy.
- Japan in October said it will cut emissions to net zero by 2050, up from its previous target of 80% by the same date.
- South Korea in October also pledged a 2050 net zero target.
- China, the world's biggest GHG emitter, in September said it would hit net zero before 2060. This was its first net zero target.

Paris-based policy research institute IDDRI argues that net-zero targets are the legacy of COP21.

Its recent paper on climate neutrality points out: "As of November 2020, more than 110 countries have committed to a net-zero objective. These represent in total

"More pension funds and asset managers will make net zero commitments for 2050, with near-term targets. The Net Zero Asset Owner Alliance will dominate, as the most serious and influential of these commitments"

Fiona Reynolds, Principles for Responsible Investment

around half of the world's GDP and global CO_2 emissions, and include notably the totality of the G7 and a majority of the G20.

"Carbon neutrality has also become a reference for a growing number of non-state actors (NSAs). For example, 1,100 companies have adopted carbon neutrality goals and joined the UK COP26's Race to Zero Campaign alongside other NSAs.

"It is stunning to see how fast this concept of carbon neutrality, barely discussed beyond experts before 2015, is now mainstreamed and widely understood by leaders and society."

Investors are not immune from this trend. The Net Zero Asset Owners Alliance is already gaining traction, with 33 signatories representing $5 trillion of assets, which have committed to reduce their portfolio emissions to net zero by 2050.

Fiona Reynolds, CEO of the Principles for Responsible Investment, predicts: "More pension funds and asset managers will make net zero commitments for 2050, with near-term targets.

"The Net Zero Asset Owner Alliance will dominate, as the most serious and influential of these commitments. Pension funds will realise that engagement alone will not get them to net zero – they need to move investments from brown to green and invest in negative emissions technologies."

3. The US reawakens

After four years in the wilderness, the US is expected to push forward with action on climate change.

President-elect Joe Biden has pledged to rejoin the Paris Agreement, and has made climate change one of his top four priorities.

Despite the current administration having ignored climate change, there was a growing trend towards climate action at city, state and company level.

What will Biden do to make up for lost time?

Biden's website says: "As president, Biden will lead the world to address the climate emergency and lead through the power of example, by ensuring the US achieves a 100% clean energy economy and net-zero emissions no later than 2050."

So, will he set an official net zero target, for example? What will his Green New Deal look like?

Will the change in attitude towards climate also boost the uptake of ESG in the country?

4. Central banks step up their focus on sustainability

Central banks have in recent years become key players in sustainable finance.

The Central Banks and Supervisors Network for Greening the Financial System (NGFS) now has members accounting for more than 60% of global emissions.

In an interesting development, it has been widely reported that the US Federal Reserve has applied to join the NGFS.

While it now seems that many central banks accept that climate change is a legitimate part of their remit on financial stability/systemic grounds – this was not the case five years ago – it remains to be seen how far they will go in promoting this cause.

Eurozone banks will, in 2022, be stress-tested on their ability to withstand climate-related risks, the European Central Bank has said.

In the UK, the PRA is starting to stress test banks and insurers, while the FCA is making TCFD reporting mandatory.

The NGFS has devised scenarios that should help with TCFD-style reports and have been used to inform stress tests by the French central bank.

A recent report by the London School of Economics, which examines the pandemic response measures by central banks in 180 countries found that just one – Fiji – takes climate and sustainability factors into account.

Since then, Sweden's Riksbank has said it will start to exclude corporate bonds from its asset purchases on norms-based criteria, such as breaches of the UN Global Compact.

5. Natural capital concerns

Accelerated by the Covid-19 pandemic, investors are rapidly waking up to the dangers posed by biodiversity and habitat loss.

There have already been numerous developments, such as a report by the Dutch central bank saying that the country's financial institutions held €510 billion ($600 billion) of investments that were exposed to

biodiversity risks.

Earlier this year, four French fund managers — Axa Investment Managers, BNP Paribas Asset Management, Mirova and Sycomore Asset Management – launched an initiative to develop a tool to help investors integrate nature and biodiversity considerations into their decision making, while a group of Dutch financial institutions established the Partnership Biodiversity Accounting Financials to measure the positive impact of investments in biodiversity.

2021 could be the year of action.

There are hopes that the UN Biodiversity Conference in Kunming, China, between 17-30 May will lead to commitments for 'no net biodiversity loss by 2030'.

The Task Force on Nature-related Financial Disclosures (TNFD) this year established an informal working group to help financial institutions better understand and report their nature-related risks and impacts. In collaboration with the corporate sector, reporting frameworks will be developed in 2021, and tested early in 2022 before being made available worldwide. The Task Force will be fully established in the second half of 2021.

This trend will likely lead to more products to address biodiversity loss, particularly those that focus on land use and the blue economy.

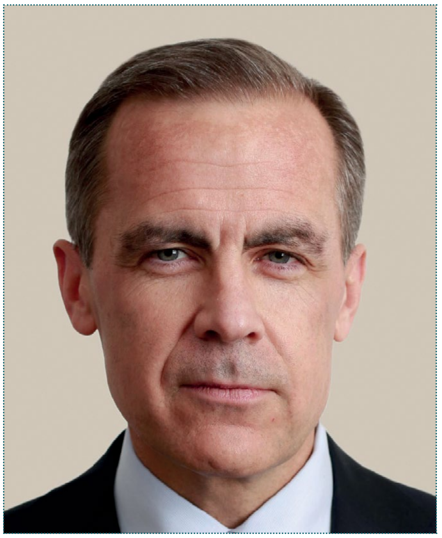
For example, Pollination Capital and HSBC have launched a $1 billion fund to focus on natural capital solutions (see page 24).

Environmental Finance has launched a channel on natural capital to make stories on biodiversity and other aspects of natural capital easier to find.

6. The labelled bond market at a crossroads

It has been an interesting year for the labelled bond market. The green bond market has finished with a flourish, despite a blip as a result of the pandemic, while the social bond market enjoyed a stellar year, with a seven-fold rise in the value of issuance compared with the previous year.

A recent note from Barclays said ongoing government stimulus could help boost labelled bond supply. It points out that the



▲ Mark Carney: Investors should be given an automatic advisory vote on companies' transition plans

EU has announced plans to raise, via green bonds, some 30% of the funds it intends to borrow from public markets and has already issued over €30 billion of social bonds to help protect jobs.

"Overall, we expect sovereign and SSA issuance to make up a growing share of overall [labelled] bond issuance in 2021, as governments find ways to fund their large stimulus spending," the note said.

Meanwhile, the Sustainability-linked Bond Principles were launched in June and there have already been six issues since, raising more than $6 billion combined, according to *Environmental Finance*'s Bond Database.

A transition finance handbook was released in December. However, debate rages as to whether such a label is needed, or whether the standard green bond label can incorporate transition.

The labelled bond market is evolving fast but is also under intense scrutiny to prove that it 'makes a difference' and is not just a marketing gimmick.

Sustainability-linked bonds are gaining traction but to what extent will they help this market grow, or will they cannibalise it? The green bond market could also take a hit to issuance volumes as a result of the EU's forthcoming green bond standard. However, it could boost credibility.

7. Implementation of the EU Action Plan

The EU's ambitious and sprawling Sustainable Finance Action Plan is the biggest concerted policy effort to implement sustainability into the financial system.

But as its efforts start to bear fruit, what impact will it have on the market?

It has so far made progress on initiatives such as a ground-breaking taxonomy of climate mitigation and adaptation activities, which will underpin initiatives such as a green bond standard. Its taxonomy is out for consultation, but it leaves the highly political question of nuclear in the balance – could it find its way back into the programme?

It has appointed a 'Platform' on sustainable finance, which will start the work of extending the taxonomy into other environmental and social areas. It is also set to consider looking at a so-called brown taxonomy – covering activities that are environmentally harmful.

It has published low-carbon and transition benchmark criteria – will this trigger a raft of new indexes, and how extensively tracked will they be?

Sustainability disclosures will begin in 2021 but many are claiming that there is insufficient data to allow them to report, particularly asset managers.

Perhaps most importantly of all, will its regulations and initiatives be emulated elsewhere around the globe, making the EU the standard bearer of sustainable finance?

8. Transition

Transition will remain the real 'buzz word' in 2021. After all, the aim of the game is to move away from 'business as usual' to something more sustainable, preferably alignment with the 1.5°C goal of the Paris Agreement.

Mark Carney recently suggested investors could be given an automatic advisory vote on companies' net-zero transition plans, similar to 'say on pay' shareholder rights to vote on executive remuneration.

However, it is a subject that continues to be fraught with controversy.

The real problem is that we still don't know what the scenarios are or what the

policy pathways are. It will be interesting to see if regulators, perhaps through the NGFS, build some central scenarios under which everyone must report.

While some feel that a separate transition finance label is needed, others argue that the EU taxonomy of sustainable finance activities should suffice because it contains stretching targets for sectors that need to transition, such as cement and steel.

9. Just transition

Countries that have signed up to the Paris Agreement have agreed to "take into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities".

Companies must also take notice. In November, energy utility SSE published what it says is the first company Just Transition plan, following pressure from investors to spell out how it plans to support employees, consumers and its supply chain as it cuts its emissions to net zero by 2050.

Its 19-page Supporting a Just Transition document sets out 20 principles across five key themes: good green jobs; consumer fairness; building and operating new assets; looking after people in high-carbon jobs; and supporting communities.

To coincide with the publication of SSE's strategy, investors Friends Provident and Royal London published a set of 'expectations' for energy utilities when developing just transition strategies. Colin Baines, investment engagement director at Friends Provident, told *Environmental Finance* the investor has been working with Royal London on similar engagements with EDF, Eon, RWE, Centrica and Iberdrola-owned Scottish Power.

Expect more focus on the Just Transition in the build-up to COP26.

10. Impact – can it go mainstream?

Impact investing is an exciting and rapidly growing part of the sustainable finance market. Some argue it is the next phase of sustainable investment, following ESG integration.

Big firms such as Bain are lending credibility, in the form of scale, with the launch of $1 billion impact funds.

But the extent to which impact can become a mainstream investment category, rather than a niche, remains to be seen. After all, a case can be made for ESG because it can be used to help mitigate risks. But making investments that produce a positive impact on people and planet alongside a financial return is a harder sell to investors with fiduciary duties.

The PRI is incorporating "real world outcomes" into its reporting next year, in a nod towards where the market is heading. However, this has proved controversial, with Norway's giant sovereign wealth fund warning of mission creep.

A report from law firm Freshfields into impact investing, which has been delayed until 2021, could make a significant difference – in the same way that a similar report published in 2005, around ESG and fiduciary duty, helped boost the uptake of ESG.

Environmental Finance has its own dedicated Impact channel.

11. Voluntary carbon markets set to boom

A Mark Carney-initiated taskforce focused on rapidly scaling up global voluntary carbon markets in November opened to consultation on its initial report on forming a global carbon market.

The Taskforce on scaling voluntary carbon markets (TSVCM) said voluntary carbon markets must jump 15-fold by 2030 to achieve global climate goals of limiting global temperature rises to 1.5°C by the end of the century.

Although recognising that the voluntary carbon market has made "significant strides" since its early days in both market functioning and credit integrity, in order to be able to scale significantly, "structural challenges" need to be solved, including a lack of consistency and price transparency.

The Taskforce outlined 17 recommendations across six topics. These include establishing core carbon principles (CCP) that could be used to create standardised benchmark contracts to be listed on exchanges.

As well as companies making net-zero commitments, more investors are turning to offsetting to help them claim that portfolios are 'green'.

But there are concerns around whether offsetting is really the right answer. The 'Financing credible transitions' paper from Credit Suisse and Climate Bonds Initiative doesn't consider them to be a serious solution, for example.

The Taskforce will issue a final report in January, including a roadmap for implementation.

The market seems set for rapid growth, and prices could also be pushed up by the standardisation of credits.

12. Consolidation of ESG reporting standards

In November, we learned that the Sustainability Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC) are to come together to form a new organisation, the Value Reporting Foundation.

The merger is a significant step towards simplifying the corporate reporting landscape, linking the IIRC's integrated reporting framework with SASB's disclosure standards.

The Value Reporting Foundation, which will be led by SASB chief executive Janine Guillot on its formation 'in mid-2021' could eventually integrate other entities, and the Foundation and the Climate Disclosure Standards Board (CDSB) have jointly signalled interest in entering into exploratory discussions in the coming months.

The merger will also advance the work of the Statement of Intent To Work Together Towards Comprehensive Corporate Reporting. Published in September, this was a summary of alignment discussions among leading sustainability and integrated reporting organisations including the IIRC and SASB as well as the CDSB, CDP and the Global Reporting Initiative (GRI).

Guillot said: "We stand ready to engage with the efforts of the IFRS Foundation, IOSCO, EFRAG, and others working towards global alignment on a corporate reporting system."

In July this year, SASB and the GRI also announced a collaboration to show how their two standards can be used together to help ease the reporting burden.

So, watch this space! **EF**

ESG Ratings in fixed income: A good start

ESG ratings should only be used as a first step when it comes to assessing issuers, a panel at *Environmental Finance*'s ESG and Fixed Income 2020 conference heard. Ahren Lester reports

Providers of environmental, social and governance (ESG) ratings have been urged by fixed income market participants to be more transparent with their underlying data and methodologies, so that the tools can become more credible and convenient.

Speaking at *Environmental Finance*'s ESG in Fixed Income Europe 2020 virtual conference, Moody's Investors Service ESG senior vice-president Swami Venkataraman said "the scores are important, but I think equally important – or perhaps even more important – is the reasoning and the thinking behind the scores".

Ørsted ESG engagement head Christine Sobieski added that there is increasing interest from banks using ESG ratings in sustainability-linked loans, raising the prospect that they could find their way more extensively in the fixed income market through sustainability-linked bonds in the future.

"This is a really positive development," she said. "But I would say that in order for us, as a company, to be more likely to actually use ESG ratings in the sustainability targets that are linked to such financial instruments, I think that we will need to see more transparency and predictability around the methodologies used by ESG ratings."

She added that ESG ratings agencies adjust their methodologies regularly, sometimes resulting in changes to the ESG rating for a company. Issuers are rarely informed about when or how these changes happen, however.

Federated Hermes research and sustainable fixed income head Mitch Reznick warned that using ESG ratings as the key performance indicator on which the coupon of sustainability-linked bonds hinge should be avoided for as long as there is the risk that issuers could go "ratings shopping" to find the most favourable score to use. This is an issue compounded by the lack of transparency on data and methodologies.

Importance of ratings analysis

However, Reznick said ESG ratings are an "important part" of the analysis, assessment and pricing of ESG risks as a quick and easy way to grab information for an initial look.

He told *Environmental Finance*, however, that it was a "colossal mistake" for investors to merely run ESG ratings over their portfolio.

ESG Portfolio Management managing partner Christoph Klein agreed that ESG ratings are "just a starting point" in his ESG fixed income investment process, effectively serving as an initial exclusion filter, before digging deeper into the company. Klein said the firm starts by selecting only BBB or higher ESG-rated firms before applying additional exclusion criteria and then measuring their impact on the UN Sustainable Development Goals (SDGs) and climate risk.

"It is just impossible to get full ESG detail from a first look in a note when looking at a universe of 20,000 companies," he said. "So, we need to start somewhere, and that is where we use ESG ratings to screen the issuer. But it is just the first step, and all the other analysis follows after that."

▲ Swami Venkataraman, Moody's Investors Service: look beyond the ESG scores

Mixed messages

Reznick emphasised that ESG ratings come with significant downsides – not least being that not all ESG ratings "deliver the same message" on ESG for the same issuer. One rating may focus on the financial materiality of their ESG profile, whilst another may be focused on

▲ Christine Sobieski, Ørsted: Need for more transparency and predictability around methodologies

▲ Mitch Reznick, Federated Hermes: ESG ratings are an "important part" of the analysis

▲ Christoph Klein, ESG Portfolio Management: Ratings are "just a starting point" in the investment process

the ESG values woven into the fabric of the company itself. The outcome is that there is often limited correlation between ratings.

Venkataraman agreed, explaining that Moody's has its own ESG scores increasingly integrated into its core credit reports which focus on financial materiality. Meanwhile, Moody's owns V.E, formerly known as Vigeo Eiris, which takes a "broader perspective" on ESG Ratings and looks beyond financial materiality.

"We acknowledge the need for that and why some investors may want to have that perspective as well," he said.

In August 2019, the Massachusetts Institute of Technology published a research paper of five ESG raters – V.E, KLD, RobecoSAM, Sustainalytics and Asset4 – which showed an average correlation of 0.61 between their ESG scores. In contrast, the correlation of the credit ratings of Moody's Investors Service and S&P Global Ratings – the two main providers – stood at 0.99.

Venkataraman said that this lack of correlation was not a case of "factual divergence" but rather of different emphasis. As an example, he pointed to US electric vehicle maker Tesla.

"Do you say they have an excellent climate profile? Do you say that they have a controversial governance track record? Do you say that it may be electric cars, but the cobalt is being mined using child labour in the Democratic Republic of Congo? Oftentimes, ESG investors are not all the same and they can give importance to different aspects of this, just as ratings do," he said.

Looking forward

There is also the challenge of the largely backward-looking data underpinning the ESG Ratings. Sobieski said that an ESG Rating – which usually lasts a year – can be based on data that is as much as two years old. Even the freshest ratings, however, only offer a snapshot of the ESG profile of a company at that moment in time with little consideration for their forward-looking ESG trajectory.

"Maybe I build a portfolio of low rated bonds from an ESG point of view, but I think these are the transition companies that are moving in the right direction," said Reznick. "It makes sense to be in those corners of the market as well as with the leaders. I think that is how you affect change as well."

Klein agrees that it is "absolutely clear" that focusing on transition is the way to drive positive ESG change. "If you only buy the best, it can be expensive. It is all about your future potential – both in price terms, but also on ESG and sustainability terms."

'Here to stay'

Reznick suggested ESG ratings may have been "eclipsed" by the "increasingly sophisticated" way investors now handle ESG. He said investors are asking about carbon footprints of a portfolio, or other socially responsible investment metrics, which ESG Ratings often do not provide. Instead, he is turning to tools, such as those provided by CDP and the Transition Pathway Initiative (TPI).

ESG ratings are "here to stay," he adds, but "every analyst and portfolio manager needs to really dig further – talk to the companies and use the other primary sources of information that are out there".

Venkataraman said this approach was not hugely different from how credit ratings are used by investors. "Credit rating agencies put out our ratings – and investors want them and use them – but investors have their own credit analysis process in coming up with their own judgement. I see the use of ESG Ratings as being very analogous to that."

So, is it time to regulate ESG ratings like credit ratings? Reznick does not think this is required until ESG ratings have a similarly material financial impact on pricing and valuations as their credit cousins.

"I'm not sure we are there yet," he said. EF

Green bonds begin to flow from emerging market banks

A pioneering initiative by the IFC to encourage green bond issuance by banks in emerging markets is bearing fruit, reports **Graham Cooper**

Green bonds have now been issued by more than 65 countries. But the market remains dominated by development banks, European sovereigns and utilities, and government agencies in Europe and the US.

Issuance from emerging markets has grown rapidly in the past year but, aside from China and a few sovereign issues, the bulk of these bonds have come from the energy sector.

This is starting to change, however, thanks largely to an educational initiative aimed at financial institutions in emerging markets which forms part of the International Finance Corporation's (IFC) Green Bond Technical Assistance Program (GB-TAP). Organisations attending the course have issued eight bonds since August 2019, raising a combined $228.25 million.

GB-TAP was launched in January 2019 to complement the Amundi Planet Emerging Green One (Ego) fund – the world's largest emerging market green bond fund – in which the IFC is a cornerstone investor. While the $1.42 billion fund created demand for emerging market green bonds, the GB-TAP was designed to create supply.

The training course at the heart of GB-TAP was initially run as a two-day event in Singapore and Thailand, then as a five-day course at the Stockholm School of Economics in June and October 2019. Attendance on the Stockholm courses was by invitation only and preference was given to banks that were already issuing in the traditional bond market.

The course tutors explained why green bonds could be a better option for such banks, by helping them broaden their investor base and motivate their staff, in addition to the environmental benefits, says Jean-Marie Masse, chief investment officer at the IFC. "We teach them the benefits of green bonds and how to issue them."

The training was designed in partnership with the International Capital Market Association (ICMA) and gives bankers a grounding in the Green Bond Principles and the importance of green bond issuers' disclosures to investors, with case studies and workshops helping to illustrate best practice.

> "We teach them the benefits of green bonds and how to issue them"
> Jean-Marie Masse, IFC

In total, 19 banks from 11 countries were represented on the course: Thailand, Philippines, Indonesia, Georgia, Armenia, Turkey, South Africa, Nigeria, Benin, Togo and Senegal, says Johan Nordlund, programme director – finance, at the Stockholm School of Economics Executive Education. They were joined by two representatives from Symbiotics, a European firm that helps arrange financing for micro, small and medium size enterprises in emerging and frontier markets.

Covid-19 has brought an end to the in-person events but the course material is now being converted into an online format. This will first be presented to bankers in Eastern Europe and Africa and then, on a separate occasion, to potential issuers from Latin America, says Masse.

The bonds issued since the Stockholm training fall into two groups. Four were issued by Turkish banks and four were arranged by Symbiotics.

Symbiotics provides advice to banks, pension funds and other institutional investors about sustainable and inclusive finance and serves as an asset manager for their 'impact' investments, particularly in developing countries. Two Symbiotics executives attended the Stockholm course, so "we were training the trainers," notes Masse.

All four Turkish deals were labelled green, sized at $50 million, and listed in Dublin. They varied in tenor between four and 10 years. The Ego fund has allocated about 3% of its assets to each of them.

The Symbiotic bonds were smaller in size – ranging from $3.5 million to $10.25 million – and their proceeds were used for loans to financial institutions in Sri Lanka, Peru and India. The latter two were labelled as social bonds while the Sri Lankan deals were both labelled green. One of the Sri Lankan bonds was issued in US dollars but the other three bonds were issued in local currencies.

Symbiotics used a special purpose vehicle – Micro, Small and Medium Enterprises Bonds SA – to issue these bonds, which are all listed in Luxembourg. This structure allows a single issuing framework to be used for all four bonds, thus minimising transaction costs, notes Dirk Dijksma, Symbiotics' Geneva-based head of innovation investments. Each bond is linked to a single loan, he explains.

"I see huge potential" in this model, says his colleague Mattia Corato, a London-based portfolio advisor. Two more bonds – both from Armenian banks – were coming to market as this article went to press. One was labelled green, the other sustainability. EF

Transition bonds

Yes, argues Marisa Drew of Credit Suisse

First, let me explain why we launched in September the Financing Credible Transitions white paper with the Climate Bonds Initiative (CBI). The documents present a framework designed to support the rapid growth of a transition bond market and define what a transition label should encompass.

I was hearing directly from institutional debt investors who were keen to put more money to work in sustainable strategies generally, but also specifically in supporting transition opportunities. In addition to wanting to see more brown-to-green corporate issuance, they wanted to see a broader definition and more diversity in the 'uses of proceeds' in the green bond market and participation from more issuers along the credit curve.

In respect of transition investment opportunities, investors were also beginning to grumble about the fact that there are many self-labelled 'transition' or other types of labels cropping up, but with no consistency to the labels and no agreed methodology or market-adopted framework to govern the transition market and help protect it from greenwashing.

Meanwhile, from the issuer community, I was hearing a great deal of frustration from high carbon-emitters that really do want to make the investment to transition, but do not qualify under existing green bond market principles to access that market. These companies recognise that they need a huge amount of investment to migrate their business models and would like to access a dedicated pool of transition-aligned capital.

In response, we surfaced these issues to the CBI, who agreed that there was a gap in the market. We first explored the possibility to expand the existing Green Bond Principles (GBPs) in an attempt to bridge this gap and meet these stakeholder requests. There was, however, a general reluctance to adjust the GBPs because they are well understood by the market and operate effectively and efficiently at scale.

Instead, we birthed the notion of creating a 'sister market' to sit alongside the green bond market, with a specific framework and robust set of principles for those dedicated to a sustainable transition.

And after a year's work we came out with a paper to articulate this vision. For issuers looking to use the transition label, it prescribes five principles (See box).

Given the investment needs of trillions of dollars to ultimately get us globally to a net zero emissions status, we wanted this framework to have a broad reach and to apply not only at a use of proceeds level but also at an enterprise level – we are trying to encourage whole-business model transitions in addition to investments in greener activities or projects. And we want to make sure that the transition label and concept is not limited to debt; we think this should be applicable to equity issuances, asset-backed structured solutions, and so on.

We actually think sustainability-linked bonds and loans represent a subset of transition finance that can neatly fall under our proposed transition framework and ethos.

They are not mutually exclusive – we think they're actually complementary. That said, not all issuers or investors want to see their coupons linked to sustainability KPIs, and linking the cost of capital to KPIs does not work for all asset classes.

We want to encourage the broadest, most inclusive lens when thinking about the provision of capital to fund transitions while still protecting the integrity of the markets to allow them to scale with confidence. EF

Marisa Drew is chief sustainability officer and global head of sustainability strategy, finance and advisory at Credit Suisse.

The five transition principles

The Financing Credible Transitions paper lays out five principles for an ambitious transition:

1. Align with zero carbon by 2050 and nearly halving emissions by 2030;
2. Be led by scientific experts and not be entity- or country-specific;
3. Be sure that credible transition goals and pathways don't count offsets;
4. Include an assesment of current and expected technologies which can be used to determine a decarbonisation pathway;
5. Be backed by operating metrics rather than a commitment or pledge.

Is a transition bond label still needed, now that the Sustainability-Linked Bond Principles have been published?

No, argues Jacob Michaelsen at Nordea

Note: For the purposes of this article, the term Transition Bond refers to 'use of proceeds' bonds only

Let me be clear to begin with – 'Climate Transition Finance' is arguably the most important topic for the sustainable finance market to deal with in the coming 12-36 months. And rightfully so.

We have already spent considerable time on accepting Green into the mainstream, and have even gone to great lengths in codifying this in a Taxonomy as part of the EU's Sustainable Finance Action Plan. This inevitably leaves the topic of 'Brown' or 'Transition' (recognising that these terms are not synonymous) as the next, but not final, frontier.

Indeed, this was recognised by the EU-appointed Technical Expert Group on Sustainable Finance in their final report on the Taxonomy, where they highlighted that a fully realised Taxonomy should incorporate also "technical screening criteria for significant levels of harm to environmental objectives. (...) So-called 'brown' Taxonomy criteria."

The case against 'Transition Bonds'

With that said, let me also be clear and state that I do not believe the market currently needs a new Transition Bond label. The key reasons for this are:

1. 'Transition' is already baked into the Green bond market. This is eloquently formulated in the 'Shades of Green'[1] methodology, where, in essence, anything that is not 'Dark Green' represents transitioning.
2. Green bonds are/should be for everyone. To this point, it is somewhat hollow to say that an oil company can't issue a green bond if you would buy a green bond from any of the major banks, most of whom have significant oil-related exposure on their balance sheet. In any case, isn't a green bond from, say, an oil company seeking to invest into renewable energy not the purest form of transition there is?[2]
3. In the absence of clear and well agreed-upon definitions for what constitutes a relevant transition (such that an updated Taxonomy would provide[3]) the risk of 'Greenwashing' goes up. To this extent, it seems to me that, from a broad market perspective, 'Transition Bonds' carry more potential downside risk than we can hope to gain from them.

Sustainability-linked structures are better suited to address transitioning anyway

More specifically to the point of this article, I maintain that Sustainability-Linked Bonds (SLBs) are better suited to deal with transitioning than Transition Bonds, for the simple point that sustainability-linked structures are forward-looking in nature, and use-of-proceeds are not (necessarily). That is, SLBs require improvements on a KPI – or the transitioning from something to something better.

That is in contrast to Transition Bonds, where we cannot guarantee overall improvement of the issuer, but simply that the underlying projects are "not as dirty as they could be".

Obviously the market for SLBs is still in its infancy and one could certainly highlight that we need better definitions of what "material" and "ambitious" means – especially in the context of transitioning. That said, I maintain that, for the time being, we are better off, as a market, to give SLBs our full attention instead of diverting it to a label that is not fully understood and which may call into question the validity of the overall labelled bond market. That hardly seems a sensible move to me. EF

▶ Jacob Michaelsen is head of sustainable finance advisory at Nordea.

1. As popularised by 'CICERO Shades of Green', the second party opinion provider
2. I recognise that many would argue that this would require a credible transitioning story away from fossil-based energy production. A valid point, but one that deserves more nuance than can be afforded here.
3. There is already a number of credible and relevant initiatives providing guidance on this, such as the Transition Pathway Initiative

Impact is part of pension trustees' fiduciary duty, says coal pensions CIO

Managing a pensions investment portfolio in line with environmental and social impact considerations can be part of trustees' fiduciary duty, **Michael Hurley** reports

Mark Walker, who as CIO of the UK's Coal Pension Trustees (CPT) manages two pension pots with a combined £21 billion ($28 billion) in assets – the British Coal Staff Superannuation Scheme and the Mineworkers Pension Scheme – said on a webinar hosted in November by the UK's Impact Investing Institute: "I'm no lawyer, but I do think [the pensions industry] does get mixed up sometimes, from a fiduciary duty perspective, when we separate things into financial and non-financial aspects."

Walker was speaking alongside Denise Le Gal, chair of the £30 billion Brunel Pension Partnership, and Melanie Cusack, a professional independent trustee, on a webinar that asked: Fiduciary duty: a duty to care or a duty of care?

Attendees heard why understanding the positive and negative environmental and social impact of investments is increasingly becoming an important consideration for trustees.

"If the world is changing, capital flows are changing and we may have to make money or manage risks in a different way in the future, are these financial and non-financial issues really unconnected? Perhaps they're the same thing, and the non-financial issues end up being financial in the future.

"If I've got stranded assets in my portfolio, because of environmental, social, or changing consumer preferences and behaviours, that's a risk to returns – so those are financial," Walker said.

> "It's our fiduciary duty to consider the members' expectations. [We] should be expected to look at socially responsible investing and, better yet, to make a positive impact"
>
> Melanie Cusack, a professional independent trustee

He said trustees' fiduciary duty includes being receptive to the wishes of their beneficiaries when it comes to environmental and social impact. CPT members tend to prefer a focus on jobs when considering low-carbon investments, Walker said: "The coal industry [in the UK] wasn't closed down for environmental reasons [when it was privatised in 1994], but it had such an impact on jobs that when we think about the energy transition, the social side, relating to jobs and communities, should be a part of what we do.

"The question comes back to: do we have any products out there that can deliver those financial returns we want but also have an impact from a green and jobs & communities perspective? Who is thinking about those things? There needs to be leadership. If that's something we want to do, could we find somebody to work with, and in what asset classes and so on?"

CPT trustees do not currently target asset classes or individual investments with positive sustainable or "impact" attributes as a primary objective, its responsible investment policy says, but the scheme "already has certain investments that have a sustainable focus".

Because CPT's assets are managed by third party investment managers, the main focus for ESG integration is the evaluation and assessment of those external managers' policies and procedures.

Denise Le Gal, chair of the £30 billion Brunel Pension Partnership pool of 10 UK pension funds, who was speaking on the same webinar, said: "Everything we invest in has an impact. The question is: is it good impact, or bad impact?

"Expectations around fiduciary duty are different in different places. But one common element is that it is no longer

> "Impact will only become more relevant. Post-Covid-19, for example, we sense a heightened consciousness around climate change and human capital, to name a few issues. And we want to do something about that"
> Denise Le Gal, Brunel Pension Partnership

just about hardcore financial returns, it's increasingly more nuanced around impact and outcomes.

"We believe impact will only become more relevant. That requires pension funds like ours to go along the road that the leaders are setting and also go one step further, to help influence and shape policies as they are set by governments and regulators [as they relate to impact].

"Post-Covid-19 for example, we sense a heightened consciousness around climate change and human capital, to name a few issues. And we want to do something about that."

However, there is a limit to fiduciary duty as it relates to impact, Le Gal said: "We have to be careful as a collective that the momentum doesn't go too far. If you go too fast, for example by excluding so many [companies from investment] that you lose any meaningful engagement, one might risk being in breach of the trustees' duty to care. Trustees are not NGOs.

"For us, fiduciary duty is all about managing fiduciary risk. If you focus on risk [and] financial return in a balanced way you should get it right."

Le Gal added that many of the 10 underlying funds in the Brunel partnership "are shifting their focus from traditional asset classes to drive impact and outcomes".

"They now want us to make all of our portfolios sustainable and responsible. This is a big challenge and not as easy a task as it may seem, as it looks very different for different asset classes, and the impact will be different for each of these, but the point remains: to maximise impact, our clients and Brunel want to exercise our duty of care, through prudential stewardship of our beneficiaries' assets."

Melanie Cusack, a professional independent trustee of 17 schemes, also speaking on the webinar, said: "I feel it's our fiduciary duty to consider the members' expectations. We're already expected to focus on things like good governance and ensuring good member outcomes. But I feel this voice should be used as well to be expected to look at socially responsible investing and, better yet, to make a positive impact.

"Not least because there's already been rumblings that suggest it's only a matter of time before members demand it of us. There's an expectation that is rumbling below the surface in the UK and is being echoed in other countries – for example with the REST superannuation case in Australia. She was referring to the AUD60 billion ($42 billion) Retail Employees Superannuation Trust pension fund, which has settled a court case brought against it by a member over its handling of climate change risk, which could spark further legal climate challenges at pension fund managers.

"The timing for this conversation is absolutely perfect right now. Trustees [in the UK] in the last few months have had to outline their investment beliefs and what they are doing in the area of responsible investment [as required by The Pensions Regulator]. We need to keep that momentum going while it's still fresh."

Cusack and CPT's Walker agreed that trustees should adopt a long-term strategy that includes considerations around sustainability and impact, and clearly articulate this strategy.

In September, the Impact Investing Institute published five 'guiding principles' for pension trustees that outline the concrete steps trustees can take to pursue an impact investing strategy.

New risks and opportunities must be considered by trustees when balancing risk and return in investing their pension funds' assets, the Institute said at the time. "Trustees may therefore consider it prudent to adopt investment strategies that reduce the negative impacts arising from, and impacting on, their portfolio and search for positive impacts which provide financial opportunity." **EF**

Are banks really going green, or just…

Some of the world's largest banks have made hundreds of billions of dollars in commitments to sustainable financing, with many pledging to align their portfolios with the goals of the Paris Agreement. Christopher Marchant asks whether these commitments are impactful

A growing number of banks have made headline-grabbing sustainability commitments in recent months.

Banks to have made such pledges include JP Morgan, Morgan Stanley and HSBC. (See box below.)

Yet these pledges are typically greeted with a chorus of disappointment from NGOs, who make comments that can be summarised as: "the commitments are a step in the right direction but do not go far enough, particularly when it comes to fossil fuels".

The real-economy impact of these sustainability commitments is difficult to quantify, and claims of greenwashing abound.

So, how to assess the credibility of these claims?

One of the main problems when comparing and contrasting sustainability pledges is that they are often inconsistent and there is no common standard or framework to which they all adhere.

Another challenge is the widely varying and complex nature of lenders, which are often part of broader financial groups, and the commitments often span the groups, rather than just the lending arms. Understanding the impacts of such sprawling and complicated firms can be problematic.

The commitments typically set a target for increasing what they define as green or sustainable finance, by a set date. For example, in February 2015 Citigroup was one of the first global banks to make a significant sustainable financing pledge, in this case a commitment to lend, invest and facilitate a total of $100 billion over 10 years to finance activities that reduce the impacts of climate change and create environmental solutions that benefit people and communities.

NGOs are looking for evidence that banks are changing their behaviour away from 'business as usual', and these types of commitments tend to come under fire for merely identifying opportunities for scaling up green finance. This could for example include underwriting green bonds, which critics argue do not constitute 'additional' green finance.

It is rarer, however, for banks to set targets or commitments to reduce finance to fossil fuels or other sectors. One example of this came from French lender BNP Paribas, which said in May 2020 it is speeding up its timetable 'for a complete exit from coal', expanding to all OECD countries its target to end the use of coal by its electricity-producing customers by the end of 2030.

Increasingly, banks are making explicit mention of the Paris Agreement, and ultimately a timeline of aligning a portfolio to its goals. For example, in October this year JPMorgan committed to use its position as a financier to pressure clients to align with the Paris Agreement and work toward global net zero-emissions by 2050.

NGO scrutiny

As lenders to the 'real economy', banks arguably have a greater impact than other types of investors, often reaching sectors such as SMEs and households that asset managers do not directly influence.

Lenders' sustainability commitments, therefore, attract increasing NGO scrutiny. In 2019, at a time of growing shareholder pressure on banks to increase their sustainability commitments, NGO the World Resources Institute (WRI) analysed 23 of

the 50 largest private sector banks that had made sustainable finance commitments at the time.

Each bank was rated against six indicators, assessing whether the commitment made by the bank:

- defines sustainability criteria,
- identifies the financial services included,
- provides a specific timeline,
- discloses an accounting methodology,
- includes a plan for reporting, and
- has a level of accountability, such as being endorsed by the bank CEO or chair.

Ariel Pinchot, an associate at WRI's Sustainable Finance Center, says: "The commitments from private sector banks are an important signal of their contributions [to the transition to a low-carbon economy].

"While they seemed conceptually simple at first glance, it was really hard to say at face value how these commitments compared, and whether they actually represent a bank's efforts to drive real change in their business practices. Given that it's so difficult, we developed the framework to help stakeholders interpret the commitments and make sense of them."

Bank of Montreal (BMO) came bottom of the pile, according to the WRI's 'Green Targets' assessment framework.

In June 2019, BMO Financial Group announced commitments to "support a thriving economy, sustainable future and inclusive society". According to the bank, by 2025, BMO will mobilise CA$400 billion ($309 billion) for sustainable finance, increase support for small businesses and women entrepreneurs, and commit to 'zero barriers to inclusion'.

However, the announcement failed to meet five of the six indicators laid out by the WRI.

Jonathan Hackett, managing director and head of BMO's Sustainable Finance Group, insists BMO's poor ranking is mainly the result of unfortunate timing, pointing out that the bank has since made radical improvements to the accountability and specificity of its sustainable finance commitments.

Later in 2019, BMO published a sustainable financing framework that aligns with the International Capital Market Association's (ICMA) 2018 Green Bond Principles, committed CA$3 billion ($2.3 billion) in capital available to women-owned businesses across Canada, and doubled the size of its Indigenous Banking business.

Hackett says: "The timing of the WRI questions was unfortunate, as it was just out of step with our disclosure period. Based on what's happened in the meantime, I wouldn't characterise us as being wildly out of step with anyone else."

However, on the subject of 'available methodologies' (the fourth bullet point in the WRI's criteria), Hackett admits that this has not been published but says it will "likely be forthcoming".

On the other hand, Wells Fargo's commitment achieved all six of the WRI's indicators for an effective sustainable financing commitment. In April 2018, Wells Fargo announced it will provide $200 billion in financing to sustainable businesses and projects by 2030, with more than 50% focused on clean technology and renewable energy transactions that directly support the transition to a low-carbon economy. The company also detailed its commitment to transparency in its methodology for accounting, project inclusion, and the carbon intensity of its credit portfolio, and will regularly report on the social,

environmental, and economic impacts of the lending.

"Since the announcement there's been an evolution of our sustainability work and a desire for us to communicate our leadership goals and aspirations around sustainability," says Mary Wenzel, head of sustainability and corporate responsibility for Wells Fargo.

"We've also been working with some extra external stakeholders to vet our accounting methodology, as we wanted to be very transparent in our approach."

But what about fossil fuels?

Another high achiever, according to WRI, was HSBC, which in 2017 pledged to provide $100 billion in sustainable financing and investment by 2025, a commitment which ticked all six of the boxes for a specific and accountable pledge.

However, HSBC's beefed-up commitment in October 2020 to reduce financed emissions from its portfolio of customers to net zero by 2050 or sooner, in line with the goals of the Paris Agreement, did not receive the same warm treatment from a number of NGOs. HSBC faced criticism for a perceived lack of definable targets within its pledge, and a lack of detail as to exactly how its portfolio will become aligned with the targets of the Paris Agreement.

There were also accusations of hypocrisy on fossil fuel financing, as the bank still has money tied up in East Asian mining companies, for example.

Nina Roth, director of responsible investment at BMO Global Asset Management, says: "Such announcements are great to indicate the direction of travel [for HSBC]. But there is a clear need for more substance in their implementation.

"Whilst the announcement is detailed when it comes to pledges to provide Paris-aligned finance to clients, we still need more information on what they *won't* do anymore. I'm particularly thinking of their coal portfolio. With HSBC's large presence in Asia, it will be most interesting to see what it means for the regional extractives portfolio."

The issue of whether banks have set targets to reduce their exposure to fossil fuel and other dirty sectors, has been a common theme in NGO criticism of banks' sustainability commitments. This debate rages with particular ferocity when it comes to the big US banks. In September this year, Morgan Stanley became the first major US bank to commit to a net-zero financed emissions target by 2050.

However, the net-zero commitment was criticised by NGOs BankTrack and The Sierra Club for not including interim targets or plans to phase out fossil fuels or deforestation.

> "52 out of 58 stakeholders we consulted concluded that 'science-based targets' should only be considered to be achieved when they lead to GHG emissions reductions in the real economy"
> Jakob Thomae, 2DII

It was a similar story for JP Morgan Chase, which pledged to align its financing with the goals of the Paris Climate Agreement but was criticised for a lack of commitments on fossil fuels. It was revealed as the biggest financer of fossil fuels by a report compiled by a collaboration of NGOs including Rainforest Action Network and BankTrack published in March 2020.

Paris alignment

Banks argue that the NGO focus on fossil fuel divestment is too simplistic.

HSBC, for example, has said that gas still has a key role to play in the transition to a low-carbon economy. It sees its role as engaging with its clients to help them transition away from carbon-intensive business models, to those that are in line with the Paris Agreement.

Banks are beginning to weave alignment with the Paris Climate Agreement into their sustainability pledges.

While few banks have explicitly made such a commitment, this is the aim of initiatives such as the Platform for Carbon Accounting Financials (PCAF), which counts numerous banks among its signatories. Paris alignment pledges are also a key ask of the Principles for Responsible Banking (PRB), which has over 190 signatories, just one year after being formed.

Citigroup is the only one of the six largest American banks to be a signatory to the PRB.

On why Wells Fargo is not signatory to the PRB, Wenzel says: "When the PRB was introduced last year we were really waiting until we began the process of resetting our public commitments to think about which collaborations and partnerships were appropriate, and so we hope to approach that in a holistic manner."

This year Deutsche Bank, a signatory to the PRB, tightened its fossil fuel policy to include exiting coal mining investments by 2025, and restricting oil and gas sector financing by the end of 2020, with the aim of "reducing" its fossil fuel exposure.

However, Deutsche Bank will not publish targets on the decarbonisation of its portfolio until 2022. For that, the bank faced NGO criticism, with German environmental not-for-profit Urgewald countering that: "Deutsche Bank seeking to limit its fossil businesses is a much-welcomed step forward. From a climate perspective, however, this is still too little, too late. We would have needed significantly more ambition in the year 2020."

Gerald Podobnik, chief financial officer for the corporate bank at Deutsche Bank, says: "[Sustainable finance] has become of major strategic importance for the company."

He points out that the bank this year also became signatory to the Equator Principles, seventeen years after their inception. The principles are a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk, primarily in emerging markets.

One reason for banks taking time to become expressly Paris-aligned is the difficulty in establishing a clear, agreed-upon methodology for defining exactly what it means for a financial institution to adhere to net zero goals, with the International Finance Corporation, part of the World

Bank Group, having previously declined to confirm whether it is Paris-aligned, arguing that the methodologies for making such a claim are 'still evolving'.

The World Bank has, as yet, declined to make a specific Paris-aligned pledge. As part of a joint statement by Multilateral Development Banks prior to the COP 25 climate event in 2019, while committing to helping clients deliver on the goals of the Paris Agreement, the World Bank noted that principles for intermediated financing activities were still under development and will be presented by the time of COP 26, now delayed by one year to November 2021.

The bank has, however, pledged to double its climate finance over its current five-year commitment, with plans to direct $200 billion to climate-related projects between 2021 and 2025, and $50 billion of that total to climate change adaptation.

Are science-based targets the answer?

External frameworks are arguably needed to help give credibility to banks' claims of Paris alignment.

In October this year, the Science-Based Targets initiative (SBTi) launched a "breakthrough" pilot framework for financial institutions to set science-based climate targets, but some campaigners perceived shortcomings.

The SBTi – a collaboration between the CDP, UN Global Compact, WRI and World Wide Fund for Nature (WWF) – said the framework provides banks and other financial institutions with the first tool to help them set science-based targets to align their portfolios with the goals of the Paris Climate Agreement.

To qualify for validation, direct Scope 1 greenhouse gas (GHG) emissions and indirect Scope 2 emissions – covering operational and purchased energy emissions – must be in line with an average linear reduction rate of 4.2% for a 1.5°C pathway and 2.5% for a "well-below" 2°C pathway, according to the SBTi.

Scope 3 emissions – covering those produced through the use of products and services – must also meet specific criteria relevant to each class.

However, even the SBTi faces questions over its credibility. Jakob Thomae, managing director of the 2° Investing Initiative (2DII), an organisation that in the past has been at odds with the SBTi over whether it is currently possible to establish whether a 'science-based target' has been achieved, said of the SBTi framework: "52 out of 58 stakeholders we consulted concluded that 'science-based targets' should only be considered to be achieved when they lead to GHG emissions reductions in the real economy.

> "You need to eventually abandon these fossil fuel clients, rather than stand with them, or to have a very strong conversation with them that their future is not in oil and gas at all, but in renewables"
> Johan Frijns, BankTrack

"The framework released [by the SBTi] means that targets can be considered to be achieved simply by rebalancing a portfolio, without necessarily any real-world effects."

The 2DII has its own Paris Agreement Capital Transition Assessment (PACTA) methodology, available since 2018 as an online tool for equities and fixed income portfolios. In September 2020, 2DII launched PACTA for Banks, a free, open-source climate scenario analysis toolkit for corporate lending portfolios. It enables users to measure the alignment of their corporate lending portfolios with climate scenarios across climate-relevant sectors and technologies.

The Netherlands-based ING Bank has a loan book of over €600 billion ($700 billion) across many sectors, which it has 'begun steering' towards meeting the Paris Agreement's two-degree goal, through its 'Terra' approach, using the PACTA methodology to assess its portfolio.

ING's approach focuses on the sectors in its loan book that are responsible for most GHG emissions: power generation, fossil fuels, automotive, shipping, aviation, steel, cement, residential mortgages and commercial real estate. The PACTA methodology for corporate lending assesses the technology shift that is needed across certain sectors to slow global warming, then measures this against the actual technology clients are using.

In October 2020, ING Bank released its second Terra progress report – its first to use the PACTA methodology on its upstream fossil fuel financing portfolio. Following a 2017 commitment by the bank, the trajectory for the financing of thermal coal was sharply downward, on course to drop to zero by 2025.

However, the financing for oil and gas only showed a gradual downward trend, from current levels of €4 billion, down to €3.9 billion in 2030, and €3.2 billion in 2040.

Michiel de Haan, global head of the energy sector at ING, stated its position was in line with the International Energy Agency's (IEA) Sustainable Development Scenario for transition, and that they would tighten these targets if these IEA conditions were to be 'sharpened' in the future.

Additionally, the bank claimed that while finding no place for coal in the current energy mix, there is a place for oil and gas for the foreseeable future under the Sustainable Development Scenario, and

What are investors asking for?

In 2019, Boston Common Asset Management, engaged 58 of the world's largest banks, including the likes of HSBC, JP Morgan Chase, BNP Paribas and MUFG.

The exercise identified some progress in terms of governance, with a majority of banks endorsing the TCFD guidelines (69%), disclosing TCFD governance reforms (71%) and carrying out climate risk assessments (78%).

However, the research showed these tools are not necessarily impacting on decision making, with 40% of banks failing to develop any new financing or investing exclusions/restrictions as a result of their climate risk assessments.

A selection of bank commitments so far

Bank of America
Bank of America committed to mobilising an additional $300 billion in capital through its Environmental Business Initiative between 2020 and 2030.

The finance is designated for promoting low-carbon and sustainable business and, more specifically, to advance "Sustainable Energy and Transportation, Climate Resiliency, Clean Water and Sanitation."
Total commitment: $300 billion
Average annual fossil fuel finance (as of 2019): $36 billion

Bank of Montreal
In June 2019, BMO Financial Group announced commitments to 'support a thriving economy, sustainable future and inclusive society'. According to the bank, by 2025, BMO will mobilise CA$400 billion ($309 billion) for sustainable finance, increase support for small businesses and women entrepreneurs, and commit to 'zero barriers to inclusion'.
Total commitment: $309 billion
Average annual fossil fuel finance (as of 2019): $18.9 billion

BNP Paribas
BNP Paribas said in May 2020 it is speeding up its timetable 'for a complete exit from coal', expanding to all OECD countries its target to end the use of coal by its electricity-producing customers by the end of 2030.

Reclaim Finance, BankTrack and Friends of the Earth France said the updated policy "reflects a level of ambition far short of best practices set by such peer financial institutions as Crédit Agricole, Crédit Mutuel, ... and other financial players."

The bank also aims to provide €180 billion in financing to sectors that contribute to the UN SDGs, with an increase of €10 billion on average between 2018 and 2020.
Total commitment: $211 billion
Average annual fossil fuel finance (as of 2019): $17 billion

Citigroup
In February 2015 Citigroup was one of the first global banks to make a significant sustainable financing pledge, in this case a commitment to lend, invest and facilitate a total of $100 billion over 10 years to finance activities that reduce the impacts of climate change and create environmental solutions that benefit people and communities. Predating the Paris Agreement, this commitment cannot be seen to align to it, although Citigroup is also a signatory to the PRB which commits to a path to alignment with the Paris Agreement.
Total commitment: $100 billion
Average annual fossil fuel finance (as of 2019): $43.2 billion

HSBC
HSBC has committed to providing $100 billion in sustainable financing and investment between 2017 and 2025. The commitment is designated for developing clean energy, lower carbon technologies, and projects that contribute to the delivery of the Paris Climate Agreement and the UN Sustainable Development Goals (UN SDGs).

In September 2020 HSBC also pledged to reduce financed emissions from its portfolio of customers to net zero by 2050 or sooner, in line with the goals of the Paris Agreement.
Total commitment: $100 billion
Average annual fossil fuel finance (as of 2019): $19 billion

JP Morgan Chase
In October 2020, JP Morgan Chase, which earlier this year was revealed by a collaboration of NGOs including the Rainforest Action Network and BankTrack to be the world's largest financier of fossil fuel projects since 2015, pledged to align its financing with the goals of the Paris Climate Agreement.
Total commitment: $200 billion
Average annual fossil fuel finance (as of 2019): $65.2 billion

Morgan Stanley
In September this year, Morgan Stanley, which sits on the PCAF steering committee, became the first major US bank to commit to a net-zero financed emissions target by 2050.

However, the net-zero commitment was criticised by NGOs BankTrack and The Sierra Club for not including interim targets or plans to phase out fossil fuels or deforestation. The bank was encouraged to adopt the SBTi methodology to increase the consistency and clarity of its approach.
Total commitment: $250 billion
Average annual fossil fuel finance (as of 2019): $22.3 billion

Wells Fargo
In April 2018, Wells Fargo announced it will provide $200 billion in financing to sustainable businesses and projects by 2030, with more than 50% focused on clean technology and renewable energy transactions that directly support the transition to a low-carbon economy. The company also detailed its commitment to transparency in its methodology for accounting, project inclusion, and the carbon intensity of its credit portfolio, and will regularly report on the social, environmental, and economic impacts of the lending.
Total commitment: $200 billion
Average annual fossil fuel finance (as of 2019): $50.5 billion

Any figures for average fossil fuel finance come from the World Resources Institute

focus should be placed on encouraging transition within these providers rather than divestment.

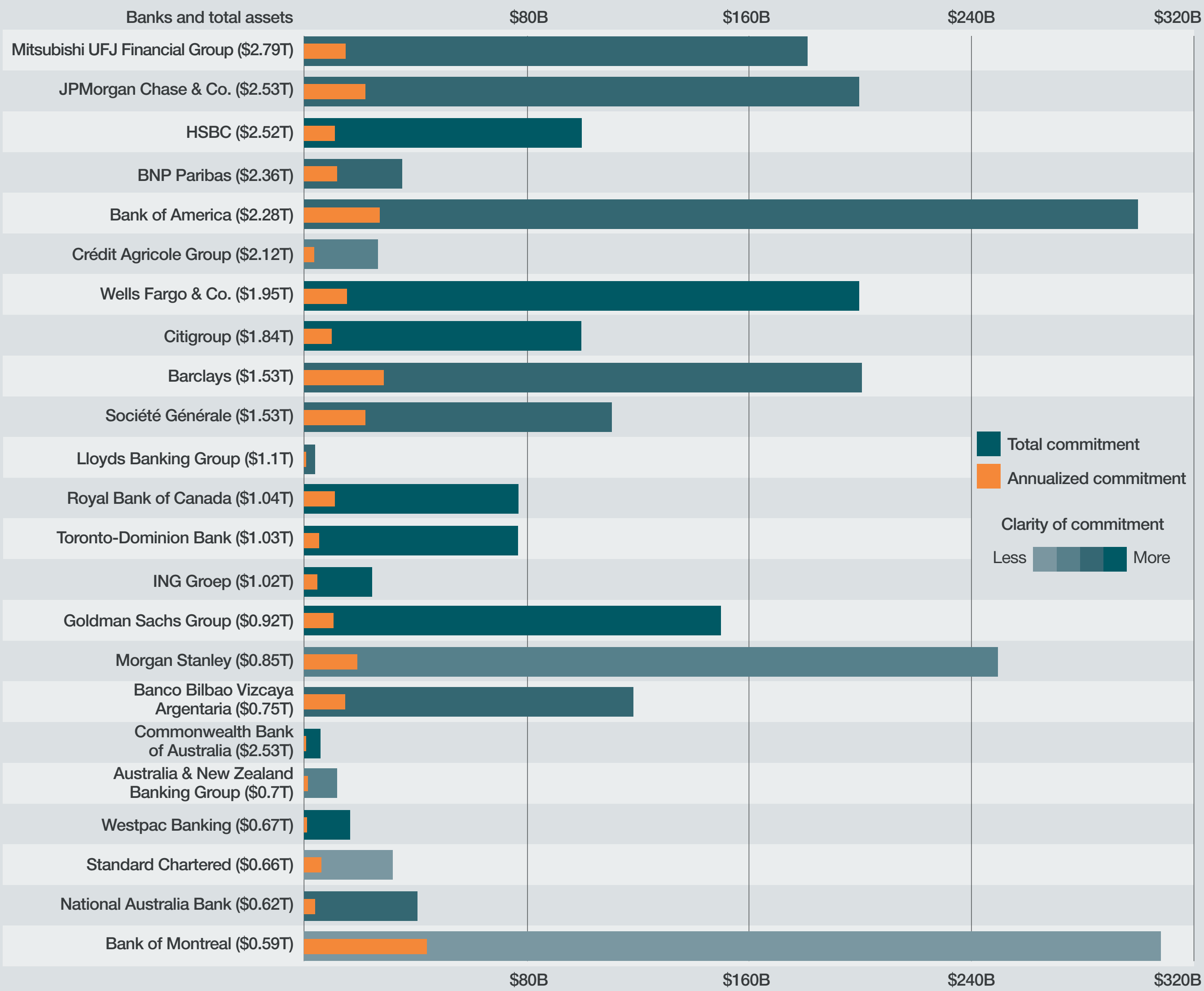
ING expects a relatively sharper decline for oil, and while gas as a bridging fuel will more gradually decrease, it foresees an increase to its natural gas funding in the immediate future.

Johan Frijns, director of NGO Bank Track, says of ING's approach: "I think the message here is that ING will stand by its oil and gas clients as they navigate through market disruption. That doesn't sound as if they get the message that you need to eventually abandon these clients, rather than stand with them, or to have a very strong conversation with them that their future is not in oil and gas at all but in renewables, and that they have to move."

Fossil fuels remain a small part of ING's bank overall mix: $4 billion of a total $980 billion in assets. Much of what criticism can be levelled against ING is also only possible due to information publicly disclosed in its Terra Report, a level of accountability still rare among the world's largest banks.

ING has also created a 'Climate Alignment Dashboard', which shows the pathway of ING's loan book towards climate alignment. The dashboard shows each sector's carbon intensity and whether it is:

- outperforming or on track with the relevant climate scenario,
- not on track with the climate scenario but outperforming the market, or
- performing below the market or two-



▲ Analysis of bank sustainability commitments by the World Resources Institute

Note: The green bars are total commitments over varying time periods, and are therefore not directly comparable.

degree pathway identified.

Leonie Schreve, global head of sustainable finance, ING Global, says: "The Terra report really shows what is our exposure into nine different sectors which are the most greenhouse gas intensive, and how are we doing compared to the markets and compared to our goal to achieve the alignment with the Paris agreements.

"We also actively also work with our clients on specific transactions, on occasion for example integrating carbon emission reduction targets into the structure of the loan or the bond provided."

Reflecting the economy around them

Some bankers will privately argue that while they have an important role to play in the transition to a low-carbon economy, they cannot be expected to drive it.

Their loan books will, to varying extents, reflect the economies to which they lend, and it is ultimately down to policymakers to change companies' behaviour, they argue.

Deutsche Bank's Podobnik said: "I would caution not expecting too much from the financial sector. With our financing decisions and our product offering we tend to play a role which tends to be significant, but we cannot be the only ones.

"There will always have to be political frameworks and such things that are outside our remit. We play our part, and you will see that there's clearly upside to all the efforts of the last couple of months. I think what we're doing is definitely not unambitious." EF

'The time is right to invest in natural capital'

How does HSBC Pollination Climate Asset Management aim to attract large-scale investment in natural capital, Michael Hurley asks

When HSBC Global Asset Management and Pollination Group in August revealed their joint venture, they announced their intention "to create the world's largest natural capital manager [and] to mainstream natural capital as an asset class".

HSBC Pollination Climate Asset Management, through the creation of private funds, aims to catalyse investment into the world's stocks of natural assets, such as geology, soil, air and water, by attracting commitments from some of the world's largest institutional investors, including sovereign wealth funds, pension funds and insurers. It will invest in emerging and developed markets.

This contrasts with most existing natural capital-themed funds, says Martijn Wilder, a founding partner of Pollination Group, which in addition to investments provides law, policy and corporate climate advisory services. Most natural capital funds are small-scale and can find it challenging to attract commitments from large institutional investors, he observes.

Wilder, who was previously head of law firm Baker McKenzie's global environmental markets and climate change practice, tells *Environmental Finance*: "Over the last 10-15 years, a lot of the work [the members of Pollination's management team] have done has been around natural capital – such as the IFC-Conservation International-BHP Billiton Forests Bond [issued in 2016 to raise $152 million].

"When we started discussions with HSBC about possible solutions in the climate space, we discussed various areas, but settled on natural capital.

"Particularly in Australia, New Zealand and California, where you have a growing focus on regenerative agriculture, investors often say: 'We want to invest in nature, but we don't know how.'

"Throughout the [fundraising and approval] process, many investors told us Covid-19 has made clear to them, more than anything else, the absolutely fundamental need to focus on climate and nature.

"The timing is right – the EU said recently, we have to invest trillions in nature, and we are seeing constantly the importance of nature in terms of resilience and adaptation, for example with Covid-19. These are the sorts of trends we would like to tap into."

Martin Berg, a partner at Pollination Group, is a former head of the European Investment Bank (EIB)'s environmental funds and climate finance policy unit, where he led investments into sectors such as natural capital and the blue economy, and supervised the development of the Natural Capital Financing Facility, a joint EIB and European Commission initiative.

He tells *Environmental Finance*: "The Natural Capital Financing Facility is a pioneering project, but it's very small-scale, a lot of it is done with blended finance.

"What I often heard, especially from larger investors is: 'It is so small we just can't invest.' Where we try to position this [HSBC-Pollination joint vehicle] and where we see the niche in this market is between the smaller impact-focused funds and the really large forestry and agricultural funds, which are not there yet in terms of embracing the natural capital aspect.

"HSBC immediately got that. They want to show the joint vehicle to their investors – large institutional investors: pension funds, sovereign wealth funds."

The joint venture

The joint vehicle is funded by Pollination and HSBC, and is capitalised to support an executive team to grow the business. For compliance reasons, the joint vehicle will be managed separately from Pollination's main business.

Christof Kutscher, former global chair of AXA Investment Managers, is a senior advisor to Pollination Group and executive chairman of the HSBC joint venture. Berg will also advise the joint vehicle.

HSBC will provide seed funding to help grow the natural capital fund, Berg said, but declined to specify how much this might amount to. He said the real asset fund, which

could be the first of many to be launched under the joint vehicle, is expected to reach first close by the middle of next year.

"We are having detailed discussions with investors before we go out with a formal proposal. We have an idea of how to structure the vehicle, but we are in listening mode.

"We imagine the fund will focus mainly on regenerative agriculture and sustainable forestry, as a core strategy. We would also like to have a frontier strategy focused on some of the more challenging projects in natural capital."

The exact geographical scope and the relationship between the core and the frontier strategy depends a lot on the feedback from investors, Berg says.

According to Pollination's website, other investment themes might include Oceans (including sustainable fisheries, coastal restoration and blue carbon), and Biodiversity and wildlife protection and restoration.

The natural capital challenge

Wilder says that the breadth of opportunity to invest in natural capital makes it a challenging area to grow.

"At one end of the natural capital spectrum you've got regenerative agriculture, forestry and fisheries; at the other end you've got biodiversity and wildlife.

"Many investors told us Covid-19 has made clear to them, more than anything else, the absolutely fundamental need to focus on climate and nature"

Martijn Wilder, Pollination Group

"To get to that 'other end' – the more difficult end – is going to take more time, but sometimes it can be incorporated into the other investments. You can do investments in agriculture or forestry that help increase biodiversity. Over time, as the biodiversity markets increasingly emerge, standalone investments in those will materialise more and more.

"It will be fantastic if, in the coming years, there will be more of these funds. We need trillions of dollars to flow into nature over the next years."

Wilder admits it will involve a concerted effort to convince large institutional investors of the fund's potential, both for attractive returns and positive impact.

"In the way that we are presenting it, this is a new asset class. Even though everyone continuously says how interested they are in natural capital and how much they want to invest in it, we are going to have to convince people. We are working very hard developing a pipeline to show there are good investments out there that can do this."

Impact measurement

As a fund aiming to create positive impact alongside financial returns, impact measurement will be particularly important, Berg observes.

Pollination aims to quantify the potential for natural capital value creation at the start of each investment. It intends to develop

“We see the natural capital niche as between the smaller impact-focused funds and the really large forestry and agricultural funds”
Martin Berg, Pollination Group

HSBC: The vehicle meets growing investor demand for natural capital

Environmental Finance asked Melissa McDonald, head of responsible investment at HSBC and a board member at HSBC Pollination Asset Management, what the bank hopes to gain from the collaboration.

EF: What is HSBC's role in the joint vehicle?
MM: The joint venture will leverage HSBC's reach and expertise as the world's best bank for sustainable finance and the Pollination team's 20-plus years of experience in natural capital. In addition to providing resources for the joint vehicle along with Pollination, HSBC intends to become a cornerstone investor in the first fund.

EF: What was HSBC's motivation to join? Why natural capital in particular? Where are the biggest opportunities to invest in natural capital?
MM: The joint vehicle aligns with HSBC Global Asset Management's long-held commitment to sustainability and to actively improving the societies it exists in. Coupled with that, HSBC Global Asset Management is also focussed on building its alternatives capability ... HSBC's partnership with Pollination helps it tap into market expertise as well as [Pollination's] deep technical expertise and existing deal pipeline. The joint vehicle will meet growing investor demand.

To reach the goals set out in the Paris Agreement, we need to find and fund new approaches that protect nature. We regularly hear from institutional investors and organisations looking for investment opportunities that mitigate long-term climate risk – but they simply haven't existed at the scale required. This venture aims to solve that problem. In natural capital, we're accelerating investment in an asset class that can help combat climate change and build biodiversity while also generating long-term returns for institutional investors.

EF: How else is HSBC active in the field of impact investing?
MM: HSBC Global Asset Management is accelerating its activities in this space having launched its low-carbon equity and bond funds and the recent launch of the Real Economy Emerging Markets Investment Opportunities Funds (REGIO) [$474 million bond fund, in May] in partnership with the IFC, part of the World Bank Group.

positive impact targets across six impact areas. Progress against these targets will be monitored and reported using “an industry-leading, proprietary impact measurement tool”, according to Pollination. No further details of this were available.

Berg adds: “In a further step, we have the ambition to apply evaluation methods to be able to put a financial value on the natural capital that's being saved or created.

“Whether we can monetise this remains to be seen. It is certainly not something we sell to investors, but we do sell the fact that we have the ambition to do that, and we believe in the long-term it is the only way environmental markets should work. As it stands, one of the obstacles is there is not enough data, not enough approaches to measuring that.”

Yet Wilder says that while he does not want the joint vehicle to be “pigeon-holed” as ‘impact’, “we want to be attractive to impact investors. Our investments will have impact and, whether it is a large sovereign wealth fund, or an impact investor, we want everybody to look at this fund.”

A carbon fund on the cards

While Pollination's first fund as part of the joint venture with HSBC will focus on natural capital, Wilder says the organisation is exploring the creation of a carbon fund at an as yet unspecified date.

The carbon fund could invest in large landscape projects, or other emission reduction projects, “and we would pick between five and eight countries very serious about [carbon offsetting], and work with them to protect large amounts of nature, and generate carbon reductions”.

Wilder says the demand for carbon offsets from large corporates is high and rising.

“In April, Pavilion Energy, which is owned by Temasek, put out a tender to source liquefied natural gas (LNG) [as much as 2 million tons of LNG a year for five years from 2023]. They wanted that bundled with carbon offsets. That's indicative of the demand that's coming.”

The emissions reductions and carbon offsets that LNG sellers to Pavilion might offer with their cargoes could include forest conservation or renewable power generation.

Wilder says that when he founded Pollination, it was not initially intended that it would start making natural capital investments.

“The expectation initially was that, over three years, we would build out our approach to investments in various areas. First, we started to looking at digital infrastructure, large-scale renewable transformative energy and nation-building infrastructure, as it relates to climate change. Then the HSBC opportunity came along and all our focus went in that direction.

“Now we are taking a step back to see what else Pollination could do in its investment universe. We've been exploring whether we could launch a venture capital fund. It is likely this would be focused on food and technology.”

Pollination has also created a not-for-profit foundation with the ambition to develop climate-related projects. EF

Environmental markets buoyant despite pandemic

The coronavirus pandemic rocked the markets, but the environmental theme looks set to be a long-term winner, says Peter Cripps

The coronavirus pandemic wreaked havoc with the global economy in 2020, pushing businesses under and wrecking government finances.

But the traded environmental markets, covered by *Environmental Finance*'s Market Rankings, have a different story to tell.

While not immune from the horrors of Covid-19, they appear to have survived its infection, and have emerged in rude health.

That is mainly because they are driven by long-term trends such as climate change, which have not been impacted by the pandemic.

It seems that action to tackle climate change may have been hastened by the pandemic, as governments around the world have understood that the recovery needs to be a green recovery.

So, commitments to environmental policies seem to be strengthening, rather than falling victim to the malaise spread by the pandemic.

That is good news for the carbon markets, which look to put a price on carbon and cap emissions of greenhouse gases.

They are benefitting from buoyant sentiment. For example, Louis Redshaw, CEO of Redshaw Advisors, expects the EU's Green Deal to lead to materially higher prices of EU Allowances, "sooner rather than later".

Another contributing factor is the change in administration in the US. As David McCullough at Eversheds Sutherland puts it, a Biden administration is expected to be "very favourable" for carbon markets the US.

Meanwhile, the structural change in the energy grid, as ever-cheapening renewable energy comes online, displacing fossil fuels, has not been reversed by the pandemic. This has been positive for the market in renewable energy certificates (RECs).

Tim Pabst, managing director of STX, which won three awards, says: "Despite Covid-19 and the overall decrease in energy demand, renewable energy supply saw record growth in 2020," propelled by government policy and corporate demand for voluntary RECs.

He adds that, if the more climate-friendly policies of the incoming Biden administration can be implemented "it could accelerate renewable energy development, especially by tackling one of the biggest issues, the outdated infrastructure… we expect the federal

The Biggest Winners in the 2020 Annual Market Rankings*

Element Markets	★★★★★★
Karbone	★★★★★
Baker McKenzie	★★★★
Evolution Markets	★★★
Redshaw Advisors	★★★
South Pole	★★★
STX	★★★
TP ICAP	★★★

*Stars indicate number of awards received. Colours of stars relate to categories as laid out on right of page.

> Overall, the growing impacts of climate change, the growing acceptance that it is a problem that needs to be urgently addressed, and the fact the response to the pandemic offers an opportunity to do this, augur well for these markets

government to step up in their own green procurement."

This also has ramifications for the weather market, which is seeing the types of products sold adapt to this new renewables-powered reality.

And the effects of climate change are not going away, leading to strong demand for 'traditional' weather hedges and weather-related cat bonds.

Overall, the growing impacts of climate change, the growing acceptance that it is a problem that needs to be urgently addressed, and the fact the response to the pandemic offers an opportunity to do this, augur well for these markets.

Many of the players which are mentioned in the following pages – for example, Element Markets, which also won six gongs last year – have been plugging away at these markets for years, and it looks like their dedication will be increasingly rewarded for years to come.

Congratulations to all this year's winners. EF

Environmental Finance

Annual Market Rankings 2020

How the rankings were conducted:

Companies were emailed in October and asked to nominate the leading traders,brokers and service providers in the markets covering carbon emissions, renewable energy certificates, and weather and catastrophe risk, via an online survey. They were asked to vote only in those categories in which they had direct experience and to make their judgements on the basis of: efficiency and speed of transaction;reliability; innovation; quality of information and services provided; and influence on the market, not just the volume of transactions handled. More than 950 completed responses were received. Only one vote per company site was allowed and those firms that nominated themselves had their votes disregarded.

Carbon markets resist 2020's headwinds

Cap and trade schemes were not immune to the pandemic, but growing support for climate policies helped them recover, the winners of the 2020 Market Rankings told Annabelle Palmer

The effects of the Covid-19 pandemic have reverberated across financial and commodity markets this year, and carbon markets were no exception.

While the impacts have been uneven in different regions, the overall trajectory is one of recovery.

Environmental Finance spoke with the winners of the 2020 Market Rankings to see how the events of the past year have impacted their regional compliance markets, and what they predict for the year ahead.

CATEGORY	WINNER	RUNNER-UP
EU Emissions Trading System		
Best broker, spot & futures	★ Evolution Markets	
Best trading company, spot & futures	★ Redshaw Advisors	Vertis
Best broker, options	★ Evolution Markets	
Best trading company, options	★ Vertis	CF Partners
Best advisory/consultancy	★ Redshaw Advisors	ClearBlue Markets
Best law firm	★ Reed Smith	
Best verification company	★ SGS	Swan Energy
Best exchange/clearing house	★ Intercontinental Exchange (ICE)	European Energy Exchange (EEX)

EU ETS

"There never seems to have been a dull moment for carbon in 2020", says Louis Redshaw, CEO and founder of Redshaw Advisors, which won two awards in the European Union's Emissions Trading System (EU ETS) market category – Best Trading Company, Spot & Futures and Best Advisory/Consultancy.

As widespread lockdown measures were implemented earlier this year to halt the spread of Covid-19, production levels decreased across multiple sectors and, as a result, demand for EU allowances (EUAs) plummeted.

In March, the price of the EUA Dec '20 Futures contract fell as low as €14 ($17) per tonne of carbon dioxide (CO_2) as financial players liquidated their positions.

"[Speculators] panicked and some even went short," says Redshaw.

Since then, the initial price crash in March has given way to an impressive rally, with prices passing €30 three times over the course of the summer.

As of 27 November 2020, prices were hovering around €27, which is approximately 12% higher than at the end of 2019.

One reason for the impressive bounce back was due to the European Commission's (EC) plans for an EU Green Deal. "This stopped Covid's negative impact on the market in its tracks," says Redshaw.

Since it was announced in December 2019, it has renewed speculator interest in the carbon market, and the medium- and long-term outlook remains bullish.

In addition to a 2050 climate neutrality target, there was a strengthened 2030 emissions reduction target of 55%, up from the previous 40% target. Proposals to achieve this include a lower supply of allowances, additional sectors to be covered by the EU ETS – such as shipping and buildings – and a carbon border adjustment mechanism (CBAM) from 2023 to better address the risk of 'carbon leakage' – that higher compliance costs would drive companies or operations to other regions of the world.

The CBAM would put a price on the CO_2 content of imported products such as electricity, steel and cement.

"There seems to be a strong support of the CBAM among politicians and corporates as well," says Bernadett Papp, senior market analyst at Vertis Environmental Finance, which topped the

"The EU's green deal will have to entail materially higher EUA prices "sooner-rather-than-later"
Louis Redshaw, Redshaw Advisors

polls for Best Trading Company, Options in the EU ETS market – a position it has held for four years in a row. "The EU could also be a pioneer and motivate other countries and regions to implement carbon pricing."

The details of how the carbon content of products from different countries will be calculated is unknown. The EC is currently drafting a law to align the ETS with the Green Deal's objectives and opened a public consultation on various measures on 13 November. Further details on the proposals are expected in June 2021.

Until then, "we wait with bated breath," says Redshaw, but he adds that such measures will have to entail materially higher EUA prices "sooner-rather-than-later."

According to Gordon Bennett, managing director, utility markets at Intercontinental Exchange (ICE), which won Best Exchange/Clearing House in the EU ETS and Best Exchange in the Kyoto Project Credits (JI and CDM) category, policy support from Brussels for a long-term price signal for carbon has perhaps never been stronger.

"If the world is to meet its net-zero ambitions then we need a higher price of carbon. Most governments and multilateral development banks have shadow carbon pricing well in excess of \$100 per tonne," he says.

2021 also marks the first year of a new trading period (Phase IV) for the EU ETS, which includes tighter rules on free allocations. Redshaw points out that most big emitters, such as steel companies, continue to be protected with generous free allocations in Phase IV.

"However, the prospect of a much higher emissions reduction target for 2030 is likely to dramatically alter the Phase IV landscape, at some point," he cautions.

Another important issue for the EU ETS is Brexit, which continues to create uncertainty. On 1 January 2021, the UK will leave the EU ETS. The UK has indicated that its preference is to set up a domestic ETS that would then link back to the EU system. However, given that Brexit negotiations are still ongoing at the time of writing, it seems unlikely the link will be established in time for 1 January.

Even if there is a deal, Peter Zaman, partner at Reed Smith – and winner of Best Law Firm in the EU ETS for the second year in a row, is not certain how quickly a linkage to the EU ETS could be achieved.

"[Assuming there is a deal that allows continuity] I think we are going to have a period where the UK ETS operates in isolation, but in a consistent manner to the way that the EU ETS is operating, to facilitate easier linkage under the terms of a Brexit deal – perhaps during the course of 2021 or thereafter," he says.

Papp at Vertis agrees that it is highly unlikely that the UK ETS could start in January 2021.

"The infrastructure is not ready yet and the Treasury seems to prefer a carbon tax instead. That would mean fast money for the government. A link between the UK ETS and the EU ETS is therefore highly uncertain," says Papp.

Bennett at ICE is not in favour of the UK adopting a carbon tax and hopes an ETS can be put in place: "Adopting a carbon tax would be a deeply regrettable step backwards from the enormous progress the UK has made – and the leadership it has shown – in supporting cap and trade schemes which are so fundamental in allowing the market to put a price on pollution and, in doing so, enable energy transition," he says.

"There seems to be a strong support for the CBAM among politicians and corporates as well"
Bernadett Papp, Vertis Environmental Finance

In the meantime, the market is in wait-and-see mode.

Francesca Cerchia, global product manager of environment, health and safety at SGS, winner of Best Verification Company in the EU ETS category, says verifications of UK installations for the 2020 reporting year are being carried out under a 'business as usual' scenario under SGS's United Kingdom Accreditation Service (UKAS).

"However, as a result of the limited geographical coverage of UKAS accreditation, SGS had to re-allocate a series of pan-European verification

contracts to SGS affiliates in EU member states," she adds.

North America

North American markets have endured a similarly volatile year.

"We expected this to be a year of solidification and growth," says Randy Lack, founder and co-president of Element Markets, which topped the rankings for Best Trading Company, Spot & Futures, Best Trading Company, Options in North American markets (California) and Best Trading Company in North American markets (RGGI) and Best Advisory/Consultancy in North American markets (all).

Instead, optimism was replaced with tremendous volatility and downward pressure on prices when Covid-19 hit the US in March.

For the Western Climate Initiative (WCI) – the linked California and Quebec cap-and-trade programme – there was an expectation that the California allowances would hold the auction floor price of $16.68.

However, as funds in Europe and California liquidated, and WCI's clearing agents increased margin requirements to manage volatility, California Carbon Allowance (CCA) prices were driven to lows of $11.50.

While CCA prices have since recovered and are now trading at around the $17.20 level, California Carbon Offset (CCO) prices have not recovered, with the allowance/offset spread now at an all-time high.

This is partly because of a rule change starting in 2021 that reduces the usability of offsets in California from 8% down to 4%. As a result, the market has an oversupply of offsets. It remains to be seen how long this will persist.

Michael Coté, president at Ruby Canyon Environmental, winner of Best Verification Company, North American markets (all), says: "It's made some projects pause and reflect on the scale they were expecting to roll out future projects," he adds.

He sees interest growing in projects centred around natural climate solutions, such as land use change and agricultural practices, however.

Settlement Price on EU Emission Allowances 2020 (€)

Source: Redshaw Advisors Ltd

CATEGORY	WINNER	RUNNER-UP
North American Markets (California)		
Best broker, spot & futures	★ Karbone	Evolution Markets
Best trading company, spot & futures	★ Element Markets	STX
Best broker, options	★ Evolution Markets	
Best trading company, options	★ Element Markets	STX
Best offset originator	★ Bluesource	Element Markets
Best advisory/consultancy	★ ClearBlue Markets	Element Markets
Best law firm	★ Eversheds Sutherland	
North American Markets (RGGI)		
Best broker	★ Karbone	
Best trading company	★ Element Markets	Bluesource
North American Markets (All)		
Best advisory/consultancy	★ Element Markets	ClearBlue Markets
Best law firm	★ Latham & Watkins	Eversheds Sutherland
Best verification company	★ Ruby Canyon Environmental	Aster Global
Best project developer	★ Bluesource	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Environmental Finance
Annual Market Rankings 2020
Winner
Environmental Finance
Voluntary Carbon Market Rankings 2020
Winner

"Even though they aren't necessarily the biggest in terms of delivering tonnes, I am seeing a genuine interest in those kinds of projects. We're also seeing interest from US oil and gas companies as to how they could get some credit for methane reduction projects within their portfolios – in areas that are not regulated right now," he says.

Meanwhile, in the north-eastern US, the worst effects of the market volatility were tempered by the re-entry of New Jersey into the Regional Greenhouse Gas Initiative (RGGI) cap and trade system, and the fact that lawmakers have initiated processes for Pennsylvania, the US's third biggest coal producing state, and Virginia to join as well.

However, Coté says he had also hoped that more states, such as Washington and Oregon, would have joined the compliance market by now.

"They've repeatedly failed to get it across the line, so that's been disappointing," he says.

More recently, the market received a boost from the recent US Presidential election results.

While the 'blue wave' – whereby Democrats won both the House and Senate – didn't happen, David McCullough, partner at Eversheds Sutherland, and winner of Best Law Firm, North American markets (California), says "the prevailing view is that Biden will be very favourable to the carbon markets".

For now, the US awaits the results of the Georgia Senate run-off race, which will decide whether the Biden administration will pass future legislation through a Democratic or Republican-controlled Senate.

> "The prevailing view is that Biden will be very favourable to the carbon markets"
> David McCullough, Eversheds Sutherland

If the Senate remains in the hands of Republicans, Lack at Element Markets says he will be watching where the Biden administration can affect clean energy and sustainability policy without needing Congressional approval.

Another political boost came to the US market earlier in the year when a federal judge rejected a Trump administration lawsuit that was designed to put a halt to California's cap and trade programme.

The filing argued that the WCI's linkage with Quebec represented an international treaty which cannot be enacted independently by a state.

The rejection of that lawsuit in July was significant in terms of providing confidence to carbon markets.

"It had the markets spooked a bit," says McCullough at Eversheds Sutherland. "Some investors were concerned that it could overturn the framework in place, negate credits that have been traded in California and imported from Canada, and the value of their investment would either disappear or be significantly negatively impacted.

"It demonstrated that the courts would defend against the aggressive changes in the political swings that can happen in the United States," he says.

Kyoto Project Credits

The 1997 Kyoto Protocol and the 2015 Paris Agreement are separate and independent instruments of the United Nations Framework Convention on Climate Change (UNFCCC).

As part of the Kyoto Protocol, UNFCCC's Clean Development Mechanism (CDM) allows emission-reduction projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO_2.

More recently, the focus and attention has shifted to the Paris Agreement, which will see countries implement their Nationally Determined Contributions (NDCs), leaving the fate of the CDM and CERs unknown.

"The future market for CERs remains somewhat uncertain, but we continue to see a role for these units – particularly in those emissions trading schemes that recognise CERs for offset purposes. However, the CDM transition in the context of Article 6 of the Paris Agreement remains highly contentious in the negotiations," says Ilona Millar, head of Baker McKenzie's Global Climate Change practice, which continued its multi-year

CATEGORY	WINNER	RUNNER-UP
Kyoto Project Credits (JI & CDM)		
Best broker, secondary market	★ Enking International	
Best trading company, secondary market	★ Enking International	Redshaw Advisors
Best advisory/consultancy	★ Kanaka Management Services	Enking International
Best law firm	★ Baker McKenzie	
Best verification company	★ EPIC Sustainability Services	
Best project developer	★ Kanaka Management Services	Enking International
Best exchange	★ Intercontinental Exchange (ICE)	

Leading through volatility

Randy Lack, founder and co-president of Element Markets talks to *Environmental Finance* about how his firm has navigated the disruption carbon and renewable fuels markets experienced in 2020

***Environmental Finance*: What trends have you observed in compliance and voluntary carbon markets this year?**

Randy Lack: For Element Markets it was a great year in the compliance markets, but 2020 was a tough year for some traders in the California carbon market.

During the early part of the Covid-19 pandemic, the market shocked lower and wiped out several speculators. That same ripple also impacted carbon offset prices, with the offset market getting knocked down by both covid-related market effects and the oversupply caused by the restrictions to 2% out-of-state offsets beginning in 2021. Having said this, it feels like we are bottoming out as regards to both California carbon allowance (CCA) and California carbon offsets (CCO) prices.

The Regional Greenhouse Gas Initiative (RGGI) has been quite a different story. While we experienced a sharp downturn in March there was a quick V-shaped recovery with the market now up over 25% YTD. We attribute this run-up to the addition of new states into the program along with a premium in the market associated with the incoming Biden administration. While there was some hope that RGGI would converge into federal climate legislation, that has been tempered following November's general election and the strong possibility for continued Republican control of the Senate (pending the outcome of the Georgia runoff election). I think the market overall will ride the momentum higher for some time, especially if we see more states join in.

In comparison, the voluntary market has been incredibly resilient this year and we have seen prices trend strongly higher driven by additional commitments by large corporations, universities, and utilities. We expect the demand to continue to increase. We are excited about the future of the voluntary carbon market, and we are laser-focused on new and innovative pathways to bring large volumes of high quality supply to the market as well as investing in new projects under existing protocols.

EF: In the UK, Prime Minister Boris Johnson has recently proposed a Green Industrial Revolution – are you preparing for a similar set of initiatives in the US?

Randy Lack, Element Markets

RL: I love that Prime Minister Johnson refers to this as the Green Industrial Revolution, and President-elect Joe Biden introduced a plan for a Clean Energy Revolution as part of his campaign. A similar call to action is reflected in how Element Markets sees our role: our slogan is "Leading the Clean Energy Revolution."

We have witnessed a fundamental shift in the last year, with companies and institutions wanting to undertake decarbonisation initiatives that make real, positive impacts.

At Element Markets we see our role as not only leading this change, but enabling that leadership for our clients; acting as a trusted resource in helping them understand commodity markets and giving them the confidence to make informed, strategic decisions. Historically our clients shied away from the regulatory risk of the environmental markets. We are now showing them how to embrace the regulatory markets and use them as a tool to finance change.

Environmental commodities are a new currency of business with upside opportunity for those who are early adopters. Corporations who don't evolve or lag behind entering these markets will fall behind their peers and become a price taker, which will result in significant value erosion.

EF: With low carbon fuel programs such as California's Low Carbon Fuel Standard (LCFS) poised to expand, what opportunities do you see ahead?

RL: California once again is demonstrating leadership in the environmental industry. Oregon has followed suit and now we have Washington, Minnesota, Colorado, and most of the Northeast US looking at starting LCFS programs. This is resulting in robust growth for all parts of the renewable fuels sector, especially those with ultra-low carbon intensity such as renewable gas (RNG) from agricultural waste. As an example of the scale of investment we are seeing, Dominion and Smithfield have committed to spending over $500 million in project development to convert swine waste into biomethane.

These projects yield good returns while making a real impact on carbon reduction with wonderful co-benefits such as decreased nutrient loading in the waterways and odor reduction. We expect a continued boom in the RNG space as market participants continue to convert landfills, wastewater treatment plants, agricultural waste, and organic waste into a high value fuel.

EF: As you reflect on your strong performance in this year's Market Rankings, how is Element Markets positioned to continue the momentum?

RL: I truly believe we have the best and most dedicated team in the US, and they are essential in growing and maintaining our client relationships. We have worked hard to cultivate an environment of creativity, adaptability to change, a focus on impact, and a fostering of knowledge that we share with clients and regulators to propel this market further. We have executed extremely well in the face of adversity in 2020, and I am proud to say that this turned out to be another year of consecutive growth for the company. Element Markets is well positioned for the growth we see ahead in the RNG, carbon, emissions, and LCFS markets.

CATEGORY	WINNER	RUNNER-UP
Chinese markets		
Best advisory/consultancy	★ ClearBlue Markets	
Best Law Firm	★ Baker McKenzie	

Gordon Bennett, ICE

winning streak for Best Law Firm in the Kyoto market and topped the poll for Chinese markets as well.

G Vishnu, quality manager of EPIC Sustainability, winner of Best Verification Company in the Kyoto markets, is positive about the role the market will continue to play in 2021: "We strongly believe that the Kyoto mechanism is the most matured mechanism, with an excellent technical and working foundation, which is a knowledge reservoir for future actions by the governments and society," he says.

Dr Madhukar, director of Kanaka Management Services, which won Best Advisory/Consultancy and Best Project Developer in the Kyoto markets, says the UNFCCC structure is "indispensable in a multilateral setup" but he cautions that time is fast running out for "cheap credits like renewables where there is not much real additionality".

Instead, he is seeing a shift to nature-based credits.

Chinese market

The Chinese national cap and trade market, originally expected in 2017, is still yet to be fully implemented.

It had been hoped that it would finally be up and running this year. While that has not happened, China has released an updated draft proposal on how the ETS would operate. Compliance has been also backdated to 2019.

The updates have been optimistically received by the carbon market, says Nicolas Girod, founding partner and managing director of ClearBlue Markets, and winner of Best Advisory/Consultancy in the North American markets (California) and Chinese markets.

"China is adopting policies that have worked for others, such as allowing China's nine ETS pilot markets to operate until 2025. Additionally, the Chinese government is reducing oversupply without hurting companies, by reducing benchmarks but also allowing for generous correction factors," he says.

Free allocations will be the primary means of distributing credits, while China Certified Emission Reduction (CCER) offsets will also be allowed – up to 5% for compliance markets.

Millar at Baker McKenzie says the potential for ETS participants to use a small portion of offsets for compliance is encouraging.

She adds that another key feature which the market is tracking closely is whether foreign investors will be able to trade in the scheme.

"We have been encouraged by the recent release of the updated allocation plan for the national ETS, along with the draft ETS rules and registry regulations, and are waiting with anticipation for trading activity to commence, likely in early 2021," she adds.

Looking ahead

There are plenty of significant market developments on the horizon. One key aspect will be clarification of rules surrounding Article 6 of the Paris Agreement, the outcome of which will determine how countries can reduce their emissions using international carbon markets.

Discussions on the matter were expected to take place at COP 26, which has been delayed by a year to November 2021.

In addition, the collapse in aviation fuel demand was a disappointing turn of events for those market participants expecting airlines to be big buyers of carbon offsets as part of voluntary preparations for Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), ahead of a mandatory phase due in 2027.

"Article 6 and CORSIA were both expected to be catalysts for an international carbon market to replace the CER market, of which over 3 billion tonnes is traded on ICE. Covid-19 has impacted both; one through the delay of COP26 and the other through the destruction of demand for airline fuel and the decision to utilise 2019 as the baseline," says Bennett at ICE.

The International Civil Aviation Organization (ICAO) Council's decision to use 2019 emissions as the baseline for CORSIA's implementation during the pilot phase of 2021 to 2023 has been controversial. If air traffic fails to recover to 2019 levels during this time, airlines will not be required to purchase carbon credits.

Despite these headwinds, Lack at Element Markets, says "it's still an incredible market" and he is hopeful that post Covid-19, there will be resurgence in air travel and that will lead to an increased demand for offsets: "We expect at least 550 million tonnes of demand coming from the airlines by 2035," he says

He says that substantial investment is required to meet the requirements of both compliance regimes and CORSIA.

"We're very bullish about offset development opportunities: there are still a lot of credits out there that appear to be inexpensive relative to the demand we see on the horizon," he adds.

Such a picture means carbon markets are likely to attract further interest from investors seeking to diversify portfolios or use carbon to hedge against energy transition risks. EF

Environmental Finance
Annual Market Rankings 2020

Weather markets buoyed by renewables in turbulent year

The growth of renewable energy has fundamentally affected approaches to weather risk. This year's Market Rankings winners in the weather derivatives markets speak to Christopher Marchant

In a year when the Covid-19 pandemic sent stocks tumbling and masses of the population sheltered from the weather by working from home, questions about how weather derivatives would adapt abounded.

"The market has not just been resilient, but actually very active, with more work in the sector seen than in the previous 12 months, with a lot of new initiatives," says Claude Brown, a partner at Reed Smith and a member of the firm's global derivatives practice. "Activity on transactions has been quite strong in Australia, South America and in Europe.

"Also, there's been a lot of focus on the Caribbean, which has come as a result of the increasing severity of weather and climate change in the region."

Reed Smith was again voted best law firm category in the global weather management category, the latest in a line of consecutive victories.

In 2019 TP ICAP expanded into the weather derivatives market, led by Eric Ernst and his brother Nicholas Ernst. Hired in April 2019, Nick joined as managing director, weather markets, and Eric as a weather broker.

This year TP ICAP was victorious in the best broker category for weather risk markets in both North America and Europe, after winning in the North America category in 2019.

Both previously worked together at Choice Energy, which claimed the Best Broker – North America title in 2018 and 2017, evidence of the Ernst effect.

Of the impact of the pandemic on the market, Nicholas Ernst says: "When Covid-19 came and the economic slowdown started, you started to see a little bit less business coming through, because there wasn't as much demand. However, most of our customers still had weather risk, so it didn't affect it as much as I would say it has other marets."

Renewable energy has seen a sustained increase in its adoption rate over the past twelve months, following a strong 2019, especially transactions related to solar and wind power. Coupled with a crash in oil prices in early 2020, the energy mix showed early signs of a truly radical transformation, with implications for weather derivatives traded in the sector.

Marcel Reif, head of weather at Munich Re, winner of best dealer or structured product seller in the European markets, says: "Many energy markets are currently undergoing a period of structural change, driven by the massive shift to renewable energy production and technological changes. This has resulted in new company

CATEGORY	WINNER	RUNNER-UP
Weather Risk Management – North America		
Best broker	★ TP ICAP	
Best dealer/structured product seller	★ MSI GuaranteedWeather	Munich Re
Weather Risk Management – Europe		
Best broker	★ TP ICAP	
Best dealer/structured product seller	★ Munich Re	
Weather Risk Management – Asia		
Best broker	★ CQ Energy	
Best dealer/structured product seller	★ AXA	
Weather Risk Management – Australia		
Best broker	★ CQ Energy	TP ICAP
Best dealer/structured product seller	★ Nephila	Swiss Re
Weather Risk Management – Global		
Best advisory/data service	★ Speedwell Weather	Parameter Climate
Best law firm	★ Reed Smith	

formations, novel business models and increased M&A activity.

"As a whole, this transformed market faces new or altered weather & commodity risk positions. Given the direct nature of our business, it is paramount to keep abreast of these developments."

David Whitehead, co-CEO of Speedwell, which beat off the challenge of upstart Parameter Climate to retain its title as winner of best advisory for weather risk markets worldwide, gives some specificities on how this has impacted the market in 2020: "Originally, wind hedging would be in the form of a company that has a portfolio of wind power generation, worried about weather patterns that were not producing enough. That's a very simple hedge, but where the markets are getting exciting now is from market participants that have been impacted by excess production coming into the grid and impacting pricing.

"All of a sudden, your traditional energy participants have to care about wind farms, and needing to manage that risk through weather products. It's been a huge, huge growth segment of the market right now."

Technological advances have also played a huge part in updating the weather market for 2020, especially in the field of parametric weather modelling.

Martin Malinow, CEO of Parameter Climate, runner up for best advisory or data service in the weather markets, expands on what this entails: "Over the last twenty years, protection sellers have solely focused on the station to which the transaction was indexed, for example London Heathrow, and they would consider the attributes of that station in their modelling."

"What Parameter Climate is bringing to the table is actually looking at climate trends regionally, not just at Heathrow but across Western Europe. This also involves analysing proprietary extreme weather indices to better understand the general volatility of climate and then factoring that into the risk analysis and pricing for our clients."

CQ Energy, partnered with Risk Solutions in an international joint venture, was named best broker in weather risk management for the Asian and Australian

▲ David Whitehead, Speedwell

regions. It has also developed in non-energy markets a business focus on parametric index-based solutions and sees 'significant opportunities' in the sector.

As well as global trends, specific areas have witnessed more localised effects of climate change, the rise of renewables and an evolving marketplace. As runner-up in 2019 for best dealer or structured product seller, Munich Re's work in the continent gave it top spot in 2020.

On the European perspective, Reif says: "The increased occurrence of extreme events raises awareness [of climate change], but risk assessment and pricing has become, of course, much more difficult as these events deviate significantly from historical expectations, and innovative risk transfer solutions are increasingly required.

"A good example is the increasing number of European heat waves leading to low river levels. This has resulted not only in shipping disruption, but also limited the generation of thermal power plants who rely on the river for cooling water. The economic losses from such events can be severe."

Increasingly extreme weather is, of course, not a uniquely European phenomenon, and approaches to confronting this issue are inextricably tied to addressing how climate change is affecting the weather markets.

Speedwell's headquarters are in Charleston, South Carolina, part of an American South that experienced more than $14 billion in damages after Hurricane Laura, the strongest tropical storm to have hit the mainland US in 150 years, wreaked havoc in the region in August.

On how climate change and corresponding changes in weather are impacting the weather markets, Whitehead says: "Climate change, in the context of increased frequency of extreme weather, has made people very interested in weather risk management. All you have to do is look at headlines in any paper.

"With climate change, the markets are expanding more into these climate parameters. We're looking at wildfire, looking more at tropical products, we're looking at atmospheric pollution visibility. There are these environmental variables that are all coming into play in the same market."

Summarising the Australian markets, Dan Stilwell, head of origination at Nephila Climate, again trumping competition to be awarded winner of best dealer or structured product seller for the region, says: "A lot of what we do as a business unit within Nephila Climate is to focus on renewable energy temperature drought risk and agricultural risks of that sort. As the temperature gets hotter and hotter every year, we're doing a little bit less on the temperature side and we're replacing that with a lot more renewable energy."

While based in Australia, CQ Energy, partnered with Risk Solutions International, was also able to capitalise on its wider global presence to be victorious in the Asian markets. On its role in the Asian markets, Ian Tannebring, a partner at CQ Energy, says: "We have been for a number of years inclined to focus on Asia for various opportunities that may exist in those markets.

"We have a strong relationship with capital providers that offer options for renewables. We are looking at rolling those products into Asia, specifically Japan, which has an inflation of renewables. But it's probably fair to say that it is early days, and that these markets are still updating their regulations in this area." EF

RECs Covid-19 rally 'shows renewables momentum'

Covid-19 and the US election contributed to a turbulent year for RECs and RINs, winners of this year's annual market rankings tell Michael Hurley

US markets for Renewable Energy Certificates (RECs) rode out turbulence caused by a global pandemic in a show of strength that demonstrates the dynamism of the transition to a low-carbon economy, according to the winners of *Environmental Finance*'s annual market rankings.

By comparison, equivalent schemes in other parts of the world, including in Europe, appear to have been hit harder by declines in travel and corporate energy use as a result of Covid-19 – but have nonetheless shown resilience, say this year's winners.

RECs are a market-based instrument that certifies the bearer owns one megawatt-hour (MWh) of electricity generated from a renewable energy resource. Once the power provider has fed the energy into the grid, the REC can then be sold on the open market as an energy commodity.

In the US, where states implement compliance and voluntary REC schemes, prices of the certificates dropped sharply in line with the initial shock caused by the rapid spread of the pandemic between March and May, but "bounced back very quickly across all markets", says Jonathan Burnston, managing partner at New York-based Karbone.

Karbone won 'best broker' and 'best advisory' for North American RECs markets. It was also voted 'best broker' for Renewable Identification Numbers (RINs – see box).

Compliance buyers are utilities or electric suppliers that are required by state regulations to have a certain percentage of their electricity generation or sales from renewable sources. Voluntary buyers include corporates wishing to purchase RECs to offset carbon emissions associated with their purchased electricity, or to meet commitments for purchasing renewable energy.

In compliance markets, the PJM (Pennsylvania, New Jersey, Maryland) 'Tier 1' RECs – typically among the highest-value RECs, which consist of wind, landfill gas, low emissions biomass, run of river hydro, and other fuel types – for example, dropped from about \$10-\$11 prior to Covid-19, to between \$6-\$7, "but soon regained their \$10-\$11 position", Burnston says.

> "If it was not obvious before, it is now: the push towards renewable energy and decarbonisation is a secular trend: society wants this"
> Jonathan Burnston, Karbone

"However, a much more important barometer of the strength of renewables was the voluntary market. The national Green-e market went from roughly a 70-cent product to what is now a roughly \$1.50 product.

"If it was not obvious before, it is now: that the push towards renewable energy, decarbonisation, within the business community and the investment community, is a secular trend: society wants this… [and] the market will have what it wants – whether government guides that or not."

Tim Pabst, managing director of STX, which was voted 'best trading company' for North American RECs, says: "Despite Covid-19 and the overall decrease in energy demand, renewable energy supply saw record growth in 2020," propelled by government policy and corporate demand for voluntary RECs.

Pabst says that, if the more climate-friendly policies of the incoming Biden federal administration can be implemented "it could accelerate renewable energy development, especially by tackling one of the biggest issues, the outdated infrastructure… we expect the federal government to step up in their own green procurement."

In Europe, "Covid-19 has had both positive and negative effects," says Anil Akalin, director of renewable energy at

Renewable energy's big moment

Environmental Finance spoke with Patrick Horka, head of renewable energy solutions at South Pole about how the 'big moment' in renewable energy has arrived much faster than expected

***Environmental Finance:* How are companies utilising renewable energy solutions to work towards net-zero commitments and hedge against global climate risks?**

Patrick Horka: A straightforward way for companies to start an emission reduction pathway is to reduce Scope 2 emissions – indirect emissions from the electricity purchased and used by the organisation. Many of our clients start by compensating their Scope 2 emissions with Energy Attribute Certificates (EACs), and then blend these with other solutions such as corporate power purchase agreements (PPAs) or on-site renewables, depending on their energy demand and facilities.

There are multiple benefits for incorporating renewable energy solutions into corporate climate strategies: price hedges, cost-savings, improving financial performance, brand and climate leadership, and contributing to positive social impacts. The interest in the latter is growing, and quality labels are becoming more important in EACs.

EF: How is South Pole helping companies with their climate strategies?

PH: We offer everything from the implementation of strategy to tailored solutions – green tariffs, EACs, corporate PPA's, on-site renewables. In other words, our team is the 'one-stop-shop' for organisations looking to incorporate renewable energy into their climate strategies. When engaging with our clients, our role is to make them aware of the risks and opportunities of each solution. For example, we helped one of our clients, a global beverage company, structure one of the first corporate PPAs in Vietnam. This will supply their local facilities with renewable energy from a newly built clean power plant. We advised them throughout the entire process, from market analysis up until the signature of a terms sheet.

We also partnered with a high-tech, global engineering multinational to develop a strategy to achieve 100% renewable electricity in its key markets by 2045, all while working towards its 50% emission reduction target by 2030. This strategy is a key part of the company's overall ambition to reach net zero emissions.

Patrick Horka, South Pole

We analysed over 31 markets and developed three alternative pathways with a carefully planned combination of renewable energy solutions.

EF: What's driving demand for such solutions?

PH: What we are seeing today is a disruptive, exponential change taking place within the realm of renewable energy. It is getting tougher every day for a business not to consider renewables as a robust solution for containing energy costs, among other things. The 'clean supermajors', such as Enel, Iberdrola, NextEra Energy and Orsted, prioritised the building or buying of clean-power plants when those assets were still considered alternative and expensive. Now they are on the cusp of a breakthrough and their market caps have surpassed those of oil companies.

This big moment in renewable energy has come much faster than expected.

EF: What has helped the industry reach its 'big moment?'

PH: Corporate climate action pledges have been a key driver; such as the RE100 pledge, setting Science-Based targets (SBTs), and net zero commitments. RE100 signatories alone consume more than a mid-sized country, such as South Africa or Indonesia.

Stronger policy signals and regulation are also guiding the market. Much of the progress in developing and deploying renewable energy technologies has been achieved thanks to effective government policies, which overcome economic, technical, and institutional barriers. We see many markets moving towards deregulation, allowing for companies to source renewable energy directly from the generator.

The levelised cost of energy (LCOE) of wind and solar dropped well below the LCOE's of fossil fuels, strongly increasing the demand for direct procurement of renewable energy, such as via PPAs.

EF: South Pole performed well in the Australian and Chinese renewable energy certificates (REC) markets in our Market Rankings in this year. What opportunities do you see in these markets?

PH: Asia-Pacific countries are being pushed to hasten their transition to renewables, as big companies from Europe, the US, Singapore and Japan work to lower their emissions and procure renewable energy across their supply chains. We've also seen countries send positive market signals to companies: China, Japan, and South Korea have recently set net zero targets, which clearly encourages companies to start shifting towards renewables sooner rather than later – with RECs being the simplest and fastest option for companies to use immediately.

Regionally, businesses in the heavy industry, food and beverage, and the extractives sectors are wanting to secure long-term renewable energy offtakes. We also see the Asian market deregulating and giving way to alternative energy solutions.

EF: To what do you attribute to your success in these areas?

PH: We are a passionate team of renewable energy experts sitting in offices all over the world – we have our boots on the ground to ensure best possible local market insight, and work with a network of established partners. Our expert advisory capabilities paired with our award-winning EAC projects allows us to blend and customise the most innovative and impactful renewable energy solutions for our clients.

Redshaw Advisors. The London-based firm was awarded best advisory for RECs in Europe.

"Across Europe, whilst overall electricity output has dropped, the share of renewable energy in the power mix is rising … due to polices and market mechanisms valuing renewables more, and also the costs of renewable energy dropping. The EU Green Deal and other policies will continue this trend."

In the EU, Guarantees of Origin (GOs) are electronic documents which provide proof of the environmental attributes of the generation of one MWh of electricity by a renewable source.

In January, GO prices, as shown by the Association of Issuing Bodies (AIB), "took a dive and dropped from €0.50 to €0.23; they never recovered their January start price", Akalin says. "GOs dropped from a starting point of €0.70 to a low over the year of €0.35. This drop was largely due to Covid. However, oversupply of Nordic hydro also hit prices.

"Polish generators are holding back on showing volumes for 2022 and onwards as they anticipate joining the AIB. Whilst this is keeping prices higher than they might otherwise be, the outlook is mainly bearish and some suppliers, mostly from Spain and Italy, are sometimes not showing volumes because of low price bids.

"The low prices on offer have helped end-users buy more volume and hedge future increases in price. With corporates perceiving current prices as low, they are keen to lock in longer term deals. However, most generators prefer to only show prices for up to three years," Akalin says.

Oliver Crouch, chief product officer at Natural Capital Partners, which was voted 'best broker' for RECs in Australia, says increasing voluntary demand for RECs from large global companies, "particularly in the IT and professional services sectors, wanting to cover their scope 2 energy use in all countries where they operate" has bolstered demand in Australia.

"As part of the same commitment and interest from large global corporates, there's a continued growth in International RECs (I-RECs). For instance, we worked with [standard setting body] I-REC to help establish their tracking system in Israel in response to one client's specific interest in that area."

CATEGORY	WINNER	RUNNER-UP
Renewable Energy Certificates – North America		
Best broker	★ Karbone	
Best trading company	★ STX	Element Markets
Best advisory	★ Karbone	Element Markets
Best law firm	★ Akin Gump	
Renewable Energy Certificates – Europe		
Best broker	★ STX	Redshaw Advisors
Best trading company	★ STX	Redshaw Advisors
Best advisory	★ Redshaw Advisors	ClearBlue Markets
Renewable Energy Certificates – Australia		
Best broker	★ Natural Capital Partners	TFS Green
Best trading company	★ South Pole	
Best advisory	★ South Pole	
Best law Firm	★ Baker McKenzie	
Renewable Energy Certificates – China		
Best advisory	★ South Pole	
Best law firm	★ Baker McKenzie	
Renewable Identification Numbers		
Best broker	★ Karbone	Element Markets
Best trading company	★ Element Markets	Bluesource
Best advisory	★ Element Markets	Karbone
Best verifier	★ EcoEngineers	
Best law firm	★ Eversheds Sutherland	

I-RECs are similar to RECs in North America and European GOs but are available for companies to source in countries across Africa, Asia, South and Central America and the Middle East.

John Davis, commercial director for the Asia Pacific region at South Pole, which was voted 'best trading company' and 'best advisory' for RECs in Australia, and 'best advisory' in China, says: "Without a doubt, there has been more demand [for RECs] in the APAC region, due to Covid-19 prompting companies to pay more attention to supply chain resilience.

"APAC countries are being pushed to hasten their transition to renewables, as big companies from Europe, the US, Singapore and Japan work to lower their emissions and procure renewable energy across their supply chains.

"We've also seen countries send positive market signals to companies: China, Japan, and South Korea have recently set Net Zero greenhouse gas emissions targets, which clearly encourages companies to start shifting towards renewables sooner rather than later – with RECs being the simplest and fastest option for companies to use immediately."

Davis adds that South Pole is planning to grow its presence in the region – including doubling the size of its Singapore office – to meet growing corporate demand across Asia.

Paul Curnow, global head of Baker McKenzie's sustainable finance practice and

Connecting green energy markets

Jens Schumacher, managing partner of STX Group talks to *Environmental Finance* about how STX is working with its clients as the renewable energy revolution picks up pace on a global scale

***Environmental Finance:* Corporate appetite to explore new kinds of renewable energy products and certificates is growing. What is driving this?**

Jens Schumacher: There is both public pressure and a feeling of responsibility. We have seen a lot of interest by the corporates this year. Many have not procured their energy certificates yet – because of the circumstances we are in with Covid-19 – but it remains high on the agenda.

In Europe this year we will see one of the biggest changes in the energy market the European Union as ever experienced with the implementation of the Renewable Energy Directive II (RED2) and the European Green Deal. In the US, the new administration has indicated the fight against climate change will be a top priority, so we expect similar developments there as well.

Wherever there is energy demand there is a transition to renewables ahead. This process will be easier for less-industrialised nations where the renewables infrastructure can be set up from scratch, rather than having to transition from fossil fuels to renewable networks as we have had to do in Europe and other industrialised nations. That phase has not even properly started yet.

EF: What are some of the challenges that corporates are facing with the 'greenification' of their supply chains and how are you working with them on that?

JS: When reducing emissions, whether within scope 1, or 2 and 3, standardisation is probably one of the key elements here. Corporates are requesting harmonised and reliable solutions on a global scale.

In Europe, we have a Guarantee of Origins (GoO) system, which is governed by the EU and requires member states to issue certificates of renewable electricity. With the implementation of the RED2, this system will be extended to other renewable energy sources, such as gas, and likely even to non-renewables. The USA have a similar system, called Renewable Energy Certificates (RECs).

Jens Schumacher, STX Group

In other regions of the world there is a standard commonly used called International REC (I-REC). This seeks to create a certain standard for Energy Attribute Certificates (EACs) in countries where there is no national scheme available.

Standardisation and harmonisation are the most important elements that ensure credibility. When corporates believe that the purchase of such certificates is a viable solution and there is a framework in place, then they are comfortable that what they are doing is correct. If there is a standard, there is a norm, and STX can provide companies with that solutions in line with these standards.

Scope 1 and 3 emissions are mainly being reduced using carbon offsets. This year, we have seen a strong increase in consumers addressing and approaching their supply chain footprint.

EF: You work with companies to buy certificates but also to sell them. What are the advantages of doing both?

JS: At STX, we add value for the buyer and the seller. For a possible seller – such as an energy producer or maybe an investor – we provide long-term offtake agreements for the energy certificates on a global scale. And for the buyers – utilities and corporates alike – we provide a great variety of solutions of EACs from our portfolio of around 200 terawatt hours annually.

We also know how different markets operate, how they are developing, and we have the network and experience to manage cross-border issues. With the RED II law being implemented in Europe, this will help to standardise the renewable energy markets and allow more cross- border transactions – on both the electricity and on the gas side.

EF: What has been the impact of Covid-19 on GoOs?

JS: Energy demand was immediately impacted by lockdown measures. Because less energy has been needed – but the supply of the renewables remained stable – we have seen the lowest prices in years. However, the renewable energy revolution had already started before Covid-19 came along and net zero strategies were already in place. In the short-term, the markets have been very bearish, but if you look at forward markets – especially the electricity and EAC markets – there is a very bullish outlook already. We expect already a strong increase in demand in 2021 with even further increases in the following years to come.

EF: You have performed particularly well in the European and North American regions in our Market Rankings this year. To what do you attribute to your success in these regions?

JS: We have been providing solutions to the global markets for over 15 years now. In addition, we have local expertise, in combination with a global reach. Our global network consists of independent generators, project developers, investment funds, major utilities, and corporates. We support, connect, and access a wide range of international opportunities, all through a single point of contact. Recently, we also established a new a new initiative called Climate Solutions. It is totally dedicated to providing direct access to global markets as a single, reputable partner and serving as one-stop-shop for environmental solutions.

global co-head of its renewable energy & clean technology practice, says oversupply could hit prices in Australia, as the country's Clean Energy Regulator has indicated that a national target of 33,000GWh of additional renewable energy between 2020 and 2030 will not be raised.

This is despite the regulator acknowledging that the target has already been met, and the fact that new renewable energy power stations may still be accredited under the scheme.

Liable entities are obliged by legislation to purchase and surrender a certain number of large-scale generation certificates (LGCs) each year.

"It is likely that as the number of accredited projects – and, therefore, the number of LGCs created – under the scheme increases, the value of LGCs will drop considerably." Australia's Clean Energy Council has said futures markets indicate the value of LGCs may eventually drop to zero by 2030.

Nonetheless, "we are at a fascinating moment in the renewable energy markets in general. The price dynamics are now driving policy, as much as the other way around," Curnow says. "Australia has the world's highest penetration of domestic rooftop solar. This is not because of a renewables or climate policy so much as the simple fact that solar power has become cheaper for household use in many cases."

Baker McKenzie was voted 'best law firm' for both Australia and China. EF

US election amplifies RINs uncertainty

Uncertainty reigns in the market for Renewable Identification Numbers (RINs), as the agency responsible for setting compliance requirements deferred to do so, due to November's federal election, says Susan Lafferty, a New York-based partner at Eversheds Sutherland, which was voted 'best law firm' for RINs.

To implement the US federal government's Renewable Fuel Standard (RFS) programme, the Environmental Protection Agency (EPA) tracks production and use of renewable fuel using RINs. These are generated by renewable fuel producers or importers and are bought and sold "attached" to the renewable fuel until the fuel is purchased by an "obligated party" – a refiner or importer of gasoline or diesel fuel – or blended with a petroleum-based transportation fuel.

The RIN is then "separated" from the fuel and may thereafter be independently bought or sold until it is retired to meet an obligated party's 'renewable volume obligation' (RVO).

The Trump-administered EPA has in recent years granted increasing numbers of exemptions to some small refineries, which mainly produce gasoline and/or diesel. Market observers suggest this has undermined demand for RINs. However, many of these were struck down in landmark legal cases over the last 12 months, which led to a sharp increase in demand, this year's winners say.

At the time of going to press, the market was awaiting the EPA's decision on the 2021 volumes of renewable fuel each obligated party will be required to blend into their fuel, or otherwise obtain RINs to demonstrate compliance.

"The EPA was seemingly on track to issue the 2021 standards by the statutory deadline, which was November 30. They sent a draft proposal to the Office of Management and Budget (OMB) in May – that's the last step in approving a regulatory action. But that proposal has just been sitting at OMB," Lafferty says.

"We may not have final standards until some point in the second quarter of next year, which is not a good place for the industry. The big uncertainty continues to grow."

Lafferty adds that the outcome of the US election further complicates the market. "Under a Biden administration, the question would be, 'are they going to really try to push the volume requirements and make them more ambitious?' That's where an obligated party gets even more nervous.

"Will the 2021 RVOs see a modest increase, like expected under the Trump administration, or is the new EPA going to really try to push for more volumes? Then comes the question, how do they factor in Covid-19 and presumed continued decreases [in activity] into next year. The uncertainty is not a good position to be in."

Randall Lack, founder and co-president of Element Markets, voted 'best trading company' and 'best advisory' for RINs, says: "We are hopeful that, under a Biden administration, the EPA will take a more aggressive view on growth, instead of maintaining 'status quo' growth, and focus not only on propelling growth that will be needed to support renewable natural gas (RNG) but also the growing supply of new renewable diesel capacity that's being planned in the US from refinery conversions.

"Several companies have shut down large refineries and are looking to shift to renewable diesel, including Marathon, Phillips 66 and CVR.

"There is a significant amount of renewable diesel coming into the market – which represents a direct drop in diesel fuel, as it can be used in its place – but the way the RVO is set, there is not enough depth in the D4 market, where renewable diesel sits, to absorb the volume coming on."

> "We are hopeful that, under a Biden administration, the EPA will take a more aggressive view on growth, instead of maintaining 'status quo' growth"
> **Randall Lack, Element Markets**

Lack adds that several states are likely to push ahead with plans to establish schemes similar to California's Low Carbon Fuel Standard (LCFS), whereby obligated entities can generate RINs as well as LCFS credits, including Colorado, Washington, and Minnesota.

In particular, California's push to decarbonise the carbon-intensive transportation sector is likely to be replicated in states with similar programmes. "There is now a massive amount of investment going into renewable diesel and RNG, all predicated on confidence in the renewable fuel and LCFS markets in the US," he says.

Shashi Menon, CEO of EcoEngineers, voted 'best verifier', says: "We don't anticipate a dramatic change in the RVO growth from previous years. The real question is how the RFS will be integrated into a larger climate programme under the new administration. There is no clear answer to that right now.

"Currently, the RFS is a combination of farm policy that supports biofuels and climate policy that incentivises decarbonisation of the transportation sector. The new administration could continue with this agenda, or it is possible that these goals might bifurcate and be administered under separate programmes i.e., a climate strategy that lays out an overarching decarbonisation agenda will work in tandem with a farm policy that supports decarbonisation of the agriculture sector."

Creativity and transparency drives market forward

The cat bond market is closing in on another record year, writes **Ahren Lester**

The catastrophe (cat) bond market is closing in on a potentially record-breaking year, as tightened traditional reinsurance markets and growing innovation draws in new and established participants.

Logan Davis Fox – underwriting director for the reinsurance division of Nephila Capital, the winner of Best dealer (structurer/arranger) for the third year in a row – says traditional reinsurance and retro markets saw tightening terms and rate hardening due to increasing storm losses, an active hurricane season and complexities brought about by Covid-19. In contrast, the cat bond market has "fared well" as it has been largely insulated from these 'in the money' events.

Willis Towers Watson (WTW) – runner up in the Best broker category – says that in the non-life cat bond market, a rebound in annual issuance means the segment is on track to hit record levels in 2020 – after investors saw "increasing value" in cat bonds relative to other forms of insurance-linked security (ILS) investments, which also includes collateralised reinsurance, sidecars and industry loss warranties.

According to data from Artemis, cat bond issuance has reached over $9 billion in 2020 to date – considerably higher than the $5.3 billion in 2019 and closing in on the record $9.9 billion issued in 2017. Total ILS issuance, meanwhile, has crossed $14 billion – compared with $11 billion during the whole of 2019 – and represents the fourth year in a row that annual issuance has exceed $10 billion.

Logan Davis Fox, Nephila Capital

Willis Re senior vice president Quentin Perrot says demand for cat bonds has benefitted from the unexpected losses that investors have incurred on traditional bilateral instruments which have left them "trapped". This trend has heightened the appeal of the more orderly losses experienced on cat bonds, in addition to the more transparent and liquid nature of the bonds.

Davis Fox says 2020 has been particularly active in the primary issuance space, where there has been a record number of new bond deals.

"Many of these are returning sponsors looking to renew maturing notes with similar structural features," she says. "But, more interestingly, there are a large number of new issuers coming to the market for the first time – or the first time in a long time – to take advantage of the current market environment."

CATEGORY	WINNER	RUNNER-UP
Catastrophe Risk Management		
Best dealer (structurer/arranger)	★ Nephila Capital	Swiss Re= Sompo Global Weather=
Best broker	★ TP ICAP	Willis Towers Watson
Best advisory	★ Parameter Climate	

For example, Google-owner Alphabet came to the market to secure Californian earthquake insurance protection. "If similar large corporates follow suit, this could result in greater demand for capacity and diversified risk," she says.

The market is also "getting creative" and testing unique cat bond structures, Davis Fox says, with a cat bond providing wildfire protection being marketed for a utility firm that uses a blend of a parametric and modelled loss as a trigger.

The rising appeal of parametric triggers helped newcomer Parameter Climate (PC) to top the Best advisory category. Launched earlier this year by industry veteran Martin Malinow, PC seeks to capitalise on the "rapidly growing" parametric market of recent years.

Malinow – formerly president of Sompo Global Weather – says companies have become more aware of their climate risk and are looking for ways to try and address this after the 2017 Atlantic storm season saw three major storms hit in short order.

"What was laid bare by that experience was that it was difficult to loss-adjust for traditional indemnity products in any rapid manner," he says. "It made a very clear case for parametric products that could settle within days of the event." Parametric bonds can be settled in 10 to 15 days.

Parametric products are also well suited to non-damage business interruption, he says, as they provide a "very neat and objective" way of protecting against these expenses.

In 2021, all three market participants expect the cat bond market to continue to grow – especially in the US, where disruption caused by Covid-19 has meant that many cedents were unable to get to market in 2020.

Perrot cautions that we should not expect the cat bond market to surge in 2021 as it has in 2020, however, instead forecasting "healthy growth" led by "solid" investor demand. EF

IIGCC appoints Ward as first female chair

The Institutional Investors Group on Climate Change (IIGCC) has appointed a new chair, vice chair and two new board members, following its AGM.

Faith Ward – Chief Responsible Investment Officer at the Brunel Pension Partnership – will be IIGCC's first female chair. She succeeds Peter Damgaard Jensen, CEO at Danish pension provider PKA, who stands down after seven years as a board member, three of which as chair.

Torben Möger Pedersen, chief executive of PensionDanmark, has been appointed as vice chair.

In 2020, the IIGCC has seen a 28% increase in membership revenue, with 74 new members. IIGCC now has 275 members in total, with over €35 trillion ($43 trillion) in assets collectively under management.

◀ Faith Ward

Moody's appoints global head of climate solutions

Moody's has appointed **Emilie Mazzacurati** as global head of Moody's Climate Solutions.

In this newly-established role, Mazzacurati will oversee the climate solutions suite within Moody's ESG Solutions Group, a new business unit formed earlier this year to serve the growing global demand for ESG and climate analytics.

Mazzacurati is founder & CEO of climate data firm Four Twenty Seven, in which Moody's acquired a majority stake in 2019.

Marshall to lead new M&G stewardship and sustainability team

UK investment manager M&G has created a stewardship and sustainability team, to be led by **Rob Marshall**.

According to M&G, the team of 13 professionals will help meet increased client demand for ESG-integrated, sustainable and impact products and develop the roadmap to meet M&G's commitment to achieve net zero carbon emissions across its investment portfolios by 2050.

▲ Rob Marshall

Marshall previously led M&G's credit research team and more recently its global research equity and credit team.

LGPS Central hires director of responsible investment & engagement

LGPS Central, manager of eight UK local government pension schemes, has announced **Patrick O'Hara** as its new director of responsible investment and engagement.

▲ Patrick O'Hara

O'Hara will lead the LGPS's responsible investment team, ensuring the area is further enhanced, expanded and embedded as a core part of the company's investment and portfolio monitoring processes.

He was previously a senior responsible investment analyst at UK pension fund USS.

Templeton leaves GIG to join Pollination

Gavin Templeton has left Macquarie's Green Investment Group (GIG) to become a partner at Pollination Group.

▲ Gavin Templeton

Templeton had been head of sustainable finance at the GIG, which he joined in 2013 when it was the UK government-owned Green Investment Bank.

Willis Towers Watson appoints senior director

Insurance brokerage Willis Towers Watson has appointed **John Firth** as senior director for its climate and resilience hub.

Firth was CEO and co-founder of Acclimatise Group from 2004, a climate resilience consultancy which now serves as part of Willis Towers Watson. Firth will continue as director of the company.

GIB Asset Management hires Neil Brown as head of equities

▲ Neil Brown

GIB Asset Management has hired **Neil Brown** as head of equities, joining the firm from Liontrust Asset Management.

Brown will be tasked with helping GIB launch sustainable equity products.

GIIN appoints Eloy Lindeijer to board

The Global Impact Investing Network (GIIN) has appointed **Eloy Lindeijer** as its newest board member.

Lindeijer is the former chief of investment management and member of the executive committee of PGGM, the second largest pension service provider based in the Netherlands.

Janus Henderson creates head of ESG role for Aviva recruit

▲ Paul LaCoursiere

Janus Henderson has poached Aviva's **Paul LaCoursiere** to lead its environmental, social and governance (ESG) investment strategy.

LaCoursiere is currently Aviva's global head of ESG research.

Deutsche Bank makes appointment to ESG team in Asia

Deutsche Bank has appointed **Kalpana Seethepalli** as its Asia Pacific director of ESG.

Seethepalli joins the bank from impact fund Infra-Tech Capital, where she was managing director of sustainability and impact. She has also worked at the World Bank as an economist, focusing on sustainable development and investment policy, blended finance and public-private partnerships.

Zouk appoints Paul Myners to the board

Zouk Capital, an infrastructure and private equity fund manager investing in the sustainable economy, has appointed **Paul Myners** to the board.

Myners' appointment will allow London-based Zouk to draw upon his wider ranging insights into multiple areas of interest, in particular ESG considerations within private equity portfolios, the firm said.

Blackstone appoints ESG head

Blackstone has appointed **Eric Duchon** as global head of environmental, social and governance (ESG) for real estate.

The US private equity giant said Duchon will work with the firm's real estate asset management teams around the world "to build on existing ESG efforts and scale them across the firm's $329 billion global real estate portfolio".

Credit Agricole hires green bonds analyst

Valentina Sanna has been appointed green bonds and ESG fixed income research analyst at Credit Agricole.

Sanna was previously a sustainability consultant and sustainable finance research manager at Vigeo Eiris (now known as V.E.), in roles also based in France.

Lora Brill joins Orchard Street as head of responsibility & ESG

▲ Lora Brill

Orchard Street Investment Management, a commercial property investment manager, has appointed **Lora Brill** as its dedicated head of responsibility and ESG, a newly created role.

Brill joins from JLL Upstream Sustainability Services where she was a strategic sustainability consultant, advising a wide range of property companies over the last 10 years.

Lightsource bp appoints global head of structured finance

Lightsource bp, the largest solar developer in Europe, has appointed **Craig Love** as global head of structured finance.

He is former managing director of NatWest Structured Finance. EF

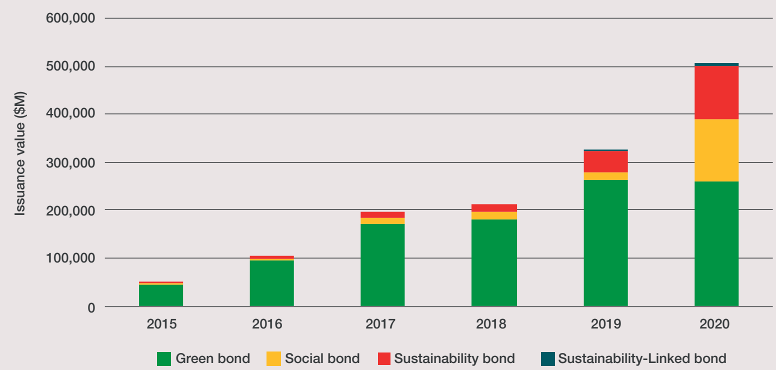
2020: the year the social bond came of age

Social and sustainability bond issuance has soared in the wake of the pandemic

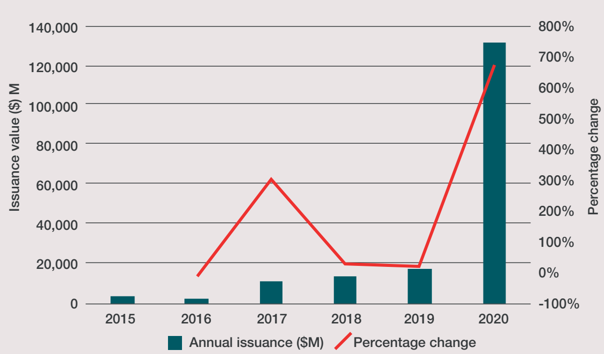
Annual issuance of green, social, sustainability and sustainability-linked bonds

Chart showing the annual issuance of green, social, sustainability and sustainability-linked bonds. 2020 issuance has grown significantly as of 3 December 2020 compared with the whole of 2019 continuing the trend of growth seen in previous years. Notably however the increase in 2020 so far has been the expansion of social and sustainability bonds, particularly social bonds which have seen a rise in value of issuance of 675% already this year. This is driven in part by a response to the Covid-19 pandemic.

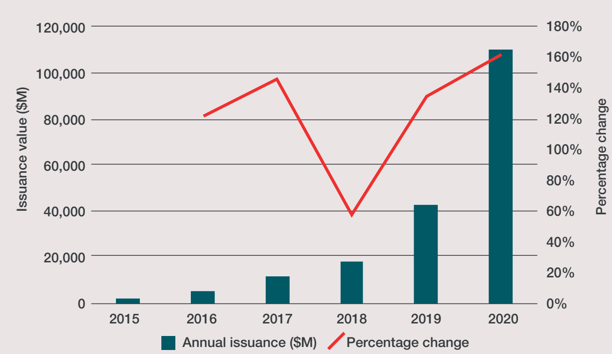
Data taken from bonddata.org as of 3/12/2020



Growth of annual issuance of social bonds



Focus on sustainability bonds



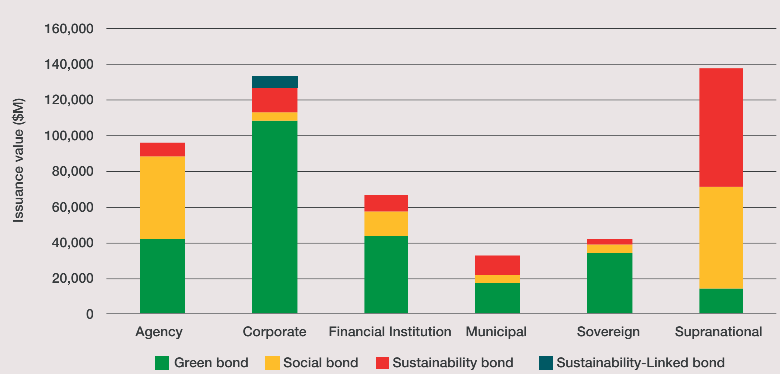
Looking at how issuance of social and sustainability bonds has grown over the past five years, we can see steady growth until 2020, after which issuance has soared. *Based on figures taken from bonddata.org as of 3/12/2020*

2020 YTD Breakdown of bonds issued by issuer type*

The increase in social and sustainability bonds this year has largely been driven by supranationals and agencies, while social and sustainability bonds also account for around half of all municipal issuances as of 3 December 2020. This reflects how large governmental organisations have responded to the Covid-19 pandemic with massive increases in social project funding, often with sustainability in mind.

**2020 up until 3 December 2020*

Data taken from bonddata.org as of 3/12/2020



Compiled by Ashton Rowntree