

ESG Central

The Latest ESG News and Analysis

Issue 4 • February 2022

The Omicron effect Can the sustainability agenda survive?

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Multilateral limits

For countries and companies looking to move on from the Covid-19 pandemic, the rapid spread of the Omicron variant has been an unwelcome reminder of the scale of the challenge ahead. Though less severe in most cases than other strains, Omicron's incredible transmissibility has forced even countries with high vaccination rates to reimpose restrictions, extending the impact of the coronavirus on economies and delaying the path to recovery.

These shocks have for the most part been mercifully short-lived – a temporary setback, rather than a permanent reversal of progress.

But Omicron also threatens to have long-term implications for the UN Sustainable Development Goals. After so much progress in 2021, will a renewed battle with Covid distract from the commitments made?

The answer to this question depends on the severity of the impact, and the extent of the policy response.

In areas that are ill prepared for another Covid-19 outbreak, the battle against the Omicron variant could cause serious economic damage and divert public resources away from other social and sustainability initiatives. It also clouds the picture for policymakers looking to withdraw fiscal stimulus measures and raise interest rates to combat rising inflation.

What is abundantly clear, though, is that Omicron's impact is not being felt evenly around the world.

The countries facing the greatest risk from Omicron are those

where the population remains largely unvaccinated. This is overwhelmingly the case for low-income countries that lack the resources to acquire vaccines or the capacity to develop their own.

Only 11% of Africa's population is fully vaccinated, according to official data – compared to a global rate of 54% and 72% in the European Union.

This vaccine disparity is a striking reminder of global inequalities – and the limits of multilateral cooperation. It has been over a year since the first Covid vaccines were approved for emergency use, and many countries are still struggling to acquire and administer the shots they need to protect their populations.

This gap must be closed before the world can move on from the pandemic.

Doing so is an urgent task for the multilateral community in 2022. It is also achievable: globally, Covid-19 vaccine production is now running at almost 1.5 billion doses per month – more than the entire African population.

International cooperation will clearly be key to the world making progress towards the SDGs, as well as the goals of the Paris Agreement. Before the next UN climate change summit in November, global leaders need to draw up more ambitious emissions targets and follow through on promises of financial support for climate-vulnerable countries. Omicron is a reminder that our agenda for a better world can only be achieved by working together.

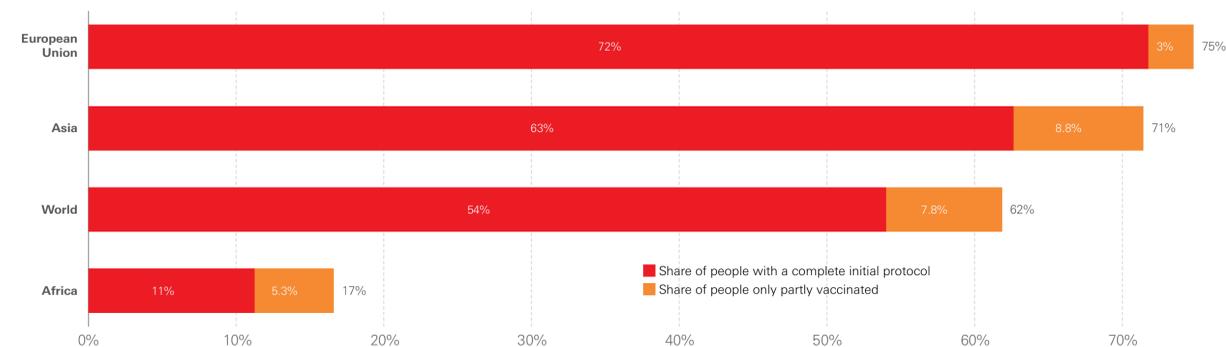
“This vaccine disparity is a striking reminder of global inequalities – and the limits of multilateral cooperation.”



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Vaccination variation

Share of people vaccinated against COVID-19, Feb 13, 2022



Source: Official data collated by Our World in Data
Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

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The Omicron effect

The latest setback in the battle against Covid-19 exposes the gulf between rich and poor nations and highlights the social impacts of an uneven economic recovery

The emergence of the omicron variant of the Covid-19 virus in November dealt a setback to hopes that 2022 would be a year of recovery – and to the delivery of the 17 Sustainable Development Goals, which include No Poverty and Decent Work and Economic Growth.

The new, ultra-transmissible variant has prompted the return of emergency public health measures, exacerbated supply chain problems and complicated plans to exit the massive stimulus packages that have supported the global economy over the past two years.

The World Bank's latest economic outlook predicts global growth will slow to 4.1% this year from an estimated 5.5% in 2021, mainly due to the combination of omicron and fading policy support.

The economic and social consequences of omicron, however, will not be felt evenly across the globe. Emerging markets and developing economies are set to be disproportionately affected, with output remaining markedly below pre-pandemic levels. Some countries – notably China – still have largely closed borders.

The arrival of omicron also comes as the world is doubling down on its ESG ambitions, with the fight against climate change and social inequality taking centre stage in 2021. After a flurry of commitments from policymakers and government leaders, will the rapid spread of omicron be a threat to their implementation, or will it add renewed drive to the ESG movement?

Social discontent

Omicron has been shown to cause less severe illness than other Covid-19 variants, but its increased transmissibility is straining healthcare systems – especially where large populations are unvaccinated. This group includes the citizens of poorer nations: Bloomberg's vaccination tracker estimates that countries and regions with the highest incomes are being vaccinated more than 10 times faster than those with the lowest. The poorest 50 countries, home to 20.6% of the world's population, have received only 6.1% of all vaccinations, according to Bloomberg data.

The world has shown "a global inability to support developing countries in their hour of need"; UN Secretary General António Guterres said in an address to the World Economic Forum's **Davos Agenda**.

"We are setting in stone a lopsided recovery. More than 8 in every 10 recovery dollars are being spent in developed countries," he said. "Without immediate action to support developing countries, inequalities and poverty will deepen, and this will result in more social unrest and more violence."

Although more than 10 million individuals are receiving their first shot every day, the goal of halting the pandemic remains elusive. The World Health Organization notes that ongoing supply-chain disruptions have replaced a lack of availability as the main hurdle to poorer countries' vaccination programmes.

As the pandemic's economic impacts hit poorer countries harder, problems associated with poverty are set to increase.

"This inequality is even more dramatic in per capita and median income terms, with people in the developing world left behind and poverty rates rising," said World Bank Group President David Malpass in January. "We're seeing troubling reversals in poverty, nutrition, and health."

The United Nations plans to provide humanitarian aid for 183 million people this year, with 161 million facing acute food insecurity – which it estimates will cost US\$41 billion to address.

Investors pull back

Thanks to the economic uncertainty fuelled by the latest pandemic wave, investors continue to pursue opportunities where the recovery shows more promise, directing funds away from

poorer countries. An HSBC survey from November 2021 showed sentiment towards emerging markets is already becoming more cautious, with 27% feeling 'bearish', up sharply from 9% in July. Correspondingly, those feeling bullish towards emerging markets dropped from 40% to 27%. Fewer than two fifths (37%) of investors polled expected emerging market growth to accelerate in the next 12 months, well down from July's 60%.

The omicron flare-up has also added to the focus on global trade and supply chains, where Covid-driven constraints are contributing to soaring inflation.

"The development of the cyclical economy and locally produced products has been accelerated by the supply chain disruption and port congestion last year, and brought the ESG issues surrounding supply chains to the forefront of considerations by consumers," said Wai-Shin Chan, Head of ESG Research at HSBC.

"The ability to respond quickly to consumer demand and provide products reliably, especially when competitors can't, is likely to be critical in the near future."

Diversity matters

Reprogramming supply chains will be a long-term trend, but companies can expect human rights issues and labour policies to remain in the spotlight in 2022.

In 2021, jurisdictions including the UK, Hong Kong, Singapore, UAE and Japan implemented or proposed diversity initiatives including mandatory diversity targets, diversity metrics disclosure and policy development. Concerns about contract and migrant workers' rights are spurring reforms in the US and EU, while Qatar introduced a non-discriminatory minimum wage and shortened working hours during hot summer months.

According to Proxy Preview 2021, US shareholder resolutions concerning social issues – including diversity and human rights – were up 20% on the previous year.

Investors are also becoming more receptive. Shareholder campaigns on environmental and social issues escalated last year, with 1 in 8 activist campaigns producing a successful outcome – an improvement from 1 in 9 in 2020.

Climate and accountability

Climate considerations in 2022 will focus on execution, rather than commitments, according to HSBC Global Research.

"There is going to be increased scrutiny in our view – from investors and civil society – on whether corporate pledges are credible, actually deliver real emissions declines, or amount to greenwashing," said Chan.

With a large proportion of available public and private funding already committed to climate-related projects, governments and corporations have increased their issuance of social bonds: Refinitiv data records US\$191.8 billion last year, up from US\$125 billion in 2020 – and just US\$38 billion in pre-pandemic 2019.

Innovation continues rapidly in this space: in November, the IKEA Foundation issued a US\$14 million development impact bond to fund refugee programmes run by the Near East Foundation in Lebanon and Jordan for "a vocational, entrepreneurship, and resilience-building programme" in those countries.

As the world waits for the omicron wave to peak, demand for capital to tackle the growing need for support in poorer and emerging economies is likely to increase.

"Climate-related funding will remain the priority," said Chan. "But a combination of factors, not least ongoing pandemic-fuelled uncertainty and disruption, means socially-linked investments will likely continue to mount in the coming years."

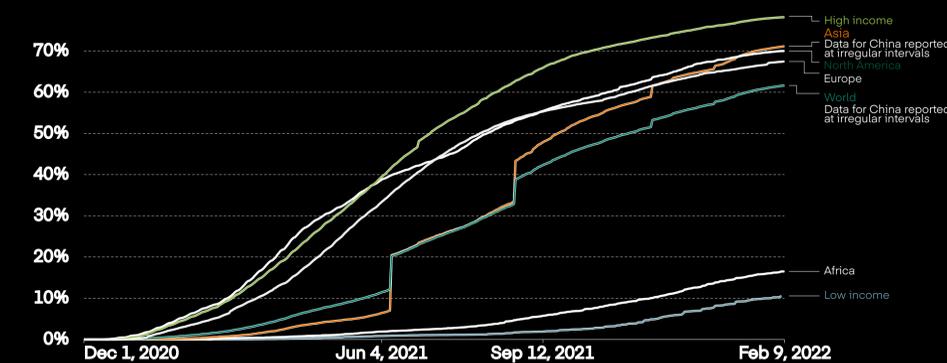
\$191.8bn

Total issuance in US dollars of social bonds in 2021, up from US\$125 billion in 2020

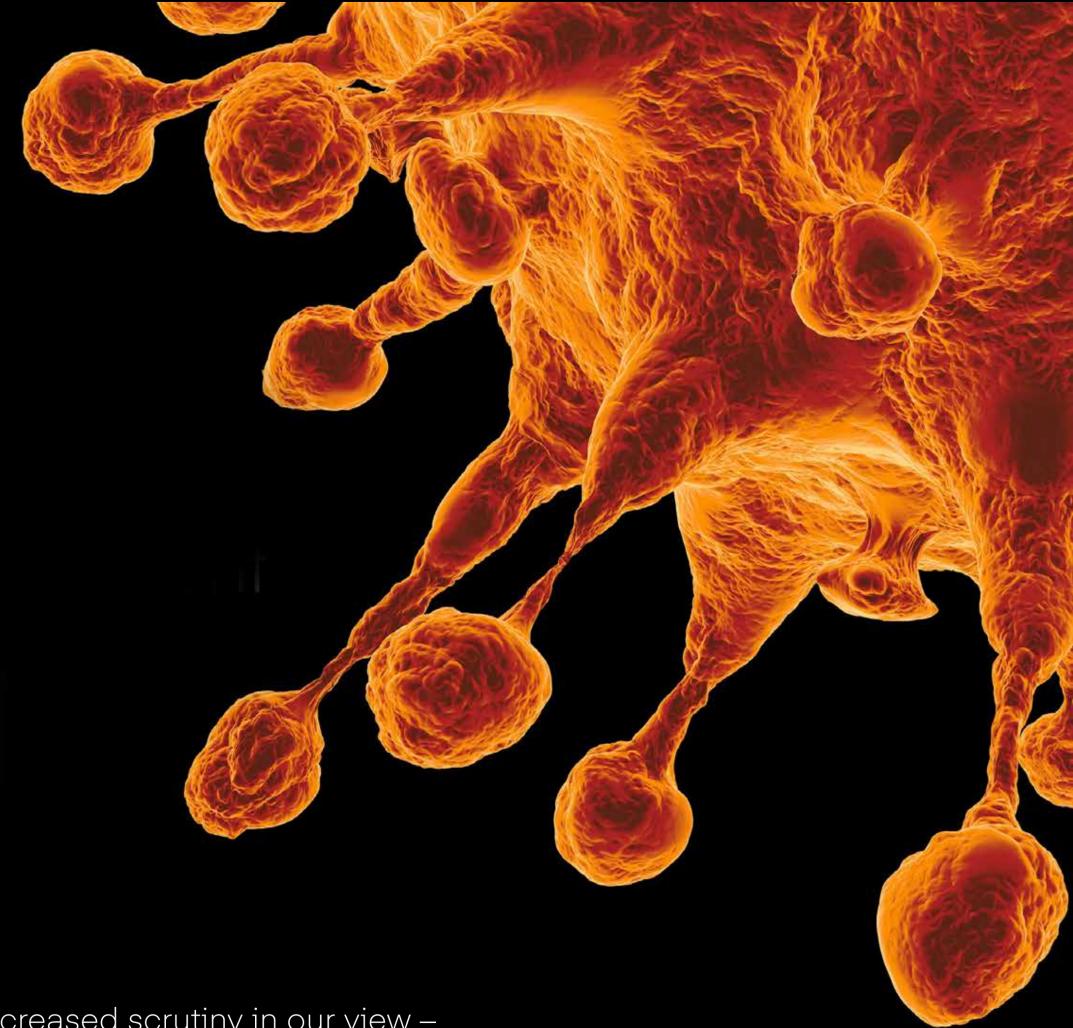
"There is going to be increased scrutiny in our view – from investors and civil society – on whether corporate pledges are credible, actually deliver real emissions declines, or amount to greenwashing"

Share of people who received at least one dose of COVID-19 vaccine

Total number of people who received at least one vaccine dose, divided by the total population of the country.



Source: Official data collated by Our World in Data





Capturing the opportunity

The pipeline of projects aiming to capture, use or store carbon quadrupled in 2021, according to the IEA. With US\$25 billion of funding allocated for carbon capture programmes over the past two years, will CCUS technologies finally take off in 2022?

For most businesses and consumers, the path to a low-carbon future starts with replacing fossil fuels with clean electricity. But what of the hard-to-abate sectors that are not yet able to “electrify everything”?

Carbon capture, utilisation and storage (CCUS) offers an alternative way of preventing carbon emissions from entering the atmosphere. The idea of capturing the CO₂ produced during industrial or agricultural processes – or even sucking it directly out of the air – and then locking it away or recycling it for other purposes is a tantalising prospect in the race to limit climate change.

CCUS can be used in conjunction with other mitigation strategies to make a significant dent in atmospheric carbon levels. It can also allow power companies, steelmakers, cement or fertiliser manufacturers to shrink their net emissions while they transition to less carbon-intensive processes.

The technology is far from new. The first commercial carbon storage project came online 25 years ago in Norway’s Sleipner gas field, which has been pumping unwanted CO₂ back under the sea floor since 1996. Today, global CCUS projects avoid over 40 million tonnes of CO₂ (MtCO₂) emissions each year – barely 0.1% of total global emissions. Scaling that up, however, is a challenge: according to the International Energy Agency (IEA), total capacity needs to increase to 1.6 billion tonnes (GtCO₂) by 2030 as part of a wider push to put the world on track to net zero by 2050.

“Previous hopes that CCUS was about to fulfil its potential have petered out,” said Samantha McCulloch, Head of Carbon Capture Utilisation and Storage Unit at the IEA.

The agency calculates that governments and companies have allocated US\$25 billion to CCUS projects since the start of 2020, with more than 100 new planned CCUS facilities announced in 2021.

“While CCUS certainly still faces challenges, the combination of strengthened climate goals, an improved investment environment and new business models have set the stage for greater success in coming years,” said McCulloch.

Delivering finance

There are signs of progress. The Global CCS Institute reports the capacity of projects in development grew from 73 MtCO₂ a year at the end of 2020 to 111 MtCO₂ in September 2021 – a 48% increase.

In addition, technologies such as bioenergy with carbon capture and storage (BECCS) and direct air capture are gaining traction.

Future storage facilities will work optimally if developed as part of a larger network of connected functions. For example, Norway’s planned **Norcem Brevik** project will capture CO₂ emitted during cement production, move it by ship to a facility on the Norwegian West Coast for temporary storage, and then transport it via pipeline to a North Sea CCS facility for sequestration. This will be built by Norwegian energy company Equinor in partnership with Shell and Total, and funded by the Norwegian government.

As CCUS becomes an established sector in its own right, it could become a major economic driver, providing jobs that offset losses in sectors impacted by decarbonisation – such as oil and gas.

Time running out

Locating and developing usable sites, however, requires a great deal of investment. The Global CCS Institute calculates that installing sufficient CCUS capacity to meet the 2°C Paris target would require between US\$655 billion and US\$1.28 trillion in capital investment by 2050.

Private sector funding for CCUS, however, is limited by a strong preference for greener or more cost-effective alternatives. Tarek Soliman, energy equity analyst at HSBC Global Research, notes that CCUS projects suffer from “image issues”, in that they can be viewed as a way to prolong fossil fuel usage.

The second hurdle is time – lead-times for establishing a functioning CCUS facility can be 10 years from site exploration to construction and commissioning.

“Unless the technology gains a solid foothold in the coming years, it risks stagnating and potentially being overlooked in the race towards decarbonisation,” said Soliman.

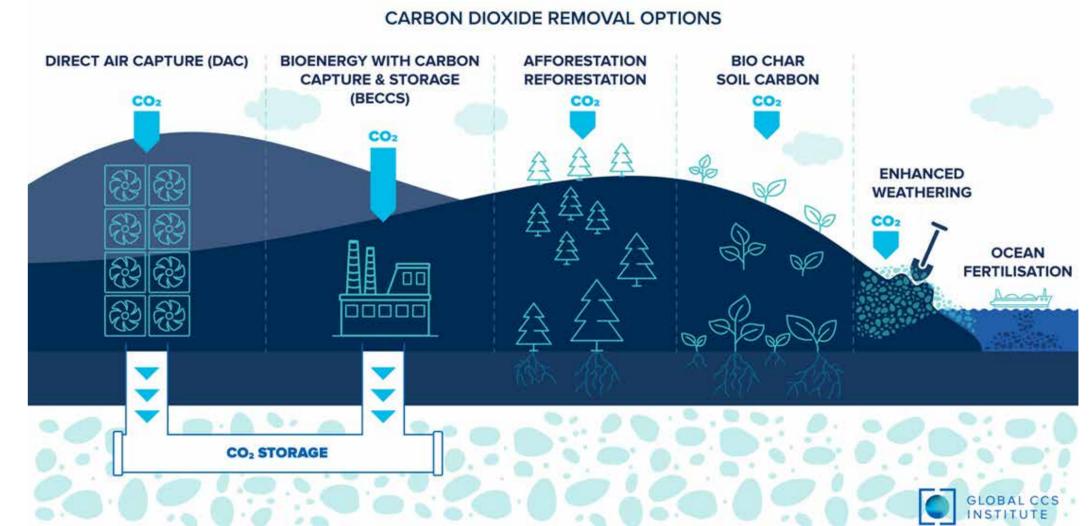
The proliferation of net zero commitments in recent years offers hope that the renewed interest in CCUS projects may be translating to decisions on the ground. As investment moves away from oil and gas exploration, infrastructure, assets and expertise have the potential to be redeployed towards CCUS projects. And the cost-benefit equation is improving: consultancy Wood Mackenzie calculates that better “learnings by doing” and economies of scale could bring about a 20% reduction on current costs, and the development of CCUS hubs, where several emitters share common infrastructure, could save another 20%.

Policy support

CCUS projects will doubtless appeal to the many companies that have set themselves net zero targets, but the rapid build-out of facilities on the required scale will require policy support as well as both public and private capital.

Hot on the heels of the COP26 summit, the Infrastructure Investments and Jobs Act that President Biden signed into law on 15 November last year, contains provisions for funding to accelerate reviews for pipelines to deliver CO₂ to sequestration facilities and provides US\$3.5 billion for demonstration and pilot projects. In addition, the Clean Air Task Force notes that the US 45Q tax credit – which varies from US\$12 to US\$50 for each metric ton of carbon captured and sequestered – provides additional momentum for CCUS projects.

The story is familiar: targets are demanding, time is short and action is needed sooner rather than later if CCUS is to make a meaningful contribution to the net-zero transition. At the same time, the groundswell of support for all decarbonisation strategies makes it increasingly likely that carbon capture will have a meaningful part to play.



“Unless the technology gains a solid foothold in the coming years, it risks stagnating and potentially being overlooked in the race towards decarbonisation”



ESG disclosure gets material

Growing scrutiny of fund labelling is raising questions over the value of generic ESG ratings

In the past year, arguments about the science behind climate change have given way to a global understanding of the urgent need to act on what the science is telling us.

A consensus on the science behind ESG investing, however, remains elusive.

In the competitive investment world, investors are accustomed to basing their decisions and performance metrics on precise, detailed data. But when it comes to sustainable investments, investors have to negotiate a flood of information – much of it contradictory. A 2020 KPMG survey found that the top challenge for institutions making ESG-oriented investments was the lack of quality and consistent data (49%); 63% of hedge fund managers cited this concern as their greatest worry.

The survey found that there are 160 ESG ratings and data products providers worldwide, but “no universal acceptance of what a ‘good’ company is in practice”. ESG labelling and tracking systems continue to proliferate: the International Organization of Securities Commissions (IOSCO) says the market for ESG data products was worth US\$1 billion by the end of 2021, with a predicted annual growth of 20%.

No basis for comparison

The same set of data can be used to produce very different results. One ESG ratings provider, for example, may issue top marks to an oil company based on its flawless corporate governance record, while another will penalise it because of its carbon footprint.

This lack of a standardised methodology is obscure for many investors – leading some to worry that they are participating unwittingly in ‘greenwashing’.

MSCI upgraded its ESG rating for fast-food giant McDonald’s in April 2021, even though CO₂ emissions from its supply chain had grown by around 7% in four years, Bloomberg Businessweek reported in December.

Many ESG ratings systems like MSCI’s focus on factors that may affect the business, rather than how the business affects the world around it. This approach is grounded in time-honoured accounting standards and corporate disclosure rules, where companies are obliged to disclose any material information that may affect enterprise value.

As Securities and Exchange Commission (SEC) commissioner Allison Herren Lee put it: “Materiality is a fundamental proposition in the securities laws and in our capital markets more broadly. The system for public company disclosure is generally oriented around providing information that is important to reasonable investors.”

Doubling down

But this enterprise value approach to materiality is insufficient for investors who are concerned about the impact of their investments

on society or the environment. The concept of double materiality has gained traction since it was formally proposed by the European Commission in its 2019 Guidelines on Non-financial Reporting Supplement on Reporting Climate-related Information. Double materiality requires a company to evaluate two kinds of materiality: “the extent necessary for an understanding of the company’s ... value,” as well the environmental and social impacts of its activities on a broad range of stakeholders – and how the two are interconnected.

The OECD is also on board, stating that methodologies “need to move from rewarding disclosure to rewarding alignment of company activities with sustainability”.

Legislators have begun to hone in on the concept of materiality as the basis of new rules for ESG disclosure. One of the first to enshrine the concept in legislation was France’s Energy Transition Law (2017), which mandates carbon reporting for both listed companies and pension investors. The EU’s Sustainable Finance Disclosure Regulation (SFDR) came into effect in March 2021, also applying double materiality.

In November 2021 the UK’s Financial Conduct Authority (FCA) launched an industry consultation process on sustainability disclosure requirements (SDRs) for asset managers and ESG product labelling. Feedback will go into policy proposals for consultation in the second quarter of this year. Using his role as UN Special Envoy for Climate Action and Finance, Former Financial Stability Board (FSB) Chair Mark Carney advocated worldwide mandatory climate disclosure ahead COP26, elevating the double materiality concept to global status.

In the US, the SEC’s proposals for enhanced sustainability disclosure rules are mired in political wrangling, with Republican states expressing concerns about the financial regulator “assuming a leading role when it comes to climate change.”

This growing scrutiny of ESG scores means companies can expect investors will hold them to these higher standards of materiality if they are to benefit from the growing availability of ESG investor funds.

HSBC’s Sustainable Financing and Investing Survey in September found 46% of investors now use impact goals or metrics as part of their investment decision-making – up notably from 37% of investors who said the same in 2020.

“Ultimately, investors and companies are thinking more deeply about the impact they and their investments are having on the world and society,” said Alex Lupis, Global Head of Global Investor Access, Global Co-Head of ESG Sales at HSBC. “The financial benefits, an evolving regulatory regime and rising demand for change among customers and employees are powerful drivers in this direction.”



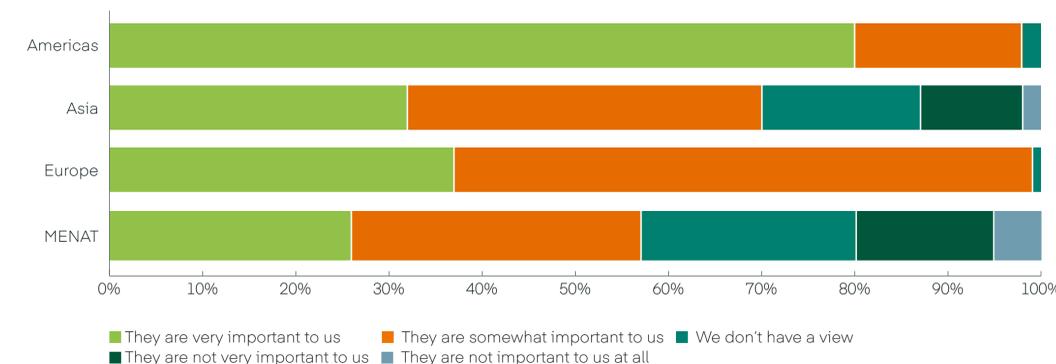
“Ultimately, investors and companies are thinking more deeply about the impact they and their investments are having on the world and society”



Mark Carney, UN Special Envoy for Climate Action and Finance

Investors from the Americas lead the way

What is your organisation’s attitude to environmental and social issues?



Source: HSBC Sustainable Financing and Investing Survey 2021



ESG NEWS ROUNDUP



Arctic drilling row heads to European court

The European Court of Human Rights has asked Norway to respond to activists' claims that new oil and gas drilling in the Arctic violates human rights.

Norway has rejected the allegations, and has until April 13 to provide its comment to the court.

The case could have wider implications on the enforcement of the European Convention on Human Rights in climate cases, the activists' lawyer said.

The court said it may designate the case as an "impact" case, which could substantially shorten the time for a ruling that now takes as long as six years, according to Bloomberg. Environmental groups and activists have increasingly been turning to courts to force companies and governments to pay for environmental damages and prevent future threats.

California solar subsidy cut adds to uncertainty over ESG stocks

California's proposed cut in solar subsidies and new fees for home solar users have added to uncertainty over green stocks. The measures announced in December reflect the risk of stimulus rollbacks or incentive delays faced by the green energy sector, knocking investor confidence at a time of rising interest in ESG.

The S&P Global Clean Energy Index, which includes wind-energy giant Orsted, Spain's Iberdrola, and US solar firm Sunrun, was down 27% in 2021 to mid-December after more than doubling in value in 2020, according to Bloomberg data.

Worries about rising interest rates, unpredictable US politics and regulatory actions could make the outlook more challenging for green stocks, analysts say.

Record EU carbon price boosts clean tech hopes

The recent rise in the EU carbon price is raising optimism over the viability of emerging technologies such as carbon capture and storage (CCS) and clean energy.

Credits in the EU's emissions trading system hit €90.75 in December, nearly doubling from €50 in late July. December also marked the biggest one-day price move on record in absolute terms. Under the trading system, heavy-polluting companies can buy credits to have the flexibility to emit tonnes of carbon in their operations.

Analysts say the price of allowances could more than double in the coming years. This could improve the economics for CCS and other clean technologies that could attract increased investments if the price of carbon stays high.

US banks asked to drop fossil fuels

Climate-focused investors have called on major US banks to quickly scale back their funding of new fossil fuel development, seeking an immediate end to new projects.

Members of the Interfaith Center on Corporate Responsibility (ICCR) have filed resolutions to bring the matter to shareholder votes at the banks' annual meetings this year. Banks receiving the resolutions include the six largest US lenders by assets – JPMorgan

Chase, Bank of America, Wells Fargo, Citigroup, Morgan Stanley and Goldman Sachs.

All six have already committed to curbing global emissions. The banks will decide in the coming weeks whether to accept the resolutions for inclusion in their proxy statements, or whether to seek regulators' permission to leave them aside.

Korea's SK E&S accused of greenwashing

South Korea's largest private gas provider, SK E&S, faces legal action from climate activists, who allege that it falsely labelled liquefied natural gas from its Barossa project as "CO₂-free".

Environmental group Solutions for Our Climate (SFOC) claims SK only partially removes emissions from the gas produced in its Barossa gas fields in Australia, but doesn't do anything about the carbon dioxide (CO₂) released when the gas is burned, leading to high levels of emissions.

SK said it will use carbon capture and sequestration to eliminate 60% of its share of the emissions from the project and will grow forests to offset the rest.

The Seoul-based SFOC will take the case to the Korea Fair Trade Commission and the Ministry of Environment, which will decide whether to go forward with an investigation.

The action, which is the first claim in South Korea against a company over its emissions, comes as environmentalists across the globe seek legal recourse against large fossil fuel suppliers.

UBS, UK pension fund ditch more energy stocks

UK state-backed pension fund Nest has sold its holdings worth £40 million (US\$54.7 million) in ExxonMobil and four other energy companies, citing their lack of progress in managing climate change risks.

Nest, the £20bn UK government-backed workplace pension scheme, has divested from ExxonMobil, Imperial Oil, Korea Electric Power Corp, Marathon Oil and Power Assets, the Hong Kong-based electric utility company.



The pension scheme had held the five companies in a £9bn climate-aware fund run by UBS. The Swiss bank has also excluded the companies from its suite of climate-aware tracker funds, which hold assets of about US\$20.8bn, as well as its actively managed equity and fixed income sustainability funds.

Alibaba targets net zero by 2030

Alibaba Group has pledged to become carbon neutral in its operations by the end of the decade, using new energy-saving technologies, renewable energy, and initiatives that cut carbon emissions.

The Chinese e-commerce giant promised to achieve carbon neutrality in its own direct emissions, as well as those derived from the consumption of electricity or heating, classified as Scope 1 and Scope 2 emissions.

It also plans to halve the carbon intensity – the amount of carbon per unit of revenue – of its Scope 3 emissions, or those produced across the wider value chain in areas such as transportation, purchased goods and services, and waste.

The company also pledged to cut emissions of carbon dioxide across all its businesses by 1.5 gigatonnes by 2035. The move aligns with China's pledge for carbon neutrality by 2060.

Investor pressure boosts climate disclosures

More companies are reporting their impact on climate change, deforestation and water security, reflecting increased pressure from investors and policymakers.

In 2021, the number of firms sharing climate data on CDP, a global nonprofit disclosure platform, rose nearly 40% from a year earlier to 13,132. European companies account for the largest number of firms making climate disclosures, followed by Asia and North America. By country, US and China had the most number of firms on CDP last year.

Despite the increase in companies reporting on the CDP platform, the quality of disclosures remains weak. Many companies have yet to set clear targets for reducing emissions, and some aren't disclosing all pertinent emissions data, according to CDP.

SGX mandates climate reporting

The Singapore Exchange (SGX) is requiring listed companies in the financial, energy, agriculture, food and forest products sectors to report their climate impact from next year.

SGX has also made climate reporting mandatory for companies in the materials and buildings sector, as well as transportation, beginning 2024.

Issuers in all sectors are already expected to provide climate reports on a "comply or explain" basis from the financial year starting 2022. They are also required to set a board diversity policy that addresses aspects such as gender, skill and experience.

The new requirements are based on recommendations from the Task Force on Climate-related Financial Disclosures, and follows SGX's public consultations on sustainability reporting and diversity disclosures.

EU proposes green label for gas and nuclear plants

The European Union's plan to classify some gas and nuclear power projects as green investments has deepened divisions among member states, highlighting challenges to the bloc's climate goals.

The proposed changes could damage the credibility of the EU's labelling and divert investment away from renewables, politicians in Austria and Luxembourg said. An EU expert panel has also opposed the inclusion of gas and nuclear. However, the biggest political group in the European Parliament threw its weight behind the plan, saying it would help accelerate emissions reductions.

The proposal sent to member states seeks to put a temporary green label on gas projects replacing coal and emitting no more than 270 grams of carbon dioxide equivalent per kilowatt-hour. Those facilities must obtain construction permits before 2031 and seek to switch to renewable or low-carbon gases by 2036. Nuclear energy could also be classified as sustainable if projects meet certain criteria including avoiding significant harm to water resources and the environment.

The rules will apply from January 2023, unless blocked by a majority in the European Parliament. Financial institutions will then need to apply the definitions to any products marketed as "sustainable".

Continuing **the momentum**

COP26 may have dominated the UK's climate agenda in 2021, but it's clear there is plenty more to do. Archie Young, the UK's lead climate negotiator, explains his priorities for 2022

Multilateral climate summits are gruelling, intense affairs for any official delegate, with the global spotlight ever present, 3.30am meetings standard practice and sleep measured in minutes, not hours. For a select group of people at the heart of global climate negotiations, however, whirlwind global summits are only one part of the process.

Barely two months after the end of the COP26 summit in Glasgow, Archie Young, lead climate negotiator for the UK Government, has already spent time in Egypt preparing for COP27 and in the United Arab Emirates preparing for COP28 in November 2023.

The UK – which retains the COP presidency until the next summit begins in Egypt's Sharm El-Sheikh in November – is clearly not resting on its laurels.

"For this year, the task is to deliver on the Glasgow Climate Pact. Everybody has made major commitments in that, and we need to make sure that they follow through," Young told ESG Central.

A fair COP

The UK closed out the Glasgow meetings with mixed emotions. The final pact delivered real progress on numerous fronts, but COP President Alok Sharma's tearful closing speech was a poignant reminder that much more needs to be done.

"We rightly set high ambitions for COP26 because that's what the science demands," said Young. "We finalised the Paris Agreement rulebook, we took forward the work on finance and adaptation, and we got countries to set a lot of ambitious plans. But those plans are still not ambitious enough in their totality, and the policies and measures aren't there in all cases to give us confidence that they will actually be delivered."

The details of the Glasgow Climate Pact – including its contentious pledge to "phase down" the use of coal – have been well reported. Beyond the headlines, Young takes pride in the participation of vulnerable nations and the increased level of global engagement.

"Covid has really highlighted so many of the global inequalities that have always been there, and some of that did play out inevitably at COP. It was the first major international gathering of leaders since the start of the pandemic, so those differences came to the fore," he said.

"But I am encouraged by the sense of global cohesion. I've been doing this for several years, and there is a much clearer consensus that 1.5 degrees must really be the upper limit and we must make every effort to stay within that," he said.

Common goals

The UN Framework Convention on Climate Change is a multilateral process in its truest sense. Every corner of the world is given a voice, and parties are careful to respect the boundaries of sovereignty.

Progress can be slow – too slow for climate activists like Greta Thunberg. And the UNFCCC, or United Nations Framework Convention on Climate Change to give it its full name, does not have the power to set national laws or enforce the agreements reached.

But this system of peer pressure has convinced 154 of the 197 parties to the Paris Agreement to submit new national targets ahead of COP26. Over 90% of the world's population is now covered by a net zero target – up from less than 30% when the UK took on the incoming COP presidency.

"One of the things I love about this process is that you are trying to deliver for everyone. We put a lot of effort into making sure that there was inclusive representation from vulnerable countries and from particularly marginalised groups."

"One of my fondest memories was chairing one of the stocktaking plenaries. At that point, there had been some really difficult discussions and people were raising very valid concerns and objections. But then just one positive intervention came in, and it completely changed the mood of the room."

Bringing business along

It is not just countries that are committing to net zero emissions. Corporate net zero pledges also accelerated around the COP26 summit, notably from the financial sector. The Glasgow Financial Alliance for Net Zero (GFANZ) has gathered commitments from financial institutions representing US\$130 trillion of assets, with 450 firms pledging to deliver their share of 50% emissions reductions by 2030 on the way to carbon neutrality by 2050.

The unprecedented level of private sector attendance at COP26 raised some eyebrows among climate change activists, who argue Big Finance is still facilitating fossil fuel industries. For Young, careful, principled engagement is an essential part of aligning financial flows with climate-resilient development – an explicit goal of the Paris Agreement's Article 2.1(c).

"If the financial actors who control those flows are hearing what needs to be done, and then setting out how they're going to act on it, then it can be directed to completely align with the Paris Agreement. We absolutely need to include the finance community in all of these conversations."

What happens next?

Commitments from the public and private sector are sure to come under scrutiny in 2022 – not least because the new "ratchet" mechanism agreed at COP26 requires governments to increase their emissions reduction targets before the next conference of parties.

Young also sees 2022 as a crucial year for conservation, with the sister UN convention on biodiversity scheduled for a key meeting in China in April-May and the desertification convention also slated to meet.

"I think there is a growing appreciation in the international community of the link between climate change and nature. The fact we have all three sister conventions meeting in 2022 presents an opportunity to really strengthen those connections."

As for the future of coal, Young sees the Glasgow Climate Pact as "the clear signal" of its demise. Coal has never previously been referenced in a UN climate decision, even if the language used was a disappointment to some.

"I absolutely understand that disappointment, because so much of that is about a desire to go further and faster," he said. "It's helpful that there is this focus on coal front and centre, because that is the one action that governments around the world need to take first, in terms of decarbonizing."

"If the financial actors who control those flows are hearing what needs to be done, and then setting out how they're going to act on it, then that is all completely aligned with the Paris Agreement. We absolutely need to include the finance community in all of these conversations."



Doomsday on ice

Cracks in an Antarctic ice shelf are a reminder of the urgent need to tackle global warming

The end of the Thwaites glacier in West Antarctica may collapse within the next five years, triggering a catastrophic chain of events that could raise global sea levels by as much as three metres.

That was the sobering message in December from a group of UK and US scientists that have been studying Thwaites, dubbed the “Doomsday glacier” for its potential to flood tens of millions of people around the world.

The remote glacier, an icy river the size of Florida, has become a powerful symbol for the urgent threat posed by climate change. Scientists have warned of rising sea levels for decades, but only recently has data and technology allowed for more precise predictions about the scale of the problem.

The UN Intergovernmental Panel on Climate Change devoted special attention to sea levels and ocean temperatures in the first part of its Sixth Assessment Report, released in August. It warned that global sea levels were likely to rise another 28-55cm by 2100 even under a very low emissions scenario – but did not rule out an increase of 2m or more due to deep uncertainty in ice sheet processes.

Cracking Antarctica

Since 2000, the Thwaites Glacier in West Antarctica has lost more than 1,000 billion tons of ice due to global warming, and if it continues at this rate, it could contribute several centimetres to sea levels by the end of this century. Recent research suggests that Thwaites is particularly vulnerable to climate change because the ice shelf which restrains its movement is eroding and could collapse, releasing the glacier’s pent-up mass to flow much more rapidly into the ocean.

Not only would this collapse contribute about 60cm to global ocean levels, but it could also trigger similar failures in neighbouring West Antarctica glaciers. These glaciers suffer from a phenomenon called Marine Ice Cliff Instability (MICI), where increasingly unstable cliffs of ice are exposed as the ancient ice cap retreats. If triggered, this domino effect could contribute as much as three metres to global sea levels.

The European Environment Agency calculates that the oceans have risen 21 cm since 1900, averaging 1.7 mm a year over that time. The rate is accelerating: between 1993 and 2018, it increased to 3.3 mm/year, and 3.7 mm/year between 2008 and 2018 – more than doubling in the 21st century alone. Melting glaciers contributed 21% to these increases in the last 20 years. These rises already endanger coastal and low-lying populations around the world – and the potential damage from a free-flowing Thwaites glacier would be exponentially higher.

Numerous major cities and low-lying nations are at risk, with Asia especially vulnerable to rising sea levels: land home to over half the populations of Bangladesh and Vietnam falls below the long-term high tide line, even if warming is limited to 2°C, according to a study published in Environmental Research Letters in October 2021. And on

top of rising sea levels, the risks to coastal-dwelling populations and small islands are compounded by flooding from storm surges, high tides and greater, more intense precipitation.

By the numbers

The World Bank’s conservative estimate of economic activity exposed to significant flood risk is currently US\$5.3 trillion.

Asia is acutely vulnerable. Across seven major coastal cities in Asia, 1,829 km² of land could be affected by rising sea levels and flooding, according to a 2021 study from the United Nations Office for Disaster Risk Reduction (UNDRR). Major cities such as Mumbai, Shanghai and Ho Chi Minh City are also extremely important to the region’s economy: HSBC Global Research cites work from the Asian Development Bank showing that economic losses from rising sea levels may account for as much as 9.3% of global GDP by 2100.

Building resilience against predicted levels of damage will be expensive: dikes and sea walls can cost US\$6 million per kilometre of coastline per vertical metre of protection, and for Vietnam alone, a full protection strategy could cost up to 52% of 2050 GDP. Other methods can help: preserving and restoring mangroves to act as natural flood barriers is being trialled in Vietnam. And Bangladesh is creating oyster reefs to provide living flood barriers for low-lying islands.

Social implications

But losses due to flooding can have broader, longer-term social impacts: according to insurer Marsh McLennan, flooding adversely affected food security in 35 developing countries in 2020. The World Economic Forum asserts that flooding is one of the major contributors to climate refugees: large-scale migration driven by the impacts of extreme weather events. By 2050, at least 1.2 billion people could be displaced by climate-change impacts.

Rising ocean levels are a given under current climate change conditions, but there is still time to build resilience as global initiatives to tackle global warming take effect. But a catastrophic failure of West Antarctica’s glaciers would take the matter out of our hands and render all plans and targets for reducing greenhouse gas emissions moot. Small wonder that Thwaites has been dubbed ‘the doomsday glacier’.

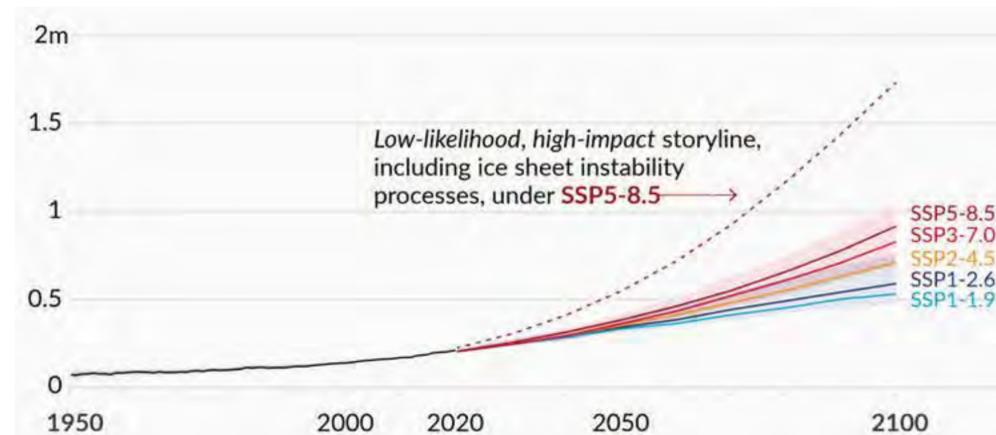
“Global sea levels are likely to rise another 28-55cm by 2100 even under a very low emissions scenario – and an increase of 2m or more cannot be ruled out.”

\$5.3tn

Estimate in US dollars of global economic activity exposed to significant flood risk



Global mean sea level change relative to 1900



Source: IPCC

Removal specialists

Governments and corporations are warming to direct air capture, but the technology has yet to reach the scale needed to make a meaningful impact on climate change

They look like something from the set of *The Mandalorian*, are hugely expensive to build and currently reduce atmospheric CO₂ by only 0.01 million tonnes a year – about the same as taking just 2,000 petrol-powered cars off the road.

But to their proponents, direct air capture (DAC) facilities are an essential part of a low-carbon future, with the ability to help mitigate climate change and potentially one day help the world reverse the damage done by centuries of carbon-intensive industrial development.

“By slashing the costs and accelerating the deployment of carbon dioxide removal – a crucial clean energy technology – we can take massive amounts of carbon pollution directly from the air and combat the climate crisis,” said US Secretary of Energy Jennifer Granholm in November, at the launch of an “Earthshot” initiative to drive the cost of CO₂ removal and storage technology to below US\$100 a tonne over time.

The latest climate science report from the UN’s IPCC also devoted a section to carbon dioxide removal – by various means including direct air capture. With the world still not on track to limit temperature change to 1.5°C, the IPCC is clear that CO₂ removal will be needed to reverse any overshoot of the carbon budget.

“To mitigate the risks of climate change, the world needs to scale-up carbon removal on top of, not instead of emission reductions,” said Christian Mumenthaler, Group CEO of Swiss Re, which announced a 10-year partnership with DAC startup Climeworks in August – in a sign, according to HSBC research analyst Tarek Soliman, that business models around the technology are starting to emerge.

Climeworks launched its biggest facility so far in September in Iceland. Orca, which is powered by geothermal energy, removes CO₂ from the air and then injects it deep underground for permanent storage. It is expected to suck 4,000 tons of CO₂ from the air each year.

The technology has some high-profile fans. As well as deals with Swiss Re, Boston Consulting Group and LGT, Climeworks is also working with Coldplay to offset some of the carbon emissions from the band’s 2022 world tour. The Orca project looks set to be soon overshadowed by much larger-scale versions.

In the US, Occidental Petroleum has partnered with Canadian company Carbon Engineering to build a DAC plant in the Permian basin that will capture up to 1 million tCO₂ each year and could become operational as early as 2024.

Storegga in the UK is working on a DAC facility – the ‘Dreamcatcher’ project – that will permanently remove up to 1 million tCO₂e each year in Northeast Scotland.

These new developments aim to prove that the concept works at scale – and can be cost-effective. Removing 1 million tCO₂e from the atmosphere would do the job of 40 million trees.

But the high cost of the technology today remains a hurdle to further development. With DAC facilities costing as much as US\$600 for every tonne of CO₂ they remove, many investors prefer to fund renewable energy projects instead.

There is also the debate over whether DAC investments are simply a licence for companies to continue with their carbon-intensive businesses. Critics note that one major use case for DAC is as a source of CO₂ that can be used for enhanced oil recovery. Injecting pressurised CO₂ underground drives out more oil and leaves the CO₂ trapped, allowing oil producers to claim they have delivered oil with net zero, or even negative, emissions.

No surprise, then, that 350.org and other climate activists argue the money is better spent elsewhere.

Public support

DAC, however, is catching on in the corridors of power. In the US, President Biden’s infrastructure bill has allocated about US\$3.5 billion towards building four direct-air capture facilities around the country. The 45Q tax credit has also been revised to encourage the permanent storage of carbon.

The Norwegian government is investing heavily in a full-scale carbon capture and storage chain, which has brought it to the attention of DAC investors. The Longship project will capture CO₂ from industrial facilities – such as cement plants – and transport it by ship to a dedicated receiving terminal, where it is then sent offshore via a pipeline and injected deep below the sea bed. Shell, Equinor and Total are backing the transport and storage component, dubbed Northern Lights.

The UK government has announced a £1 billion CCS infrastructure fund and earmarked up to £100 million of funding to help develop greenhouse gas removal technologies. In January it unveiled a shortlist of 24 projects – including Storegga’s Dreamcatcher and another that aims to attach a heat-powered DAC facility to an existing nuclear power plant.

Public funding has the potential to transform the industry from a cleantech sideshow to a genuine player in the battle to limit climate change. But the scale required for now remains science fiction: the IEA’s net zero by 2050 scenario calls for DAC to capture more than 85 million tCO₂ a year by 2030 and ~ 1 billion tCO₂ by 2050 – more than 100 times the current pipeline.

“Direct air capture is an interesting alternative from other forms of carbon capture in that it takes existing CO₂ from the air and can be located anywhere,” said Tarek Soliman, climate change analyst at HSBC Global Research. “It will take time to demonstrate the scalability and commercial viability of this technology before it can play a more meaningful role in the energy system.”

“To mitigate the risks of climate change, the world needs to scale-up carbon removal on top of, not instead of emission reductions”

US\$3.5bn

Federal funding allocated towards building four direct-air capture facilities in the US

CO₂ turned into stone via Carbfix technology © Climeworks



Climeworks’ Orca plant in Iceland with founders C.Gebald and J.Wurzbacher © Climeworks



Global Investment Seminar – Outlook 2022

HSBC's 39th annual Global Investment Seminar, held virtually on January 11, offered clients the chance to hear expert views on the outlook for 2022.

Professor Michael Pettis, a noted expert on China's economy, joined from Beijing to discuss the impact of new Covid-19 lockdowns on China's economy, against a backdrop of a slumping housing market and already slower growth.

In conversation with **Fred Neumann, Co-Head of Asian Economics at HSBC Global Research**, Pettis noted that the Omicron variant could have a significant impact on global supply chains given that China has politically committed to a zero-tolerance approach to Covid-19.

While Pettis expected the renminbi and China's capital markets to hold firm in 2022, thanks mainly to foreign inflows, he warned that problems in the property sector would not be resolved quickly. Clamping down on excessive leverage has triggered a downward spiral in real estate prices, and the quick fix of lower rates and looser mortgages will not solve the problem in the long run.

Pettis argued that the real estate crisis is only a symptom of a much deeper problem in the economy. China's high-savings growth model, which supported rapid growth until the early 2000s, has become increasingly ineffective. The only way to fix the economy is to rebalance towards consumption – and China hasn't been able to do that yet.

Increasing consumption means giving the middle class and workers a larger share of income, for example by transferring income from local governments to the household sector. This is difficult because it implies a significant transfer of political power and a transformation of political institutions.

Janet Henry, HSBC's Global Chief Economist, outlined the bank's expectations for higher interest rates in 2022 despite ongoing challenges around Covid-19 but amid elevated energy prices and unusual behaviour in labour markets.

"It's normalisation, but not as we know it," she said.

Henry expects the US Federal Reserve to raise rates immediately after the end of its asset purchases in March, with further increases likely in 2022 during which it will also start to shrink the balance sheet.

The European Central Bank is likely to move more slowly, with the first steps away from negative interest rates likely in the second half of 2023.

"This is not particularly helpful for EM, with slower China growth, potentially a stronger dollar, and the Fed tightening. Arguably emerging markets are more prepared than they were in the past having already raised interest rates swiftly, but if the Fed is not able to be as gradual as we expect then it could be a rockier ride."

Henry expects inflation to decline in 2022 but to remain elevated compared to pre-pandemic rates, due to the ongoing impact of a tighter labour market, rising housing costs and higher food and energy prices. US core PCE is expected to fall back towards 3% by the end of 2022, from 5% in the first quarter.

"Globally we think inflation in EM will be more subdued in Asia than in other emerging markets, but even there we expect it to creep higher," she said.



Fred Neumann, Co-Head of Asian Economics, HSBC Global Research



Janet Henry, HSBC's Global Chief Economist

"Globally we think inflation in EM will be more subdued in Asia than in other emerging markets, but even there we expect it to creep higher"

Local insights from California and Taiwan

HSBC's Local Insights series of client webinars continued with detailed sessions on the congestion at Port of Los Angeles and the impact of carbon neutrality in Taiwan.

The Port of LA's container terminals handle approximately 20% of all cargo coming into the US. With trucks and workers in short supply due to Covid cases, and space for arriving containers sorely limited, ships on average can expect to wait 17.5 days before docking – compared to less than an hour pre-Covid.

Christopher Chase, Marketing Manager at Port of Los Angeles, explained to **Parash Jain, Head of Shipping & Ports & Asia Transport Research, HSBC Global Research** that clearing the congestion will take a considerable amount of time. The jump in online shopping has forced stores to hold more inventory, and stress in labour and logistics cannot be resolved overnight. High volumes are a part of the economic recovery and will continue at least until interest rate hikes cool spending – certainly for the first half of this year.

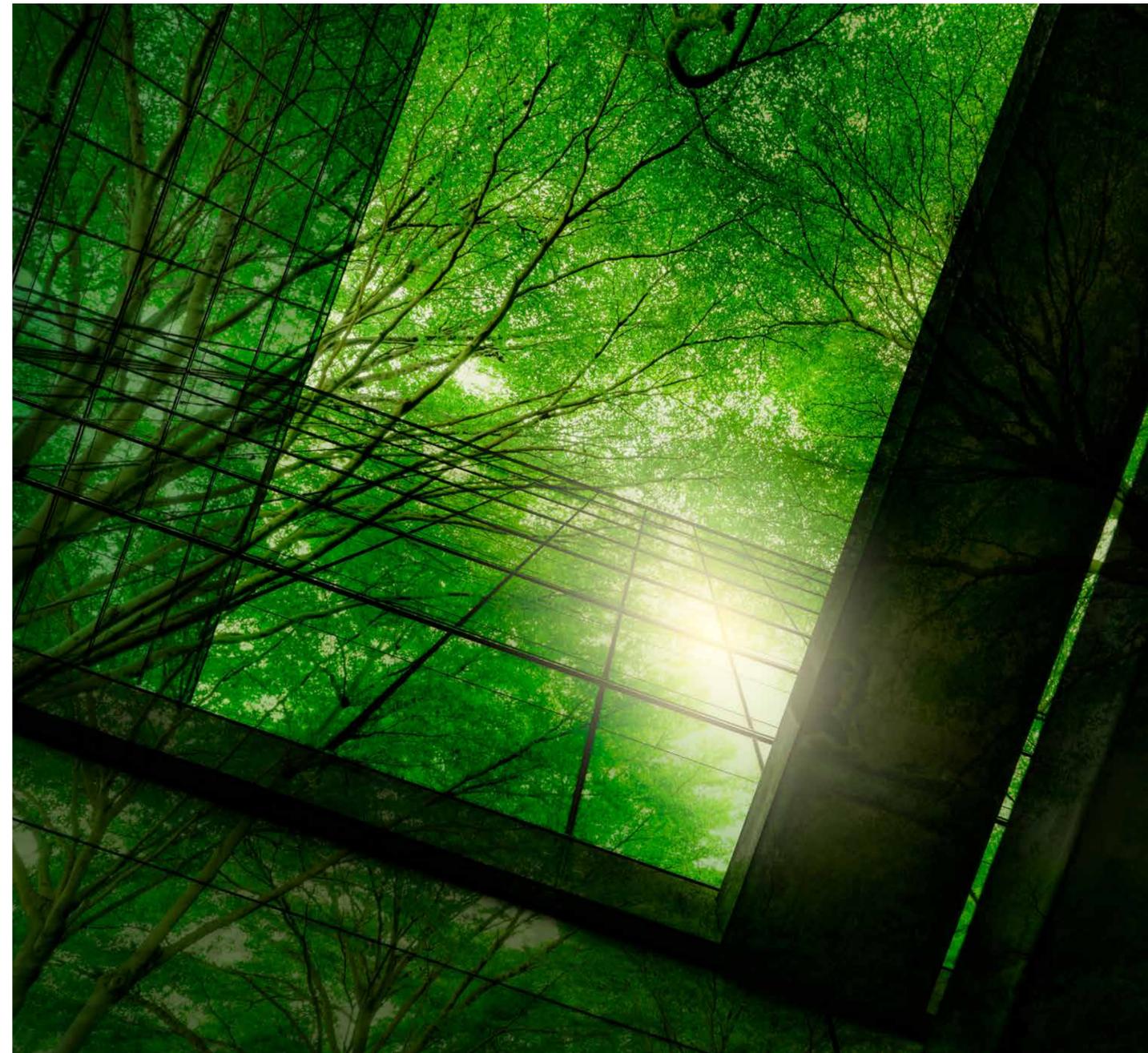
Across the Pacific, **Thomas Hilboldt, Head of ESG Integration – Equities, Asia Pacific, HSBC**, hosted a webcast on Taiwan's net zero ambitions.

Catherine Yang, Manager of Industrial Technology Research Institute and Dora Yen, Co-founder and COO, YC Consulting, explained that the island's top corporations are adopting global standards as part of Taiwan's commitment to reach net zero by 2050.

Taiwan now requires corporations consuming more than 5 megawatts of power to source at least 10% of their energy from renewable sources within five years. Clean energy projects are a priority: Taiwan missed its 2020 carbon intensity target and is in danger of missing the 2025 number, too. Its 2020 energy mix included 69% of fossil fuels.

The corporate sector is worried that carbon pricing – entrenched in the Glasgow Climate Pact – will make Taiwan's manufactured goods less competitive because of the emissions in their energy usage. This is forcing companies to seek emissions reductions wherever they can. Semiconductor manufacturer TSMC, for example, will require its 700-plus local suppliers to reduce electricity consumption by at least 20% by 2030 to stay in the supply chain.

Hilboldt also noted that Apple is looking to reach net zero emissions across its supply chain (scope 3) by 2030, having reached net zero from its own operations (scope 1 and 2) in 2020. This presents the Taiwan supply chain with significant challenges, given the high carbon intensity of the current power generation mix, and the defeat of a recent referendum to restart Taiwan's fourth nuclear power plant.





Research notes

Cities and climate change

Cities around the world power the global economy but their progress has come at a cost. Urban centres today consume massive amounts of energy and emit the highest levels of greenhouse gases. **HSBC Global Research** predicts billions living in cities will feel the impact of climate change more acutely, through extreme weather, water scarcity and pollution.

Cities must clean up their act to stay competitive and mitigate climate risk, **James Pomeroy, Lucy Acton** and **Stephen Bramley-Jackson** write. Cities that work better and cleaner will also be more attractive to an increasingly mobile labour force. Fortunately, policymakers have heard this call. Efforts to mitigate climate risks and help communities adapt to climate change are in progress around the world.

Transportation is one of the key levers in mitigating climate risks. Green and efficient public transport systems, alongside the electrification of private vehicles, could help curb pollution. Europe's transport networks are good examples; China leads the rise in EVs. In future, autonomous vehicles could reduce demand for space. Shifting to renewable energy is another key step. City dwellers can help by patronising renewable energy suppliers or using rooftop solar or wind turbines.

Global funding for climate adaptation – climate-resilient infrastructure, water and food security, and protecting lives – is rising. At COP26, leaders agreed to spend US\$40 billion on adaptation financing by 2025, at least double 2019 levels. Green bonds and social bonds could help cover these costs, as cities become key battlegrounds in the fight against rising global temperatures.

Read more about this topic here: [Cities and Climate Change – The key piece of the puzzle](#)

Hurdles ahead for alt-proteins

What's for dinner? Health-conscious and environmentally aware consumers are driving structural demand for plant-based meat and dairy substitutes. The global market for alt-proteins is likely to reach US\$140 billion by 2030 from the current US\$40 billion, **HSBC Global Research** estimates. However, the industry must overcome significant hurdles to growth, **Jeremy Fialko** and **Robert Price** write.

Meat and dairy are highly commoditised products, sold in fragmented markets. The "big plate, small portion" challenge is the same for plant-based substitutes. Even with brands like Beyond Meat, Impossible Burger and Oatly gaining popularity, the industry has a long way to go to globalise offerings and enhance market penetration. Many consumers have yet to be won over by the taste of alt-proteins, and high price points are an additional barrier. Significant technological progress is needed to create products with the quality consumers want at mass-market prices. Regulation could

help push adoption, but the regulatory environment today favours animal-based proteins.

Within the UK, one of the most receptive markets to alt-proteins, consumer interest has shown signs of slowing. Data from 2020 and 2021 indicate consumers are eating more meat than previously, and Google searches on meat alternatives and plant milks have also plateaued.

However, investment in alt-proteins continues to rise, crossing US\$7 billion in 2020-2021 from US\$2.8 billion in 2010-2019. While the market looks set for growth, the winners are less clear. The influx of capital and rapidly changing technology means those who look best placed today have no guarantee of maintaining their lead.

Read more about this topic here: [Global Alternative Proteins – Big plate, small portion](#)

Beijing needs a green tech boost

Stimulus spending in the green and technology sectors could give China's slowing economy the boost it needs, according to **HSBC Global Research**.

Beijing could spend as much as Rmb2 trillion to help keep GDP growth above 5.5% this year, **Qu Hongbin, Jing Liu and Jingyang Chen** predict. Rmb1 trillion could come from the central bank to drive loans for green projects. Another Rmb 1 trillion in sovereign green bonds could finance government spending on core technologies and sustainable infrastructure, such as updates to the power grid. Tax incentives and increased government funding for science and technology are likely to complete the package.

This spending is expected to pay dividends. China has long stressed its goal of creating new drivers of growth and transitioning to a green economy. Focusing on tech and green investments will boost domestic demand, offset the drag from the slowing housing sector, and refocus capital to higher-end manufacturing and sustainable projects.

As government leads green investment, the private sector will likely follow. Most green projects involve upgrades to technology and equipment, creating a bigger multiplier effect than real estate. This year for example, new energy consumption benchmarks are taking effect for energy-intensive industries like petroleum, coal and fuel processing. Companies are likely to invest on upgrades to ensure they meet the three-year compliance deadline.

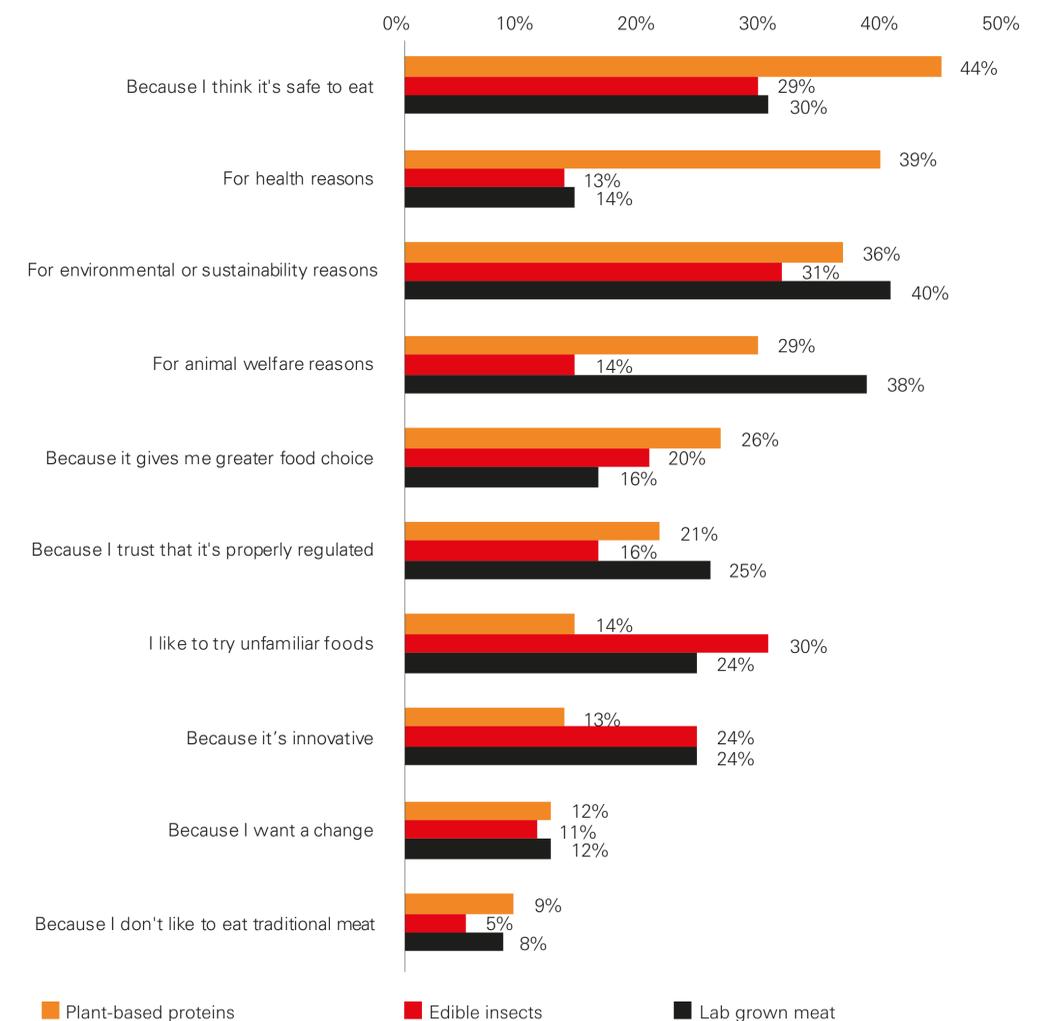
Jobs created by these measures could help Beijing to shore up business and consumer confidence at a crucial time.

Read more about this topic here: [China easing – Time for a Rmb2trn tech and green stimulus package](#)

For any questions about HSBC's Global Research, email AskResearch@hsbc.com

Top 10 reasons for willingness to try alternative protein types

Question: Why are you willing to try In your diet?



Source: UK Food Standards Agency January 2022
Data based on survey of 1,930 adults in December 2021 by Ipsos MORI



Circular economics

Find out how we are helping Dubai-based Averda expand its recycling and recovery services in less-developed markets

For Averda, sustainable waste management is not just good for the planet; it is a business opportunity. The Dubai-based company is expanding its recycling and waste-to-energy services to meet surging demand, particularly in emerging markets.

Averda's services range from collecting household bins to processing hazardous waste and dangerous chemicals. It operates in eight countries across India, the Middle East and Africa, serving 60,000 clients including municipal authorities and major industrial and commercial companies.

Recent investments have further developed the company's waste treatment capabilities, with the goal of providing circular recovery options in all markets. In one example, Averda is reclaiming 1 million tonnes of solid waste from Amritsar's landfills to be used as fuel in a new waste-to-energy project.

"Becoming more sustainable is our responsibility, but it is also an opportunity," said Samir Sharma, Averda's Chief Financial Officer. "We are delighted that our commitment to bringing circular economy principles to developing economies has been validated and supported by HSBC."

In August, Averda worked with HSBC to refinance an existing credit line from a group of banks and support its expanding business. The new US\$148m five-year financing included a US\$30m green loan from HSBC, which will be used specifically to support Averda's sustainable waste management projects.

These include a blending facility in Vlakfontein, South Africa, which processes hazardous waste into fuel that can be used as an alternative to coal in industries such as cement production.

HSBC has engaged Sustainalytics to confirm that the green loan meets the bank's standards, which are aligned with the Loan Market Association's Green Loan Principles. HSBC has committed to mobilize at least US\$750 billion by 2030 to support businesses in the transition to a more climate-friendly, low-carbon future.

"This facility will not only help the company strengthen Averda's capital structure but also accelerate the development of its sustainable waste management services," said Daniel Howlett, Regional Head of Commercial Banking for Middle East, North Africa and Turkey at HSBC. "There is a huge demand for these services in developing economies that are wrestling with the urgent need to transition to a more circular economy and balance economic growth with combatting climate change."

Averda has set a target of realigning its portfolio over the next three years towards recycling, composting and energy recovery, prioritising sustainable practices over pure cleaning and collecting contracts to unlock more value from waste. It is planning further expansion into Asia and growth in sustainable waste management technologies, both organically and through acquisitions.

"We are hopeful that this deal will pave the way for more access to green financing as we further expand our sustainable waste management services by investing in existing and new facilities," said Sharma.

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ABC of ESG

The world of ESG has its own sometimes dizzying array of acronyms and terms. Get to grips with some of the key concepts here

CARBON CAPTURE AND STORAGE (CCS)

A process whereby CO₂ is captured from industrial facilities and transported for storage, often in a geological formation such as an oil and gas reservoir. This process prevents the CO₂ from entering the atmosphere. The IPCC estimates that CCS has the capacity to reduce the costs of stabilising CO₂ in the atmosphere by 30% or more – but some critics believe it can discourage the transition to lower-carbon processes and technologies.

CARBON OFFSET

Allows companies or individuals to compensate for their CO₂ emissions by buying a corresponding reduction in emissions elsewhere. Companies can use carbon trading schemes or pay carbon taxes, while individuals can use offset schemes to neutralise their carbon footprint.

CARBON FOOTPRINT

The total CO₂ emissions caused by an organisation or individual over time.

CARBON TRADING

Enables companies to buy or sell permits that allow for the emission of a particular amount of CO₂. The European Union Emissions Trading Scheme (EU ETS) is the largest of these schemes and works on the cap-and-trade principle, where a cap is placed on the total amount of CO₂ that can be emitted within the trading zone and that limit is reduced over time. Pricing carbon in this way can also promote investment in low-carbon technologies.

CLIMATE CRISIS

Term used to describe the consequences of global warming and subsequent climate change. If the world fails to limit global warming below 2 degrees centigrade from pre-industrial levels through decarbonisation, there will be significant consequences for

biodiversity, ecosystems, food and water security and infrastructure from extreme weather events. Some believe that the climate crisis has already begun.

CRYPTOCURRENCY

An encrypted digital token based on blockchain technology, such as Bitcoin. Some cryptocurrencies have been criticized for the energy-intensiveness of “mining,” or updating the blockchain and creating new tokens.

DECARBONISATION

The process of reducing the carbon emissions of an organisation or economy. Techniques for decarbonisation include reducing the use of fossil fuels, increasing renewable energy use, switching to electric transport, agricultural change and CCS.

ESG

The acronym for Environmental, Social and Governance is used to refer to the non-financial policies and activities of an organisation and its commitment towards responsible behaviour and sustainable growth. Financing and investment in accordance with ESG principles are growing exponentially.

ELECTRIFICATION

Road transportation accounts for around 18% of total global emissions and will need to make significant CO₂ reductions for economies to meet net zero targets. Vehicles using electricity from renewable sources can make a key contribution to this goal.

GREEN HYDROGEN

Hydrogen does not generate greenhouse gases at point of use, but most current methods of producing hydrogen involve fossil fuels. Using renewable energy to power the electrolysis that produces hydrogen makes “green” hydrogen emissions-free.

GREEN TAXONOMY

A green taxonomy is a classification system that establishes a list of sustainable economic activities, providing a common basis for companies and investors to use. The EU has recently created a green taxonomy that may well become the global standard.

GREENHOUSE GASES (GHG)

Gases in our atmosphere that include water vapour, carbon dioxide (CO₂), nitrous oxide and methane. These gases absorb infrared radiation and trap heat in our atmosphere, causing global warming.

GLOBAL WARMING

The increase in global surface air and sea temperatures over a 30-year period caused by human activities that emit greenhouse gases. Global warming is expressed relative to pre-industrial temperatures. New global commitments aim to keep global warming well below 2°C by the end of the century aim to avoid catastrophic climate change.

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

The United Nations body for assessing climate change science. It provides regular reports on climate change impacts and risks as well as options for adaptation and mitigation. The IPCC is considered the most reliable and credible source of climate change science.

NET ZERO

Describes the situation in which no additional emissions are being added to the atmosphere. While emissions will continue to be released, an equivalent amount will be absorbed either through natural carbon sinks such as forests or through technology such as CCS.

PARIS AGREEMENT / COP21

The 21st Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change was held in Paris in 2015. A legally binding international treaty was agreed at COP21, called the Paris Agreement. Adopted by 196 parties, the treaty sets out the goal to limit global warming to well below 2°C.

RENEWABLE ENERGY

Electricity that comes from a sustainable source such as solar power, wind or waves. These sources do not emit carbon dioxide or other greenhouse gases. Green hydrogen also has potential as a source of emissions-free energy.

SDGS

The United Nations’ Sustainable Development Goals (SDGs) are a blueprint for a more sustainable future for people and the planet. There are 17 interlinked goals that recognise that ending poverty and deprivation can only be achieved through a range of goals including health, education, reducing inequality and tackling climate change.

TCFD

The Taskforce on Climate-Related Financial Disclosures was established in 2020. It provides recommendations on financial disclosures that are becoming accepted as the gold standard globally. These disclosures will aid understanding of exposure to climate risks and help investors better take these into account in their decision-making.

UNPRI

Launched in 2006, the United Nations Principles for Responsible Investment is a voluntary set of investment principles that provide a framework for incorporating ESG considerations into investment processes and decisions. There are now more than 3,000 signatories with collective assets under management of over US\$1 trillion.



ESG Matters! Find out how and why

Sourced from our global network of over 300 analysts, HSBC Global Research's new ESG handbook #WhyESGMatters aims to help broaden your knowledge of environmental, social and governance issues. From the role 'green' hydrogen could play in combatting climate change to finding solutions to plastic pollution, choose a topic and expand your knowledge. And if you want to go deeper, get in touch at askresearch@hsbc.com

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