

THE Ethical CORPORATION MAGAZINE

FINANCING THE TRANSITION BRIEFING

Winter 2022

Can business close the **FINANCE GAP** for nature?

● GFANZ gets cold feet

● Will the world buy
'net zero oil'?

● How deforestation risk remains
in bankers' blind spot



Welcome to the Winter 2022 issue:

Financing the transition briefing

In stark contrast to COP27 in Sharm el-Sheik, heads of state stayed away from the COP15 biodiversity talks in Montreal in December, leaving it to ministers to try to reach agreement on a new Global Biodiversity Framework.

The same lack of high-level engagement cannot be said for business leaders. Although nowhere near the numbers who flocked to Egypt in November, 700 top executives from companies and financial institutions are thought to have travelled to Montreal to participate in events on the sidelines of the talks.

One of the biggest “asks” by the private sector was that target 15 of the draft framework, calling for

countries to require companies to report on their dependencies and impacts on nature, be made mandatory. A methodology that will allow them to do so, being developed by the Taskforce on Nature-related Financial Disclosures (TNFD), will be finalised next year.

As we report in the latest issue of The Ethical Corporation magazine, the requirement for businesses to account for both their dependencies and impacts on nature is regarded as a key prerequisite to unlocking the hundreds of billions in dollars that will need to come from the private sector if the world is to meet its climate and biodiversity goals. >


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While policymakers and the private sector are only just waking up to the importance of nature to the climate agenda, finance for both is still perilously below where it needs to be, as Mike Scott reports in his introduction to the issue. One year after the Glasgow Financial Alliance for Net Zero (GFANZ) was born at COP26 in Glasgow, promising to accelerate the global transition to a green economy, GFANZ seems to be falling apart at the seams.

Under attack from Republican politicians in the U.S., GFANZ dropped its requirement for signatories to comply with the U.N.'s Race to Zero standard and divest from fossil fuels. But that wasn't enough to prevent Vanguard, the world's second biggest asset manager, from quitting GFANZ earlier this month.

One of the biggest announcements at COP27 was a Just Energy Transition Partnership (JET-P) to mobilise \$20 billion in public and private sector finance to help Indonesia to transition from coal, following last year's \$8.5 billion JET-P deal for South Africa. But as Angeli Mehta reports, such projects barely scratch the surface of what will be required. She looks at what it will take to scale up.



Since its launch last year the U.S. backed First Movers Coalition, an initiative to harness the purchasing power of companies to decarbonise heavy industry, has doubled in size

Mehta also reports on the growth of the First Movers Coalition, a global initiative to harness the purchasing power of companies to decarbonise seven "hard to abate" industrial sectors. Since its launch at COP26 last year, the U.S.-backed coalition has grown from 34 to 67 companies, in sectors accounting for 30% of global emissions, and is already leading to purchasing commitments.

With governments delaying so long to take action to cut CO₂ emissions, almost all the pathways



MOHAMMED SALEM/REUTERS

to climate safety now also depend on two highly speculative bets: a massive roll-out of carbon capture and storage projects, and industrial-scale carbon removals, according to the UNFCCC. Matthew Green looks at how 35 companies in the oil and gas sector are looking to unlock much greater finance for both by developing a methodology that will allow them to sell carbon credits.

Meanwhile, Mike Scott reports on how the energy crisis has boosted the business case for investing in another under-financed source of CO₂ emissions: the built environment.

Mark Hillsdon looks at how impact investment has come of age as private investors seek to help meet sustainable development goals.

And Peyton Fleming lays out the challenges for ESG investors in the U.S., where the sector's historic surge has triggered a greater level of scrutiny and demands for transparency from regulators, which is much needed, but also a politically driven backlash in Republican states.

In September, GFANZ's leaders wrote to its 550 member firms, urging them to join the 30 last year that signed a commitment to eliminate commodity-driven deforestation from their portfolios. Yet by COP27, the number of signatories had only risen to 35. Mark Hillsdon looks at why deforestation risk continues to be a blind spot for the finance sector. >

A woman walks on a floating bridge at Muara Baru, an area affected by land subsidence and rising sea levels in Indonesia



WILLY KURNIAWAN/REUTERS

Sarah LaBrecque, meanwhile, reports on efforts to dramatically scale up the amount of finance going to protecting ocean and coastal ecosystems, known as the blue economy, which are critical to addressing both the biodiversity and climate emergencies.

We also have commentary from Cornelia Andersson, group head of sustainable finance and investment at the London Stock Exchange Group, who argues that capital will only be reallocated to the green economy on the scale needed to achieve net zero if all regulators mandate disclosure of sustainability data.

Finally, Meredith Sumpter, chief executive of the Council for Inclusive Capitalism, introduces a new framework to help companies identify whether their sustainability initiatives are helping people as well as the planet.

With the need for a just transition one of the

strongest themes both at COP27 and COP15, it is an appropriate note to close this issue on financing the climate and nature transition, and our coverage of the most important issues for sustainable business this year.

We're looking forward to seeing you all again in 2023. ●



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Reality bites as finance firms get cold feet over their climate pledges

A year after Glasgow's net-zero commitments, the energy transition is on shaky ground, reports **Mike Scott**



VIEW ONLINE

In the run-up to last year's United Nations climate conference in Glasgow, there was huge optimism that the financial sector was finally stepping up to its responsibilities on tackling climate change.

The Glasgow Financial Alliance for Net Zero (GFANZ), set up by former Bank of England and Bank of Canada governor Mark Carney and

encompassing net zero alliances of asset owners, asset managers, insurers and pension funds, promised to accelerate the transition to a green economy.

In the aftermath of COP27, the most recent U.N. climate summit, that optimism has been tempered, with a feeling that the sector has yet to address its biggest issues. >



Progress has been too slow – in areas ranging from climate to biodiversity to deforestation – and there is a recognition that it will be extremely difficult to transform the system thanks to systemic inertia, political hostility and a bias towards incumbent providers.

According to BloombergNEF’s [New Energy Outlook](#), we must spend almost \$200 trillion to achieve net zero by 2050 – most of it private capital – and yet across the sector, there is a lack of transparency and mixed messages on how committed firms are to meeting the target.

A couple of years ago, JP Morgan chief executive Jamie Dimon was claiming his bank would align its investments in fossil fuels with the Paris Agreement. Yet this year, he [told the U.S. Congress](#) that the bank “absolutely does not” have a policy against funding new oil and gas projects and the idea of doing so “would be the road to hell for America”.

Vanguard, the world’s second largest asset manager, has just resigned from the Net Zero Asset Managers initiative in the wake of attacks from Republican politicians in the U.S., who have spoken out against investors that they say are hostile to fossil fuels.

Meanwhile, in China, which hosts the world’s fastest-growing green bonds market, [analysis](#)



We must spend almost \$200 trillion to achieve net zero by 2050, yet across the finance sector there is a lack of transparency and mixed messages

Republican politicians in the U.S. have spoken out against investors they see as hostile to fossil fuels.

suggests “it’s almost impossible to know how the money is being spent – or whether it’s having the intended impact” because of “important gaps in disclosure and transparency”.

There has been consternation that members of the Net-Zero Banking Alliance (NZBA), which had agreed to use a methodology set out by the U.N.’s [Race to Zero initiative](#), abandoned it after the methodology was made more stringent last summer, for the first time explicitly requiring members to “phase down and out of all unabated fossil fuels”.

“Race to Zero has a very robust approach to >

target-setting," says Dr Adriana Kocornik-Mina, senior research and metrics manager at the Global Alliance for Banking on Values (GABV). "The NZBA has recently dropped this and allowed members to use alternative approaches, leading to a potential weakening of how organisations carry out net zero analysis and planning."

Some alliance members are worried about legal repercussions if they rule out financing fossil fuels, but Kocornik-Mina says: "If you're still financing fossil fuels and have net-zero targets for other parts of your portfolio, you're not walking the talk." There is a reluctance to be the first to act, she adds, because for now fossil fuels remain very profitable.

Following the NZBA's first progress report, Jeanne Martin, head of ShareAction's banking programme, says that there are crucial gaps and flaws in NZBA members' targets. "Most fail to capture the full range of greenhouse gas and financing activities, exclude heavy-emitting sectors such as chemicals, or use emissions-intensity targets, which can mask the fact that absolute emissions continue to rise."



Almost none of the most polluting companies provide enough evidence that their financial statements consider climate impacts. Investors are still flying blind

It doesn't help that investors are not getting the full picture from the companies they invest in. According to Jane Thstrup Jagd, deputy director of net zero finance at the We Mean Business Coalition, almost none of the most polluting companies provide enough evidence that their financial statements consider climate impacts. In the words of a recent report from climate finance NGO Carbon Tracker, investors are "still flying blind".

Carbon Tracker analysed 134 multinational companies, responsible for up to 80% of corporate industrial greenhouse gas emissions. Although they are all subject to engagement from Climate Action 100+ (CA100+), the investor-led initiative launched in 2017 to hold the biggest greenhouse gas emitters' feet to the fire, 98% did not provide sufficient evidence that their financial statements include the impacts to their business from climate change.

Companies exposed to climate risks, such as the possibility of assets being stranded or overvalued,



BRIAN SNYDER/REUTERS

should highlight these in financial reports so that investors have the full picture.

CLARITY AND COMPARABILITY

In addition, the financial statements of companies with net-zero or emissions-reduction targets should explain how they will achieve this goal. But Carbon Tracker found that, even though a significant majority of the companies it examined had such targets, just 2% had aligned the information in their financial statements with achieving them.

This is the approach called for by the Taskforce for Climate-related Financial Disclosures (TCFD), whose recommendations are the basis for forthcoming rules from the European Union, the UK, the U.S. and the new International Sustainability Standards Board. These TCFD rules and regulations should bring the clarity and comparability that "the market has been begging for", says Alexandra Mihailescu Cichon, executive vice-president at ESG data provider RepRisk.

RepRisk analyses a range of sources to get a true picture of a company's approach to ESG factors, she says. "External sources hold up a mirror to what the company says it is doing, to give banks and investors a full picture. Report disclosures can be somewhat biased."

Indeed, despite some improvements in disclosure, no CA100+ focus company provided all of the information required by the relevant standards or requested by investors, despite operating in high-emitting sectors such as oil and gas, mining, transportation and industrials, says Barbara Davidson, Carbon Tracker's head of accounting, audit and disclosure and lead author. >

Jamie Dimon, CEO of JP Morgan Chase, has changed his tune on withdrawing from financing fossil fuels.

“When companies don't take climate-related matters into account, their financial statements may include overstated assets, understated liabilities and overstated profits,” she said. Yet financial companies themselves have similar issues. A systemic transformation is essential, says Andrea Webster, finance system transformation lead at the World Benchmarking Alliance. “The financial system is one of the last pieces in the puzzle – it’s an amplifier for where we need to move at scale. But we are still a long way from our expectations.”

The alliance’s new **Financial System Benchmark** assessed 400 global financial institutions on their progress to supporting a just and sustainable economy. It found that just a fifth of institutions – from banks to asset owners and managers, insurers to development banks, pension funds and sovereign wealth funds – acknowledge their impact on people and the planet.

Without this acknowledgment they cannot put in place processes to identify and manage the impact

they have, set targets and monitor progress, the alliance says.

More than a third (37%) of these institutions have made net zero and other pledges, but “despite global commitments, significant work is needed by financial institutions across all measurement areas to operationalise these commitments,” Webster points out. Only 2% of those with long-term net-zero targets have interim targets and only 1% are backed by science-based targets.

“It’s really important to have transparency on interim targets so investors can understand what progress is being made,” she adds. Reporting on human rights risk and impact is almost non-existent.

And funding for low-income countries, small businesses and other excluded groups is still exceptionally low. There is also virtually no tracking of the impact of institutions’ financing activities on nature and biodiversity, even though the U.N. Environment Programme says investment in nature-based solutions must triple by 2030, and private capital currently represents only >

IN NUMBERS

Among the high-emitting companies subject to engagement from Climate Action 100+, **98%** don't provide enough transparency on their climate impacts

The World Benchmarking Alliance assessed **400 companies** and found **37%** have made net-zero pledges, but only a fifth acknowledge their impact on people and the planet

Of **\$4 trillion** That will be needed annually to meet net zero by 2050, a quarter will be needed in emerging markets



TOBY MELVILLE/REUTERS



17% of investment in the sector. (See [Calls grow for companies to disclose impacts on nature in bid to plug finance gap](#))

The best performers in the WBA benchmark are European and Canadian banks, whose performance is lifted by the regulatory backdrop, along with development banks. “Those that do well have sustainability embedded into their mandate, C-suite commitment and clear policies in place,” Webster says. “You need accountability at the highest level, including linking targets to executive remuneration.”

GO WHERE THE EMISSIONS ARE

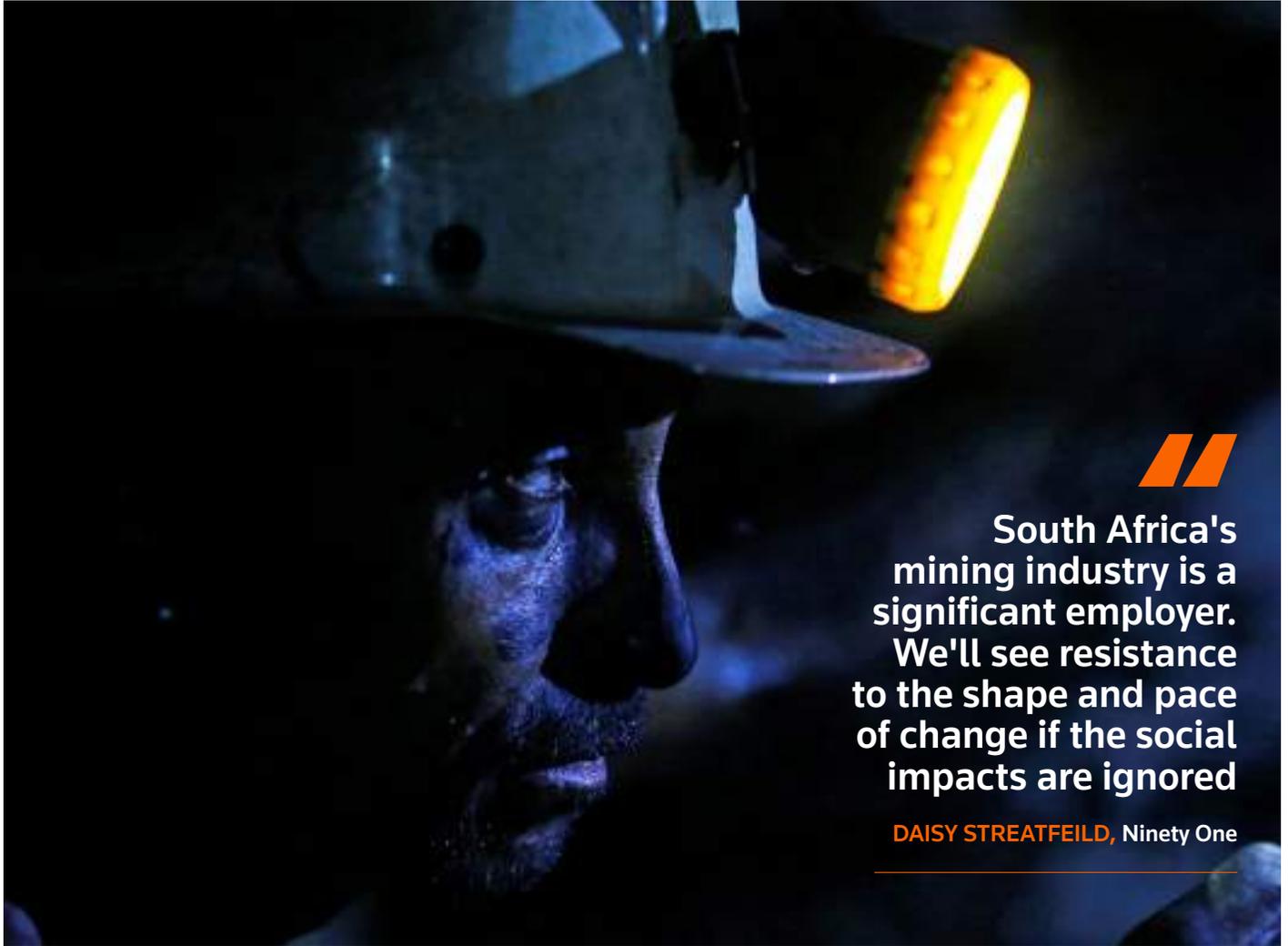
The key to reaching climate targets is to go where the emissions are. For investors, that creates a challenge, says Daisy Streatfeild, sustainability director at asset manager Ninety One. “We could reduce the emissions of our portfolio very quickly by selling off the high-carbon assets, but it does nothing to achieve net zero. The ultimate test is how much emissions are reduced in the real economy, rather than in our portfolios.”

A new wave of transition finance is needed, according to Ninety One. “We must finance the reduction of carbon by directing capital to high-



emitting regions and sectors where real-world change is most needed,” says the firm’s chief executive, Hendrik du Toit. “The worst mistake would be to isolate carbon-heavy places and enterprises by starving them of capital. Stepping back simply exacerbates the problem. Divestment may feel virtuous. But it would be ruinous. Heavy emitters cannot decarbonise alone.” >

Funds need to move from fossil fuel infrastructure to renewable energy at scale.



South Africa's mining industry is a significant employer. We'll see resistance to the shape and pace of change if the social impacts are ignored

DAISY STREATFEILD, *Ninety One*

South Africa, for example, has the highest emissions intensity grid network in the world. "It's a very clear, easily identified issue that needs addressing," says Streatfeild. "In one sense, it's very simple, but at the same time it's very challenging because it's such a big issue and Eskom, the state utility, is such a large company. The grid is very coal-intensive and South Africa's mining industry is a significant employer, with more than 1 million people dependent on those salaries. We will see resistance to the shape and pace of change if the social impacts are ignored."

The Sustainable Markets Initiative Transition Finance Working Group says that investment of about \$4 trillion annually is needed to reach net zero by 2050, about a quarter of it in emerging markets. But only 15% of the necessary finance has been made available.

As Catherine McKenna, chair of the U.N.'s High-level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities, says: "We know what we need to do: peak global emissions in just three years, by 2025, and cut emissions in

half in less than eight years, by 2030. Money needs to move from funding fossil fuel infrastructure and instead be invested at scale in clean energy.

But this does not mean just selling out of problematic companies, she says. Investors must focus on their impacts in the real economy as a whole, not just in their own portfolios. And the need for a just transition must inform everything they do – net zero will not happen without public support, so due care must be taken to address the concerns of workers in carbon-heavy industries and countries.

It's a huge and massively complex task. Transparency, accountability and global consistency in regulations will all be needed for the financial sector to have a fighting chance of achieving it. ●



Mike Scott is a former Financial Times journalist who is now a freelance writer specialising in business and sustainability. He has written for The Guardian, the Daily Telegraph, The Times, Forbes, Fortune and Bloomberg.



'GET THE BLEND RIGHT' and we can unlock trillions for Global South

Angeli Mehta hears that reducing risk through innovative public-private partnerships will be key to raising the floods of private capital needed for climate mitigation and adaptation

[VIEW ONLINE](#)

There's a big black hole in the finances needed for the climate and energy transition. Spending today (primarily on mitigation) is around \$600 billion. Africa alone needs \$3 trillion by 2030, and according to the IMF, the world needs between \$3 and \$6 trillion a year until 2050. It sounds like a lot, but private investors have the money: they control assets worth some \$210 trillion; banks potentially another \$200 trillion. How can they be persuaded to spend some of it?

The answer hinges on risk. Low- and middle-income countries are risky propositions for investors,

says Chris Clubb, managing director of Convergence Finance, a non-profit set up to increase investment going into those countries to achieve the sustainable development goals. The country risk and currency risk are so high that investors would be failing in their fiduciary duty to pension-holders, shareholders and stakeholders – or be non-compliant with regulations – if they did invest.

But the appetite is there, suggests Clubb, if risk could be reduced to bring it under the barrier. And this is where blended finance comes in: to use public sector finance to reduce the level of risk to >

A student in Cape Town studies with a rechargeable lantern during one of the frequent power outages from South Africa's struggling power utility Eskom.



something acceptable to private investors.

Groups like the U.N.-convened [Net-Zero Asset Owners Alliance](#), with \$10 trillion assets under management, “are saying three things: one, we have the money that we’re looking to invest. Two, we’ve looked at developing countries, and we would like to invest the money there, but the risk is just simply too high for us. And three, if you can, through blended finance, create fiduciary investments, we will be investing.”

Blended finance is not a new idea, but it hasn’t taken off as anticipated after the launch of the U.N. Sustainable Development Goals (SDGs) in 2015. “We are not blending to scale. We are blending small – project by project. And so, we’ve got to break some glass in order to blend more,” Jay Collins, vice chairman of banking, capital markets, and advisory at Citigroup, told an audience at a side event at COP27 in November.

Convergence has tracked more than 700 blended finance deals that have been put together over the past 15 years. Often, says Clubb, only one donor government provides funding, which limits the size of the blended finance vehicle. On average those deals are around \$70 million – too small alone to change the landscape. Bringing governments, multilateral development banks (MDBs) and the



We are not blending to scale. We are blending project by project. We’ve got to break some glass in order to blend more

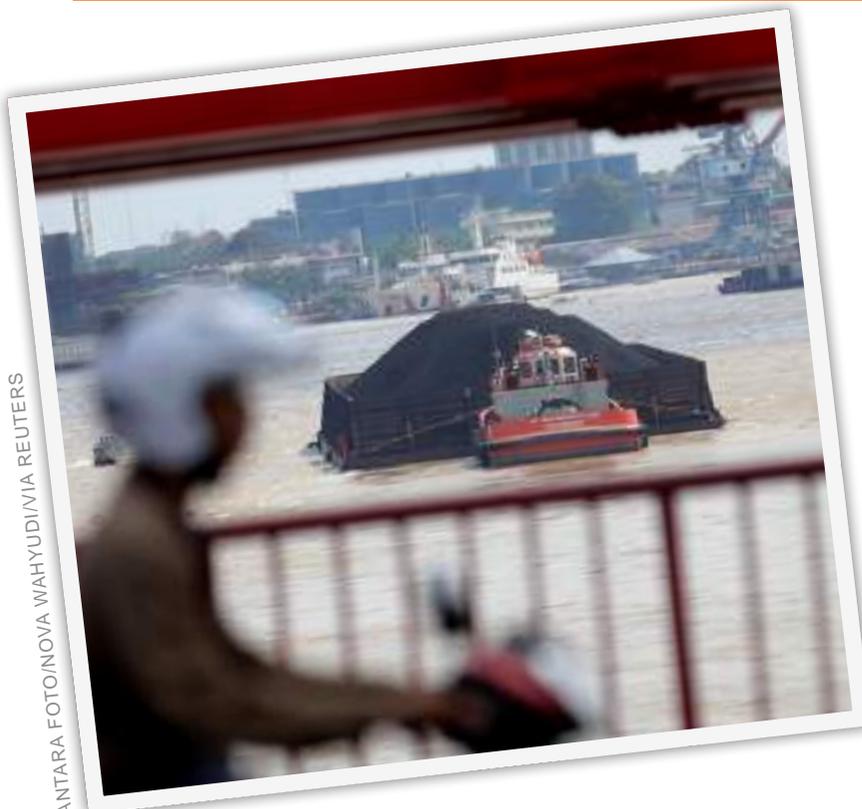
JAY COLLINS, Citigroup

private sector together can change that. One example is the Climate Finance Partnership, announced at COP26 by asset manager BlackRock.

Its focus is on renewables, transmission and energy storage infrastructure in Latin America, Asia and Africa.

The fund was oversubscribed, raising \$673 million. Of that, \$130 million of so-called catalytic funding – a safety buffer to reduce the risk to the private sector – was raised from Japanese, French and German governments, alongside TotalEnergies and philanthropic donors, including Grantham Environmental Trust. The private investors who are >

Wind turbines at the Kenya Electricity Generating Company station in Ngong hills near Nairobi.



ANTARA FOTO/NOVA WAHYUDI/VIA REUTERS

A coal barge is towed on the Musi River, Palembang, South Sumatra, Indonesia.

protected from the greatest risk committed five times as much – \$523 million. The partnership is soon to ink the first deals.

There were a range of pledges made at COP27 in Sharm el-Sheikh. In a five-year partnership with Kenya, the UK government is committing around 13 million pounds to a new guarantee company that will lower the risk for investors and is expected to unlock another 80 million pounds in climate finance for six projects across energy, agriculture and transport.

The clean energy pillar of Egypt’s newly launched Nexus on Food, Water and Energy programme attracted \$500 million from international partners, including the United States, Germany and the EU, to accelerate the country’s renewables deployment.

The financing is expected to unlock at least \$10 billion in private investment to install 10 gigawatts (GW) of solar and wind energy by 2028 and retire inefficient gas power capacity.

A Just Energy Transition Partnership (JET-P) to help Indonesia transition from coal, has committed to mobilise \$10 billion in public funding from partner governments. Private sector investors, members of the Glasgow Financial Alliance for Net Zero (GFANZ), will raise another \$10 billion.

The commitment builds on the \$8.5 billion JET-P for South Africa announced in 2021 at COP26. A JET-P was expected to be agreed with Vietnam in December.

But compared to what’s required, these projects barely scratch the surface. South Africa’s investment

plan, launched a year after the partnership was announced, suggests \$98.7 billion will be needed over the next five years to begin the country’s transition from coal. Funding sources have been identified for about half that figure.

At least a third is expected to come from private sources, but observers of the process say donor countries have not used the past year to mobilise the necessary level of concessional finance that would attract the private investment required. Nor have they addressed the huge debt that has been built up by the state-owned power producer, Eskom, which adds to investor risk.

MOVING BEYOND MITIGATION

Scale of funding is one issue. What it’s spent on is another. The bulk of climate finance projects – around 90% – target mitigation, not adaptation. That’s partly because mitigation projects (such as renewable energy) can generate cash flows to provide returns to investors, whereas adaptation projects generally don’t produce revenues.

Anjali Viswamohanam, policy director at the Asia Investor Group on Climate Change (AIGCC), says much more innovation, time and effort is needed to come up with projects that build resilience and produce returns.



There needs to be a critical mass of funding that can de-risk the investment if we want to invest at scale and that needs to be allocated to the best global examples, no matter where they come from

CHRIS CLUBB, CONVERGENCE

One example could be the building of a seawall around a low-lying area, with an integrated road project that would generate returns, for example from road taxes. “We need to get all stakeholders – not just the private investors – together to think about the adaptation and resilience issue from a systemic level, said Viswamohanam.

In any case, investors will have to be thinking about the physical risks posed by climate change to the assets they hold, and how to build resilience for them. The AIGCC has urged governments to clearly lay out a financial strategy to underpin >



national adaptation plans and bring private and philanthropic funders together with government and multilateral development banks to identify co-investment opportunities.

Clubb argues that the multilateral development banks could easily double or triple their finance commitments from \$140 billion a year at present and distribute some of the financial exposure to private investors through blended finance.

MDBs who lend to governments for public sector projects (such as climate adaptation) don't currently mobilise funds from the private sector, while entities such as the International Finance Corp (part of the World Bank group) who do mobilise private funds for private sector projects don't generate as much investment as they could.

From the perspective of most experts, "the multilateral development banks are the most systemically under-utilised development tool that the development community has," he adds.

Speaking at COP27, Nick Holder, chief operating officer for Prudential Africa, said he wanted to see the multi- and bilateral development banks expand their activities and scope of financing to provide more capital.

"We're really looking for greater scale in

Waves crash against a seawall in Mumbai, India.

concessional capital, in supporting blended finance solutions that de-risk investments, not just on a project-by-project basis, (but) on a much larger scale, both to make it easier to invest, and to ensure diversification."

He described how its support for a \$14 million project for solar energy in Vietnam took a relatively large effort in terms of due diligence and looking for certification. "It was a good thing to do, it was the right thing to do, but it's not yet scalable."

Convergence, in collaboration with aid agencies and a range of private and philanthropic investors, has put together an [action plan for climate and SDG mobilisation](#) to double investment into developing economies to \$530 billion. They say the action plan can be implemented within a year, and without additional public sector resources.

"There needs to be a critical mass of funding that can de-risk the investment if we want to invest at scale ... and that needs to be allocated to the best global examples, no matter where they come from," says Clubb.

Crucially, the catalytic funders like MDBs, need to collaborate to create large enough funds to make an impact on climate and SDG goals.

USAID, the international development arm of >



A solar power station in Tongchuan, Shaanxi province, China.

the U.S. government, which worked on the plan, has agreed to collaborate with the development agencies of the five Nordic governments to establish a financing vehicle to catalyse \$1 billion before COP28 next year in the United Arab Emirates.

Reform of the MDBs is high on the international agenda, with the [Sharm el-Sheikh Implementation Plan](#) agreed at COP27 calling for them “to define a new vision and commensurate operational model, channels and instruments that are fit for the purpose of adequately addressing the global climate emergency”.

It also emphasises the need for grant-based resources – as opposed to loans – for adaptation and for the least developed countries, something powerfully argued for by Barbados prime minister, Mia Mottley.

Since 2015, says Clubb, “we’ve had two north stars, the Paris Agreement and the U.N. SDGs, that have allowed us to begin to quantify the amount of



Barbados's prime minister Mia Mottley.

DANTE CARRER/
REUTERS

investment that’s actually required. A significant challenge is the multilateral development bank and development finance institution system – legacy mandates and processes are not aligned to the speed required or to increasing financial commitments and mobilising private finance. Their shareholders need to reset their compass towards those north stars.”

A lot is riding on the IMF and World Bank spring meetings to find agreement to chart that new course. ●



Angeli Mehta is a former BBC current affairs producer, with a research PhD. She now writes about science, and has a particular interest in the environment and sustainability. [@AngeliMehta](#).

Private sector pact to decarbonise heavy industry picks up steam

Angeli Mehta reports on the growth of the First Movers Coalition, which now covers sectors accounting for a third of CO₂ emissions



JESSICA GOW/REUTERS

W

hile there was frustration that governments failed to raise the bar on climate action at COP27, some key announcements made on the sidelines of the international climate conference showed that the **private sector is powering ahead** regardless.

Launched only a year ago at COP26 in Glasgow, the First Movers Coalition (FMC) is a global initiative to harness the purchasing power of companies to decarbonise seven "hard to abate" industrial sectors, which currently account for 30% of global emissions. At a press conference in Sharm el-Sheik, U.S. Climate Envoy John Kerry said the coalition had grown from

VIEW ONLINE

34 to 67 companies in the space of a year.

He said he was confident the world would get to a no- or low-carbon economy because "companies with major impact on shareholders and stockholders around the world, with major impact on the whole investment chain, (are) setting an example that other people have a hard time ignoring. And we will get there because the marketplace itself is making these decisions."

Coalition members have collectively made \$12 billion worth of purchasing commitments in hard-to-abate sectors such as steel, aluminium, shipping, trucking and aviation, agreeing to pay >

U.S. Climate Envoy John Kerry with Volvo AB's chief executive Martin Lundstedt and Swedish environment minister Annika Strandhäll.



MARIO ANZUONI/REUTERS

the high price tags they command now in order to create a market, which will allow costs to eventually fall. These sectors are responsible for over one-third of global emissions.

The beauty of the collaboration is that partners are both producers and purchasers of each other's materials.

The newest pillar of cooperation is cement and concrete. At COP27, General Motors, energy groups Vattenfall and Orsted, alongside ETEX and RMZ from the construction sector, said 10% of their purchasing in 2030 would be from low-carbon cement and concrete. These technologies don't yet exist at scale – the challenge for the coalition is to get them there.



One of the biggest challenges that we have across the entire decarbonisation agenda is that we need more money. Creating firm demand signals unlocks capital

JIM ANDREW, PepsiCo

Another new member of the coalition is PepsiCo, which has pledged that by 2030, 10% of the aluminium it purchases will have been produced with near zero emissions. Additionally, 30% of the heavy-duty trucks and 100% of the medium-duty trucks it purchases will be zero emission vehicles.

Jim Andrew, PepsiCo's chief sustainability officer, told an audience at COP27 that "we all know that one of the biggest challenges that we have across the entire decarbonisation (agenda) ... is that we need more money. And by creating firm demand signals, it unlocks capital."

"Whether we're talking about transportation,



VATTENFALL/ASA BACKLIN/HANDOUT VIA REUTERS

cement, or aluminium – these are all systems problems. Any company working by itself can make great progress, but you can't get to zero or even close to zero, you need that whole value chain."

However, those strong demand signals alone are not enough. Derek Baraldi, head of sustainable financing and investing at the World Economic Forum (which hosts the coalition) says concessionary finance and collaboration between public and private sectors is required to deliver the capital required, alongside a set of policies that are aligned across jurisdictions to complement the commitments made by the FMC.

"The objective, ultimately, is to provide some level of confidence that there will be a market so that a project can move ahead. Now the challenge is the speed at which these commitments turn into concrete purchasing of (the) materials and solutions that are being produced," he adds.

COMMITMENTS IN ACTION

Some of the commitments made at the launch of the coalition last year are already turning into action. Volvo is using green steel from >

PepsiCo has pledged that by 2030 30% of the heavy-duty trucks it purchases will be zero emission vehicles.

Inset: Hybrit's pilot plant is producing fossil-free steel in Lulea, Sweden.

Scandinavia’s SSAB and the Hybrit consortium in the frame of its heavy-duty electric trucks. The first is expected to be delivered to Amazon, another coalition member, by the end of the year.

Another truck-maker, Scania, says its European operation will purchase only fossil-free steel by 2030. It had already invested in Swedish startup H2 Green Steel, which secured 260 million euros of equity and 3.5 billion euros of debt financing in October from a range of public and private sector investors to get its first plant off the ground. It is expected to begin operations in 2024.

In the aviation sector, Delta Air Lines has signed offtake agreements with two U.S.-based companies, DG Fuels and Gevo, as part of its commitment to be fuelling 10% of its operations with sustainable aviation fuel (SAF) by 2030. Both companies have yet to build their first SAF plant but have already sold their planned production capacity.

Aker Carbon Capture, a founding member of the FMC, is building the world’s first carbon capture plant on a cement facility, which is expected to be in operation in 2024. The carbon dioxide captured will be transported by ship and permanently stored on the Norwegian continental shelf. Its customer is

Heidelberg Materials, another coalition partner.

Apple has bought the first commercial grade aluminium made with carbon-free smelting technology developed by Quebec-based Elysis (a joint venture between Rio Tinto and Alcoa and backed by the governments of Canada and Quebec). Apple is also an investor through its green bonds. Meanwhile Canadian consumers of Corona beer sampled the first cans made with the low carbon aluminium this summer.

Nine partner governments – including Germany, India and Japan – have joined the United States to support the coalition. Discussions are going on both about funding and how the new materials could potentially be incorporated into government procurement goals.

Half of concrete and cement procurement is done by the public sector, so “when it comes to the collaboration between governments and private sector, if there was a joint initiative here, we will really change the cement industry. We want cement in accordance with the First Movers Coalition standard. Then we can change the whole industry,” said Valborg Lundegaard, chief executive of Aker Carbon Capture. >

The public sector is responsible for half of all concrete and cement procurement.



JOHN JAVELLANA/REUTERS



POWER OF PROCUREMENT

Using the power of public procurement is one of the strands of the Breakthrough Agenda, another initiative launched last year in Glasgow, under which coalitions of countries will set out priority actions to decarbonise power, transport and steel.

“The public sector can play a really important role in improving the risk-return profile of these early-stage decarbonisation technologies, for example by providing (price) guarantees,” says the WEF’s Baraldi.

“Once you start to mitigate the (so-called) green premium – as happened with solar energy – then private capital is going to come in. That’s where we are right now, where government has to play a much stronger role in building up momentum and acting as a trigger to investment.”

One such trigger has been the [U.S. Inflation Reduction Act](#) – likened by some to a “carrot” compared with the EU’s emissions trading systems “stick”.

Certainly, says Baraldi, it’s a “fantastic builder of momentum, which is going to attract multiple sources of capital towards the U.S. to support certain industries, which are key to the First Movers Coalition. The question now is to ensure that other jurisdictions are going to provide similar types of solutions.”

Delta Air Lines has signed agreements with two U.S.-based sustainable aviation fuel companies.

Indeed, a [report from the Tyndall Centre](#) at Manchester University in the UK, calls for stronger policies (such as price and market guarantees) to encourage investment in the shipping infrastructure needed to support the energy transition. Hydrogen, likely converted to ammonia, will both fuel and be carried by ships, but there’s a yawning gap between what’s required, and the production being planned – let alone financed, the report said.



Once you start to mitigate the green premium, as happened with solar energy, then private capital is going to come in

DEREK BARALDI, WEF

The sums required are huge: the Breakthrough Agenda estimates that hydrogen deployment consistent with a 1.5 degree aligned pathway will require between \$60 billion and \$130 billion up until 2030. Over the past decade just \$1 billion has been invested annually. >



Egypt signed a deal at COP27 to develop the country's first green hydrogen facility in the economic zone of the Suez canal

While initiatives like the FMC aim to create a marketplace for the technologies to decarbonise such hard-to-abate sectors as shipping, those technologies and financial investment must also flow to developing economies.

One of the deals signed at COP27 will enable Egypt to develop the country's first green hydrogen facility in the economic zone of the Suez canal. The European Bank for Reconstruction and Development (EBRD) is providing an \$80 million loan to construct the electrolyser facility for the plant, that will eventually produce 15,000 tonnes of green hydrogen a year.

The plant will be owned and built by fertiliser exporter Fertiglobe, Norwegian power producer Scatec, Orascom Construction and the Sovereign Fund of Egypt, a state owned and privately managed fund. It's a critical project not only in terms of building out renewables, but for food security.

The U.S. International Development Finance Corporation (DFC) is also becoming involved in what will be a \$410 million project. Such institutions

have a crucial role not only in providing technical assistance, but to share the risk of this first-of-a-kind project, said Terje Pilskog, chief executive of Scatec.

They also "provide attractive financing terms that help us bring down the cost of green hydrogen to a level that's attractive from a commercial point of view".

The World Bank is introducing a partnership for hydrogen production in developing countries, including concessional financing that can mobilise further investment from public and private sectors.

More widely, the Climate Investment Funds have announced a multilateral investment programme to help developing countries decarbonise hard-to-abate sectors such as iron and steel, cement and chemicals. It aims to raise at least \$500 million to pilot and scale innovations. So far, the UK and Sweden have pledged support.

The question now is how quickly all the money seemingly on the table can make the impact required to justify John Kerry's optimism. ●



ERNEST SCHEYDER/REUTERS

Can fossil fuel industry sell world on 'net-zero oil'?

Oil companies are targeting carbon markets to raise finance for large-scale carbon capture and direct air capture projects, reports [Matthew Green](#)

C

limate scientists have long warned that the world must slash the use of fossil fuels. But governments have delayed acting for so long that almost all the pathways to climate safety modelled by the United Nations-backed Intergovernmental Panel on Climate Change depend on two highly speculative bets: a massive roll-out of projects to capture carbon dioxide (CO₂) emissions from industrial sites, and an equally daunting effort to draw the planet-warming gas back out of the atmosphere at gigatonne-scale.

[VIEW ONLINE](#)

Since [carbon capture and storage \(CCS\) technology](#) was first developed in the early 1970s, the world has only managed to establish about 30 commercial facilities – many of them used to extract more oil from fields in North America. To hit climate targets, the Global CCS Institute, an industry-backed think-tank, [estimates](#) that there will need to be 70-100 new CCS facilities built per year, at a total cost of \$655 to \$1,280 billion.

And that poses an obvious question: assuming that such a mission is even feasible, how to pay >



Occidental says it aims to build 100 DAC plants in the oilfields of the Permian Basin by 2035 and offer carbon-neutral oil



Vicki Hollub,
president and
chief executive
at Occidental
Petroleum

DANIEL KRAMER/
 REUTERS

the estimated trillion-dollar cost?

Long touted as a climate solution by the fossil fuel industry, and condemned as a “false solution” by environmental groups, CCS projects have traditionally depended on tax breaks and other subsidies to prove economically viable. Oil and gas executives now aim to unlock an additional source of finance by selling carbon credits to other heavily polluting industries seeking to offset some of their own emissions.

With companies from airlines to steelmakers under pressure to demonstrate progress towards net zero pledges, demand for credits is rising.

But harnessing this appetite to fulfil the oil industry’s vision of a fully interchangeable, global market in carbon credits for CCS schemes faces a major hurdle: the lack of a universally accepted accounting framework to certify how much CO₂ a particular project is storing.

In June last year, French major TotalEnergies and its Northern Lights carbon storage joint venture partnered with Oxy Low Carbon Ventures, a subsidiary of American oil company Occidental Petroleum, to [form a coalition](#) called the CCS+ Initiative. Working with consultants from South

Pole and Perspectives Climate Group, the coalition is developing standardised accounting methodologies to assess a wide spectrum of projects to capture, transport, store and utilise CO₂.

Also among the coalition’s 35 partners are Canada-based Carbon Engineering, Switzerland’s Climeworks, and other companies that are developing technologies known as direct air capture (DAC) to absorb the gas directly from the atmosphere. The goal is to publish draft methodologies for public consultation in January.

“We want to achieve the highest level of carbon accounting so that these methodologies will be adopted as standard practice as carbon markets expand around the world,” said Christiaan Gevers Deynoot, senior manager of carbon removal platforms at South Pole, and deputy secretary-general of the CCS+ Initiative. All told, existing CCS projects store about 40 million tonnes of CO₂ a year, or 0.1% of global emissions.

As pressure on the fossil fuel industry to decarbonise has intensified, interest in the technology has soared. As of September 2022, [the total capacity of commercial CCS projects in](#) >

the pipeline reached 244 million tonnes per annum of CO₂, an increase of 44% relative to the previous 12 months, according to the Global CCS Institute.

Northern Lights, a joint venture between TotalEnergies, Anglo-Dutch major Shell and Norway’s Equinor, aims to store emissions from European industry in disused oilfields under the North Sea, the largest project of its kind in the world. The companies said they had made a commercial breakthrough in September, when they signed a deal to store CO₂ from fertiliser maker Yara’s Dutch operation. Japan’s Mitsubishi Corporation has also joined the CCS+ Initiative – reflecting its interest in technologies to utilise CO₂ in building materials such as cement and ceramics.

In the United States, Oxy Low Carbon Ventures, founded in 2018, is leading Occidental’s strategy to become the world’s first oil and gas driller to transform itself into a “carbon management” company. Occidental chief executive Vicki Hollub says the company aims to build 100 DAC plants in the oilfields of the Permian Basin by 2035. The goal is to suck enough CO₂ from the atmosphere to offset the emissions associated with producing and burning Occidental’s newest product: so-called “net zero-oil”.

“It’s not just putting (carbon) capture on emissions sites – although we’ll do some of that,” Vicki Hollub, Occidental’s chief executive, told a panel at the COP27 climate talks in Egypt in November. “A big part of it is building direct air capture on a large-scale, which is not being done today.”

CCS CARBON CREDITS

Buyers are already lining up to buy associated credits. Oxy’s 1PointFive unit announced in March that Airbus had agreed to purchase 400,000 tonnes of carbon credits generated by its first DAC plant, which is due to go online in the next few years.

Oil companies see such deals as a mere foretaste of what could lie in store if they succeed in establishing a more liquid trade in credits for carbon capture and removals. However, not all credits will be created equal. The CCS+ Initiative methodologies aim to draw a clear distinction between carbon credits generated from CCS projects to reduce emissions from industrial sites, and DAC projects to remove CO₂ from the air.

With many climate models reliant on a massive effort to draw down atmospheric CO₂ in the second half of this century to stabilise global temperatures, interest in DAC has grown – particularly given the land-use and other constraints facing carbon removal techniques such as afforestation, or bioenergy with carbon capture and storage.



ALY SONG/REUTERS

Airbus has agreed to purchase 400,000 tonnes of carbon credits generated by Occidental’s first DAC plant.

IN NUMBERS

- To hit climate targets, the Global CCS Institute estimates that there will need to be **70-100** new CCS facilities built per year, at a total cost of **\$655 billion to \$1,280 billion**
- Existing CCS projects store about **40 million** tonnes of CO₂ a year – or **0.1%** of global emissions
- In September there was a project pipeline of **244 million tonnes**, up **44%** from a year ago
- CCS+ initiative is developing a carbon accounting methodology in hopes to sell CCS and removals credits on the EU Emissions Trading Scheme

Headline-grabbing investments by tech companies such as Microsoft and Stripe in Climeworks and other DAC companies have left some oil executives concerned that carbon markets may undervalue the arguably less glamorous task of deploying CCS to clean up industry.

The relative price of credits for CCS or DAC will initially be decided in the voluntary carbon markets, which are frequented by companies shopping for credits to meet net-zero targets.

Transactions on these exchanges reached almost \$2 billion in 2021, an almost four-fold increase from \$520 million the previous year, according to Ecosystem Marketplace. Ultimately, though, the CCS+ Initiative has its sights set on a bigger prize: introducing carbon credits for carbon capture into much larger government-run cap and trade schemes, such as the European Union Emissions >



ALEXLMX/SHUTTERSTOCK

Trading System which had a turnover of 683 billion euros in 2021, according to Refinitiv. In November, the European Commission [published framework proposals](#) for introducing carbon removals into the ETS. The CCS+ Initiative hopes its methodologies will be adopted as a regulatory standard for the associated credits as the scheme takes shape.

As carbon markets boom, the oil industry’s embrace of carbon capture has, however, fuelled concerns among many environmental organisations and climate scientists, who fear that the technology will serve primarily to prolong the fossil fuel era.

In May last year, the Paris-based International Energy Agency warned that there can be no new developments of oil and gas if the world is to have a chance of hitting the 2015 Paris Agreement target to limit the rise in average global temperatures to 1.5 degrees Celsius.

Although there is widespread agreement that CCS should be used to tackle emissions from so-called hard-to-abate sectors such as steel, cement and chemicals, some drillers are using CCS to justify new production.

Houston-based NextDecade, a member of the CCS+ Initiative, says it aims to use carbon credits to finance a CCS project to reduce emissions from its planned Rio Grande LNG facility to export liquefied natural gas from the South Texas coast – which it bills as the “greenest” LNG project in the world.

Local environmental groups say that even if CCS proves technically feasible at the site, it would only capture a tiny fraction of the overall emissions associated with extracting, transporting and burning the project’s natural gas.

There are also concerns that DAC – so far

NextDecade says it aims to use carbon credits to finance a CCS project to reduce emissions associated with exporting LNG.

confined to tiny projects – could foster unrealistic expectations over the prospects for removing enough atmospheric CO₂ to matter to the climate.

“On one hand, it’s really important that these negative emissions technologies are developed and that they are tried out at different scales – because we’ll need them,” said Anders Bjørn, a researcher specialising in net-zero emission pathways at the Technical University of Denmark. “But there’s also a danger that fossil fuel companies will showcase these nice new pilot projects without ever having an intention for them to play a serious role.”

Given the economic, technical and resource-use constraints facing carbon capture and removal, experts say that maximising energy efficiency, and switching to renewables, remains the more pressing task.

“Carbon capture technology is super-expensive, takes a long time to develop, and it’s inefficient. In what situation is that better than investing heavily in renewable energy, which is cheap and available?” said Carsten Warnecke, a carbon market specialist at the NewClimate Institute think-tank in Cologne. “In the end, the only climate-neutral gas or oil is the gas and oil that stays in the ground.” ●



Matthew Green is a former Reuters climate correspondent and now global investigations editor at DeSmog, a non-profit climate news service. [@DeSmog](#)



Energy crisis boosts drive to cut emissions from buildings

Mike Scott reports on the growing business case for decarbonising the built environment

VIEW ONLINE





GROUND PICTURE/SHUTTERSTOCK

The built environment has long had an outsize impact on carbon emissions, being responsible for about 40% of global emissions, in part because of the sector’s heavy use of steel and concrete, two of the most carbon-intensive materials on earth.

“Given that buildings account for nearly 40% of the world’s greenhouse gas emissions, decarbonising buildings is the key to decarbonising our future, and we are at a critical inflection point,” says George Oliver, chief executive and chairman of Johnson Controls, and chair of the Sustainable Markets Initiative’s Sustainable Buildings Taskforce. “The good news is that we have the technology to make a positive impact, harnessing the power of energy efficiency technologies, electrification and renewables.”

To align the sector with net-zero targets, 3-3.5% of buildings in mature cities need to be retrofitted every year, more than three times the current rate, according to real estate group JLL.

“Retrofitting existing buildings is the quickest and most cost-effective way to accelerate

decarbonisation in the built environment,” says Guy Grainger, JLL’s global head of sustainability services and ESG.

But despite its obvious benefits – in terms of cutting carbon, reducing costs and as an investment proposition – energy efficiency has always been a curious blind spot, for governments and regulators, investors and building users alike. Unlike in the power sector, the sector is fragmented, with extended supply chains, mismatches between owners and users throughout the value chain, and diffuse sources of emissions, from the carbon embodied in buildings during construction to transport to and from premises, to energy use within buildings.

For governments, the numbers can seem daunting – millions of homes and businesses are involved in driving energy-efficiency improvements, whereas when it comes to energy companies, there are only a few organisations they need to deal with, says Philippe Delorme, executive vice-president of Europe operations at Schneider Electric.

Some governments, notably the UK’s, have also >

To align with net-zero targets, 3-3.5% of buildings in mature cities need to be retrofitted every year.

been reluctant to encourage efficiency measures for fear of being seen as **promoting the “nanny state”**.

Meanwhile, consumers and businesses have been put off by the upfront costs of efficiency investments, even though the payback periods have always been fairly short.

However, there is now a growing recognition that urgent action is needed, with two key drivers boosting the case for action. The first is the wave of extreme climate events around the world in 2022, which starkly illustrated the growing impacts of climate change on the built environment.

The second is the war in Ukraine, which has played a large part, in Europe at least, by

highlighting the region’s over-reliance on one supplier, Russia, and on fossil fuels in general.

“Decarbonisation has got a lot harder in 2022 for Europe and around the world, for all the wrong reasons,” says Jonathan Maxwell, chief executive of energy efficiency investment firm Sustainable Development Capital (SDCL). While the rollout of renewable energy capacity – and the electrification of the global economy – continues to accelerate, it is starting from a very low base and electricity currently only provides 20% of energy.

“The only short-term vaccine is energy efficiency,” says Delorme. Efficiency measures are cheap, achieve rapid results and already attractive payback times have been slashed by rising oil and gas prices. “Every time we engage with customers, we drive savings of at least 30%,” he adds.

EU governments have spent 500 billion euros in the past 12 months to ease the pain of higher energy prices. At the same time, individual householders and companies are starting to see the impact on their energy bills, while investors and building occupiers are increasingly requesting that their buildings reflect wider net-zero targets and commitments.

Property developer Lendlease managed to cut its Scope 1 and 2 emissions by more than half >

Christmas lights in Oxford Street – businesses can reduce Scope 2 emissions by switching to renewable energy.



The only short-term vaccine is energy efficiency. Every time we engage with customers, we drive savings of at least 30%

PHILIPPE DELORME, Schneider Electric



MAJA SMIEJKOWSKA/REUTERS



(53%) over the past year by switching to low carbon non-fossil fuels on construction sites, powering its business with renewable electricity, and beginning the process of decarbonising heating networks across its development portfolio.

NO EXCUSES, NO OFFSETS

The global real estate and investments group, whose business model spans the entire property lifecycle, aims to be a 1.5C aligned company, achieving net zero for Scopes 1 and 2 by 2025 and absolute zero carbon, across all scopes, “with no excuses and no offsets”, by 2040.

However, with about 99% of its carbon footprint deriving from Scope 3 emissions, the vast majority from the embodied carbon emissions in building materials, it acknowledges it has a long way to go. To tackle this, it has started to specify low-carbon steel, concrete and aluminium products on new developments, and it is participating in industry groups driving decarbonisation of materials.

It is also a founder member of Built by Nature, a scheme to accelerate mass timber construction in the UK and Italy. And it has developed strategies to reduce embodied carbon by 30% compared to the original design, when pitching to external clients.

There are a few dedicated energy efficiency investment funds, such as SDCL’s 2 billion pound Energy Efficiency Income Trust, which invests in technologies including rooftop solar, energy storage, combined heat and power and industrial



Lendlease cut its Scope 1 and 2 emissions by 53% by switching to low-carbon fuels on construction sites and powering its business with renewable energy

energy recycling in buildings ranging from data centres to hospitals, schools and universities and high-emission steel and chemical industrial facilities.

It also funds projects that reduce demand for energy at the point of use, including improvements in lighting, heating, ventilation, air conditioning, building energy management systems and controls.

Other ways to drive efficiency include “as-a-service” models, where customers pay for performance and do not need to make high upfront capital expenditures. One of the best-known examples is at Schiphol airport in Amsterdam, where Philips (now Signify) took on the contract to provide lighting of the airport, installing LED lights and cutting electricity consumption by 50%.

Often such agreements are signed with energy services companies (ESCOs), who install, manage, >

Schiphol airport in Amsterdam has contracted lighting as a service from Philips, now Signify.

maintain and remove any equipment, with energy performance contracts ensuring that the customer pays only for the service provided, with the earnings from the energy savings split between customer and provider.

Efficiency improvements can also be paid for through green bonds or sustainability loans, which have green criteria built into their terms of borrowing.

The EU's Renovation Wave, the fourth iteration of the Energy Performance of Buildings Directive, calls for an increase in retrofitting and a reduction in emissions from buildings of 60% by 2030. A new Energy Efficiency Directive will add to the impetus for change in the bloc as well.

EU-level efforts are being bolstered by national policies. One is Italy's *superbonus* scheme, which pays householders 110% of the cost of energy efficiency equipment such as heat pumps, insulation or solar panels, leading to a surge in the uptake of such measures. Germany has introduced measures to cut its energy consumption by 9% by 2030, including banning new fossil fuel heating by 2024.



BRENDAN MCDERMID/REUTERS



Corporations are realising that their buildings represent their brands. ... There is plenty of evidence that net-zero buildings are securing a premium

GUY GRAINGER, JLL

Even the UK, where there has been an institutional resistance to energy efficiency since former PM David Cameron cut an insulation programme, [calling it "green crap"](#), is tentatively encouraging consumers to save energy and has announced plans to prohibit new gas heating systems and boilers by 2025, and ban them for all buildings by 2035.

In the U.S., the Inflation Reduction Act also beefs up building codes, encourages green technology and offers rebates for retrofits, so it will kickstart the U.S. market for energy-saving measures. Cities are also introducing their own measures. San Francisco, for example, mandated that all new buildings must be electric from 2021,

Los Angeles has said buildings must be net zero by 2030 while New York aims to cut emissions from buildings by 80% by 2050.

"A change has happened in the last six months," says Grainger. "Corporations are realising that their buildings represent their brands. Some buildings are becoming illiquid or overpriced and there is plenty of evidence that net-zero buildings are securing a premium. It improves the business case for retrofits."

The biggest savings will be found in emerging markets, the International Energy Agency (IEA) stresses. "With emerging countries accounting for an ever-greater share of energy demand, the largest energy efficiency opportunities will increasingly be found in such countries as Brazil, China, India, Indonesia, Mexico and South Africa."

The sector is set to provide even better returns thanks to the advent of digitalisation, says Delorme of Schneider Electric. "Digitalisation has massively increased the effectiveness of energy efficiency. The rise of digital has coincided with a massive fall in the cost of sensors and electronic equipment, while the cloud has reduced the cost of software. The next step is grid digitalisation, which will allow the integration of more and more renewables and more flexibility in the grid." ●

Timber House in Brooklyn, New York city's first mass-timber condo building.

A member of Kenya's Maasai talks on his mobile. Investors are helping mobile networks expand in sub-Saharan Africa.

THOMAS MUKOYA/REUTERS



From climate-smart farming to electric rickshaws: investors look to make an impact

Mark Hillsdon reports on the growing appetite to allocate capital to make a difference without sacrificing returns

E

nvironmental, social and governance funds have had a rough ride over the past couple of years, attracting criticism from regulators for greenwash, and from socially minded investors for investing in companies that may be good at managing the increasing risks from climate change, but aren't doing anything to solve it.

Increasing awareness of the shortcomings of mainstream ESG may be fuelling interest in impact investment as an alternative. Earlier this year the

[VIEW ONLINE](#)

Global Impact Investing Network (GIIN), a U.S. non-profit advocacy group, reported that the market was now worth \$1.64 trillion.

Amit Bouri, chief executive of the GIIN, says there is "undeniable momentum" behind the industry, which is about allocating "capital in a way that actually drives progress on the world's most pressing issues ... in a way that can achieve financial objectives and achieve impact objectives."

GIIN was created with seed funding from the >



MOHAMMAD PONIR HOSSAIN/REUTERS

Rockefeller Foundation in 2009, specifically to build the global market for impact investment by helping investors to “sharpen their focus on the role investment capital can play in adapting to climate change,” says Bouri.

In the early days, it was all about philanthropic foundations, development finance institutions and wealthy individuals. But this has changed. “The majority of activity is now from private investors,” he says, such as large pension funds, insurance companies, global banks and wealthy individuals.

Maria Teresa Zappia, deputy chief executive at impact investors BlueOrchard agrees. “Impact investing is (about) pursuing social and environmental growth alongside financial returns. It is not philanthropy. It has a very clear view that there has to be financial performance, combined with impact performance,” she says, ensuring that fiduciary responsibilities are still fulfilled.

BlueOrchard, which has \$3.5 billion under management, was acquired by asset manager Schroders in 2019, in a deal valuing the 20-year-old company at more than 100 million pounds. As of December 2021, BlueOrchard had invested over 9 billion pounds across more than 90 countries, helping 230 million poor and vulnerable people



Impact investing is about pursuing social and environmental growth alongside financial returns. It is not philanthropy

MARIA TERESA ZAPPIA, BlueOrchard

in emerging and frontier markets to get access to financial and related services.

“You are really fine-tuning your investment universe, so there is effectively an additional selection and filtering of investment opportunities,” Zappia explains. However, it “doesn’t need to be a dilemma between high impact and low returns.”

One key area where there is a huge opportunity for impact investment is in financing climate adaptation. A big theme at the last two COPs has been how the people in frontier and emerging economies, who are most at risk from climate >

A man tends seedlings on a floating bed, at his farm in Pirojpur district, Bangladesh, where many farmers grow vegetables on rafts as an adaptation to climate change.

change, are also ill-equipped to protect themselves. Many of these economies are also more dependent on fossil fuels.

According to the United Nations Environment Programme (UNEP), the annual adaptation costs in developing countries alone are set to double by 2030, to \$140 billion annually.

Beyond funding for major infrastructure projects such as sea walls to prevent storm surges, there is a huge need for more innovative climate adaptation strategies such as more resilient crops, new irrigation systems and water-efficient industrial processes. This calls for more investment in the startups that are creating these game-changing technologies, businesses which often struggle to find capital from conventional sources.

“There is a whole array of climate solutions that are very much climate impact investments, but that are under-financed,” says Bouri.



There is a huge need for more innovative climate strategies such as more resilient crops, new irrigation systems and water-efficient industrial processes, which are under-financed

In rural Kenya and India, Bouri says, impact investment has supported programmes that rent solar panels on a subscription model, and which have transformed village life. Investors are also looking to back small to medium enterprises (SMEs) seeking to radically transform mobility with electric rickshaws and scooters.

Much impact investment is in partnership with public sector sources, such as the multilateral development banks, which provide catalytic funding to help reduce risk for private investors (See [‘Get the blend right’ and we can unlock trillions](#)).

BlueOrchard recently announced a partnership with Finnfund, an impact investment company that is 95% owned by the Finnish state, to provide \$20 million in debt investment to help telecom provider Africa Mobile Networks expand its service to another 35 million people in sub-Saharan Africa.

Another example is Germany’s development finance agency GIZ, which, among other initiatives, is running a [Private Adaptation Investment](#)



ANUSHREE FADNAVIS/REUTERS

[Bootcamp](#), helping seven impact investors build a portfolio in the area of climate change adaptation, and providing individual technical assistance, peer-learning and networking opportunities for 15 adaptation SMEs from Kenya and Nigeria.

[The Landscape Resilience Fund \(LRF\)](#) is an impact-driven private-public partnership that mobilises private climate finance for vulnerable smallholders and landscapes. With a \$25 million commitment from anchor investor Chanel, the LRF provides investment, soft loans and technical training to adaption-focused SMEs, and projects, which gives them better access to private investors. It is aiming to mobilise \$100 million by 2026.

Rickshaw driver Binota Gayen in an electric tuktuk in New Delhi.

BUILDING RESILIENCE

Root Capital, meanwhile, is a not-for-profit organisation with a focus on rural livelihoods and has so far invested more than \$1.6 billion – largely from foundations and individuals – into agricultural enterprises that are building a more prosperous and resilient rural communities, by providing credit and capacity building.

BlueOrchard is also creating a new market for tailored, affordable climate insurance that covers smallholder farmers against extreme weather events, which can devastate both the crops and the livestock that are often the only source of household income. As well as weather data, farmers also receive advice on the effective use of fertiliser and how to select crops that are much more suited to the current climate situation. For investors, while >



BlueOrchard is investing in Skymet Weather Service, which reaches 20 million Indian farmers, allowing them to better manage the impact of weather events on harvests through smartphone based insurance

each insurance policy is relatively small, the returns come in the sheer number of people that take up the offer.

BlueOrchard is also investing in “insuretech” companies like Skymet Weather Services, which provides weather and crop yield information to the insurance sector in India. Skymet Weather Services, which provides weather and crop yield information to the insurance sector in India, using more than 4,000 automatic weather stations. Investment has

helped the network to expand, and it now reaches 20 million farmers, allowing them to better manage the impact of climate and weather events on harvest through smartphone based insurance.

Bouri also sees a growing role for corporations – more often seen as investee rather than investor – in the market. A company may be looking at ways of introducing regenerative agriculture across part of its supply chain, he says, and may commit to partly funding this by investing their assets and then partnering with other impact investors.

“They also have a lot of assets and increasingly are thinking about how they can invest their capital to have a positive impact,” he explains.

It’s another untapped channel that could allow a flood of new finance to flow into helping communities adapt and build resilience for an unpredictable future. ●

A villager stands next to a fluorescent lamp powered by solar energy at his house on the outskirts of Gandhinagar, India.



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BRENDAN MCDERMID/REUTERS

ESG: The investment world’s troubled teen is forced to grow up

Investment in environment, social and governance funds is approaching \$40 trillion this year. But only a fraction is helping to fight climate change, [Peyton Fleming](#) reports

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[VIEW ONLINE](#)

ith public attention on climate change and other sustainability threats rising, environment, social and governance (ESG) investing has taken off, spawning a myriad of fund products billed as “low-carbon”, “green” and “sustainable”, and a proliferation of ESG rating services, which routinely rank companies on their ESG performance.

The U.S. market has been especially active, growing by more than 40% in just the past few years, eclipsing [\\$17 trillion in assets](#).

But this historic surge has also triggered closer scrutiny of the industry’s offerings and whether their sustainability attributes are legitimate or grossly misleading, even as they often charge higher fees.

Inconsistent and subjective ESG ratings have been another sore point, most notably when

Elon Musk’s electric-vehicle company, [Tesla](#), was bumped from the S&P’s ESG 500 Index last spring, while ExxonMobil stayed on.

Lastly, the scrutiny has shone a brighter light on a hard truth about ESG investing: It is more about generating profits and less about saving the planet. From its beginning, ESG ratings, which drive ESG fund holdings, are based on “[single materiality](#)”, the impact of a changing world on a company’s profits and losses, not the reverse.

This distinction is clear when you consider the battle against climate change. Experts such as [McKinsey & Co estimate](#) that we’ll need to spend more than \$3.5 trillion annually over the next 30 years to limit global warming to well below 2 degrees Celsius. Unfortunately, these trillions >



An ExxonMobil oil refinery in France. The oil firm remains on S&P's ESG 500 Index.



Florida governor Ron DeSantis has ordered the state's pension funds to stop considering ESG factors.

CRYSTAL VANDERWEITER/REUTERS

are not the same trillions that are currently invested in ESG funds. In fact, clean energy investment this year was **only \$1.3 trillion**, according to the International Energy Agency.

Andrew King, a strategy and innovation professor at Boston University's Questrom Business School, says it is easy to see how casual investors are confused into believing that ESG investing is about saving the planet. He points to major ESG asset managers, such as BlackRock, which make lofty statements about their climate credentials but are heavily invested in fossil fuel companies.

As an example, BlackRock's **U.S. Carbon Readiness Transition Fund** touts the fund's "broad exposure to large- and mid-capitalisation U.S. companies tilted towards those that BlackRock believes are better positioned to benefit from the transition to a low-carbon economy". In fact, the \$1.4 billion fund has significant holdings in three of the world's largest fossil fuel companies: ExxonMobil, Chevron and ConocoPhillips.

Smaller boutique investment firms such as Trillium Asset Management and Green Century Funds use a starkly different approach on ESG investing, emphasising both planetary impact and healthy stock returns.

In the case of Green Century, ESG investing means screening out all fossil fuel companies, investing in climate solutions, such as the makers of electric vehicles (EVs) and renewable energy, and holding lots of green bonds. "Screening is how we get rid of industries

that are not sustainable, such as fossil fuel companies," said Green Century chief executive Leslie Samuelrich, whose firm manages nearly \$1 billion in assets. "ESG rating firms will give you 'best of class' fossil fuel companies, but we don't want them."

Trillium has not dropped fossil fuel companies altogether, but it only invests in those that stop investing capital on new fossil fuel reserves. No companies are meeting that criteria today, according to Trillium's head of ESG strategy, Elizabeth Levy.

King says the Green Century and Trillium examples are all too rare in the booming ESG landscape.

"The good stuff are the boutique firms, which are impact investing and direct investing in breakthrough technologies or dedicated funds like offshore wind," he said. "Unfortunately, the stuff that's really grown is the junk in the middle. It's stuff that feels right to investors, but it's not exactly what it seems." >



It can be very difficult to understand what some funds mean when they say they're an ESG fund. Investors should be able to see what's under the hood

GARY GENSLER, SEC chairman

BOOSTING ESG OVERSIGHT

U.S. and European financial regulators have both been ratcheting up their focus on ESG investing.

The scrutiny comes as sustainability threats like climate change are worsening and ESG investing is soaring, eclipsing \$35 trillion in global assets in 2020 and fast approaching \$40 trillion this year. Criticism has also been rising, with accusations ranging from deceptiveness and greenwashing to a secret agenda by a "climate cartel" to socialise capitalism and abolish fossil fuels.

In the U.S., the vitriol has been especially heated from prominent Republicans, including former vice president [Mike Pence](#) and Florida governor Ron DeSantis, who has ordered his [state's pension funds](#) to stop considering ESG factors in their investment decisions.

"The right and the left are both attacking this," said King, who wrote about ESG's wide-ranging strengths and flaws in a [Harvard Business Review article](#) in August. "Regulators need to do something, because ESG investing is clearly not dying."

The European Union adopted new ESG disclosure rules last year, the Sustainable Finance Disclosures Regulation, for fund managers, along with a new green taxonomy, a classification system defining environmentally friendly The European Union

adopted new ESG disclosure rules last year, the Sustainable Finance Disclosures Regulation, for fund managers, along with a new green taxonomy, a classification system defining environmentally friendly investments.

In the United States, the task falls on the Securities and Exchange Commission, which has [proposed wide-ranging new rules](#) that would force investment managers to better describe their ESG funds and how their goals and metrics are being met.

Among the specific changes is requiring ESG fund managers to disclose greenhouse gas emissions of companies they are invested in. Another proposal, [the Names Rule](#), would require that 80% of an ESG fund's holdings be invested in the kind of assets suggested by the fund's name.

While the SEC has declined to say when it will finalise the ESG rules, for SEC chairman Gary Gensler, the tighter scrutiny is long overdue.

"It can be very difficult to understand what some funds mean when they say they're an ESG fund," [Gensler said](#), in announcing the proposals in May. "I think investors should be able to drill down and see what's under the hood of these funds."

The SEC has [been investigating potential ESG misconduct](#) since early 2021 when it launched a special task force focused on ESG and climate >

Boutique firms are more likely to be investing in dedicated funds, such as offshore wind.



issues. It has since levied a \$1.5 million penalty against BNY Mellon for ESG misstatements and is also investigating Goldman Sachs.

The agency's ESG proposals have triggered hundreds of [public comment letters](#), with [opponents saying it is regulatory overreach](#) and sustainability-oriented investors [offering strong support](#), even if it leads to a decrease in assets claiming to be ESG worthy.

"In the short-term, these rules if adopted, may result in a decrease in total assets invested in funds that purport to be sustainable," wrote Ceres president Mindy Lubber, whose non-profit group works with more than 200 global investors. But "ultimately, they would bolster confidence in climate and other ESG investment products".

One area where Green Century and Ceres would like to see improvement is stronger disclosure rules on how ESG funds are engaging with companies on sustainability issues. [Shareholder resolutions](#) requesting that companies disclose their risks and strategies on climate and other sustainability threats has been an especially popular engagement tool that a growing number of investors are using.

"In public equity investing, if you're not doing active shareholder engagement, including shareholder proxy filings, I can't see how you're making a difference in the world," Green Century's Samuelrich said.

Extreme weather events like fires and drought in California are bringing ESG considerations into sharper focus.

Another approach not included in the SEC's proposals but gaining traction among European regulators, is [deploying double materiality](#), whereby investors evaluate companies both for their ESG risks and their impact on the world. [Among the early adopters](#) embracing this approach is [Fidelity International](#), one of the UK's largest money managers.

No matter where the SEC's final rules land, ESG investing is clearly not going away. Even as state attorney generals in 18 states are [challenging the rules](#), ESG-managed assets keep growing, with some experts projecting the industry will eclipse \$50 trillion by 2025.

"ESG is like the gawky teenager becoming an adult," said Andrew Behar, chief executive of As You Sow, a shareholder advocacy group that [tracks thousands of ESG funds](#). "With so much money flowing into these funds, new SEC rules, combined with the EU's efforts, are a critical step to help ESG and sustainable investing reach maturity." ●



Peyton Fleming is a freelance journalist who has written extensively about climate change, climate finance and energy issues. His articles have appeared in the Guardian, Quartz, Yale Environment 360 and National Geographic. peytonfleming22@gmail.com

Calls grow for companies to disclose nature impacts in bid to plug finance gap

For years the nature agenda has taken a back seat to climate for business. As the deepening biodiversity crisis hits bottom lines, companies and investors are playing catch up. **Terry Slavin** reports

[VIEW ONLINE](#)





BENJAMIN WESTHOFF/REUTERS

Negotiators meeting in Montreal in December at crucial talks aimed at reversing global biodiversity loss by 2030 by agreeing a new Convention on Biological Diversity have their work cut out for them.

As Sir Partha Dasgupta’s [global review the Economics of Biodiversity](#) found, biodiversity has declined by 68% since 1970, and despite the fact that 50% of the global economy depends on a functioning ecosystems, just 0.1% of global GDP is directed towards biodiversity restoration.

A [new report from the U.N. Environment Programme \(UNEP\)](#) finds that finance for nature, which will also be critical in the fight against climate change, will need to ramp up to \$384 billion per year by 2025, more than double the current spending of \$154 billion, for global climate and biodiversity goals to remain within reach.

Governments currently provide 83% of finance for what is known as nature-based solutions, or NbS, the UNEP report says, but their ability to dramatically increase these flows is limited. That means the private sector, which only spends \$26 billion a year, will have to step up investment by an order of several magnitudes to fill the gap.

But is the private sector up to this enormous task?

Certainly “nature-based solutions” is the latest buzzword in boardrooms, with increasing numbers



The private sector only spends \$26 billion a year on nature-based solutions. It will have to step this up by an order of several magnitudes by 2025

A ship sails through a narrow channel in the Rhine, Germany, caused by drought and low water.

of corporates pledging to become “nature-positive” and take action to end deforestation in their supply chains as part of their net-zero commitments.

At COP27, more than 35 financial institutions, representing more than \$8.9 trillion in assets under management (AUM), launched a [Finance Sector Deforestation Action plan](#), following up on the commitment they made at COP26 to address commodity-driven deforestation impacts in their investment and lending portfolios by 2025.

But with the world’s primary forests still being lost at the rate of a football pitch every six seconds, according to WWF, the UNEP report finds little evidence of commitments bearing fruit on the ground, with “too little action and too little capital deployed”. >

The problem is that while there is a lot of noise around the nature-positive business agenda, it lags far behind climate on the radars of companies, and the institutions that invest in them.

A review of Fortune Global 500 companies by McKinsey found that while 83% of companies have climate-related targets, only 25% have set targets for freshwater consumption, 20% for addressing chemical and plastic pollution, and 9% to address forest and seabed loss.

“While corporate leaders increasingly acknowledge the importance of nature, limited understanding of how to structurally and responsibly engage on the topic of nature degradation prevents many from making quantified commitments,” the McKinsey report said.

This divergence is also seen in the data companies report annually to voluntary disclosure platform CDP. While 18,600 companies disclosed climate change impact data last year, only 1,000 companies reported data on forests and 4,000 firms on water-security.

Cate Lamb, head of water security at CDP, told

a panel discussion at COP27 that the potentially negative consequences of clean energy investments on natural assets such as water had until recently been overlooked at CDP, in the drive to push companies to mitigate their climate impacts.

There was an attitude she said of “we need to get mitigation over the line, and then we’ll deal with nature”.

But she said CDP had a wake-up call last year at COP26, when the final text of the Glasgow Climate Pact included explicit recognition of the importance of “ensuring the integrity of all ecosystems, including in forests, the ocean and the cryosphere, and the protection of biodiversity”, reflecting a growing recognition of nature’s critical role in the battle against climate change.

A new report from WWF shows that 59% of the world’s CO₂ emissions are absorbed by natural systems, while the agriculture, food and land use sectors alone have the potential to contribute nearly one-third of the emissions reductions >

IN NUMBERS

- While 83% of Fortune **500 countries** have climate targets, only **24%** have targets for freshwater consumption, **20%** for chemical and plastic pollution, and **9%** for forest and seabed loss
- 59%** of the world's CO₂ emissions are absorbed by natural systems
- \$335 billion** in revenue was at risk from water insecurity alone in 2020
- Credit Suisse study found fewer than **one in 10** finance institutions have biodiversity targets



UESLEI MARCELINO/REUTERS

There have been 100 pilot-tests of TFND’s framework, including by companies engaged in soya farming in Brazil.



needed by 2030 to keep the planet on course for 1.5C of warming.

Lamb said the organisation is looking to make changes to its questionnaires and scoring systems over the coming year, with one scenario that companies won't be able to get an A score on climate if they aren't also taking meaningful action on protecting water and forests.

CDP is also backing a campaign by the [Business For Nature coalition](#), signed by 330 businesses with more than \$1.5 trillion in combined revenues, for world leaders who are meeting at COP15 to make it mandatory for all large businesses and financial institutions to assess and disclose their impacts and dependencies on nature.

The final version of a disclosure framework that will allow them to do so will be published next September by the Taskforce on Nature-related Financial Disclosures (TNFD), a parallel organisation to the Taskforce on Climate-related Financial Disclosures.

Although the TNFD was only launched in October 2021, it has moved at warp speed, developing the framework in a series of iterations, and in collaboration with 16 core knowledge partners and 750 companies and financial institutions. The latter have been road-testing beta versions



You have to address both together. If anything, the nature emergency is more pressing than the climate emergency

DAVID CRAIG, co-chair TNFD

of the framework since the first was published in March and reporting their findings back to inform refinements for the next.

Former Refinitiv chief executive David Craig, who is co-chair of the TNFD, told a session at November's ESG Investment Europe event in London that there have been 100 pilot-tests of the framework, including by companies engaged in soya farming in Brazil and palm oil in Indonesia.

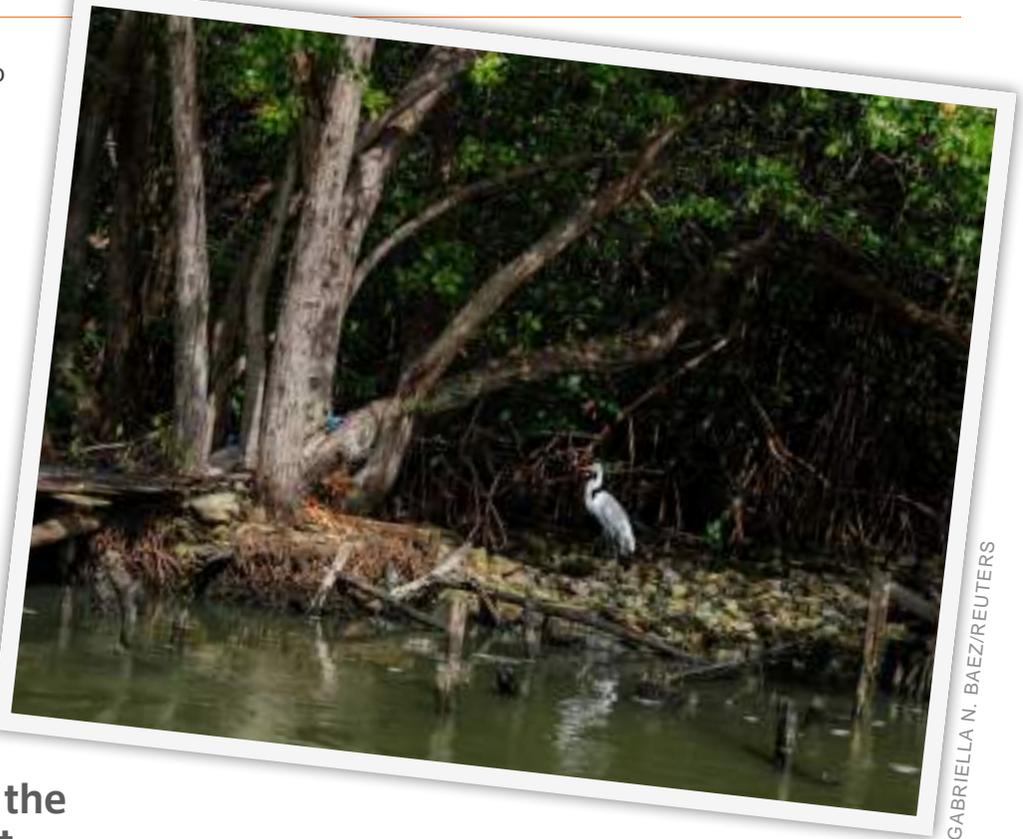
The methodology borrows heavily on TCFD, adapting it for the nature context, but there are several key differences. One is that the concept of "double-materiality" is baked in. So the framework allows companies to assess and report both their >

A polluted river in Slovakia. Only a fifth of Fortune 500 companies have set targets to address chemical and pollution.

nature risks and dependencies, and also their impacts. Another is that, unlike climate, local context is critical. “Where am I operating, is water scarce there or not? Is pollution an issue, or not?”

And then there is the social context, and the need for companies to engage with stakeholders in the landscapes where they operate: “Ninety per cent of the world’s farms are under a hectare in size ... When it comes to impacts on land, you have to think about stewardship and indigenous rights. That’s an important part of the framework.”

The key message is that companies need to be reporting on their impacts on both nature and climate in an integrated manner.



GABRIELLA N. BAEZ/REUTERS



Companies have made the flawed assumption that the water that they need will always be there. This is material. It isn’t going away, and it will only get worse

CATE LAMB, CDP

“You have to address both together. If anything, the nature emergency is more pressing than the climate emergency,” he says, because nature-based solutions, like trees and mangroves, are also critical to stop soil erosion, help keep cities cool, and protect coastlines from flooding.

“At the moment we are destroying the very natural assets we need for adaptation. Every forest we cut down, every mangrove swamp we remove, every flood basin we build on in making the adaptation issue harder.”

He points to the impact of last summer’s prolonged drought in Europe, when low river levels forced shipping to ground nearly to a halt and power plants to curtail production. “There are ecosystem services that we have taken for granted for hundreds of years that we are realising, amid scarcity, are more precious than we thought, creating huge risks for our financial systems and economies as a whole.”

This is born out in the data reported to CDP, with \$335 billion in revenue at risk from water

insecurity alone in 2020, said Lamb. “We have evidence in the dataset of stranded assets across oil and gas, mining, and agriculture that are off the balance sheet, because companies have made the flawed assumption that the water that they need will always be there. This is material. It isn’t going away, and it will only get worse if companies continue their business-as-usual approaches.”

The TNFD’s framework will be welcome by investors. [A survey by Credit Suisse](#) of institutional investors last year found that while 84% of respondents described themselves as “very concerned” about biodiversity loss, fewer than one in 10 had measurable biodiversity-linked targets, and 70% cited lack of available data a key barrier to making investments supporting biodiversity.

Among the investors that are backing the Business for Nature campaign to make reporting on nature mandatory is BNP Paribas Asset Management. “The unravelling of nature is under way and investors need to act now, starting with a better understanding of how our investments impact nature and how nature loss may translate into financial risks, says Jane Ambachtsheer, global head of sustainability.

“To achieve this, we need better and more consistent disclosure from the private sector... Enhanced disclosures enable us to allocate capital in a way that can help protect our clients from risk, while contributing towards a better future for society and the planet.”

The UNEP report pointed to positive regulatory >

Mangroves, a critical component of nature-based solutions, pictured in Puerto Rico.



developments. The European Union has introduced the “do no significant harm” principle as part of its sustainable finance framework to prevent investments that focus on decarbonisation but do not consider other environmental services such as biodiversity.

Similarly, the Network for Greening the Financial System, a grouping of 114 central banks and financial supervisors, has recommended that “biodiversity-positive” and “biodiversity-harmful” activities be defined in green investment taxonomies, and has set up an interdisciplinary consultation process that involves scientists and conservation experts.

Margaret Kuhlow, finance practice leader at WWF, said in an interview: “The finance sector has awakened to the climate risk and the nature risk and the inter-relations between the two ... They realise they have to act, together and with regulators and policymakers, in order to make changes, like making (climate and nature) disclosure more standardised and regularised.”

She added: “When the rules are clear, the money moves.” She said financial regulators were increasingly interested in the issue, with the Dutch, French, Malaysian and Brazilian authorities all now conducting an analysis of the consequences of nature loss on their economies.

“People laughed when I said this during a panel (at COP27), but I draw hope from central bankers,” she said. “It’s a complex, multi-disciplinary problem that requires many parties at the table, all pulling in the same direction. What the CBD (Convention on Biological Diversity) will hopefully do is show the direction.” ●

An indigenous leader works with cattle at a community reservation in Roraima state, Brazil.



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How deforestation risk remains a blind spot for bankers

Finance continues to flow into companies that are contributing to forest loss, despite their net-zero pledges. [Mark Hillsdon](#) reports

[VIEW ONLINE](#)





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eforestation caused by commodities such as soy and beef accounts for 10% of global CO₂ emissions, a figure greater than that of the aviation sector. Yet despite a host of pledges and initiatives, finance continues to flow into companies with links to habitat loss and destruction.

Released in the run-up to COP27, Global Canopy's new [Deforestation Action Tracker](#) showed that of the 557 financial institutions that had signed up to the [Glasgow Financial Alliance for Net Zero \(GFANZ\)](#) a year earlier, only 17% had even recognised deforestation as a risk.

Global Witness said it had further evidence of this "head-in-the-sand" approach when it revealed that several of the big names that are part of GFANZ, including BlackRock, Vanguard and Deutsche Bank, were still investing in companies linked to deforestation.

Most damning, said Global Witness, was the fact that GFANZ members had acquired an additional 10 million shares in Brazilian meat giant JBS since COP26, with Vanguard alone increasing investments by an estimated \$12.4 million. JBS

has long been [associated with accusations of deforestation](#) although it was one of the companies that unveiled a [roadmap](#) at COP27 to eliminate commodity-driven deforestation, while in the latest report from [FAIRR](#), the investor network focused on ESG risk in the food sector, the company was only classed as a medium-risk of deforestation.

Asked about these developments, Veronica Oakeshott, forest campaign lead at Global Witness said: "We regard JBS' participation in the roadmap as a dead end. The company has signed up to many such voluntary agreements in the past and failed to deliver on them. We have been investigating their murky supply chains for years, and year after year we find illegal deforestation and human rights abuses. So this latest promise rings hollow.

"Transparency from JBS about who it buys its cattle from and how it monitors those suppliers for deforestation would be far more helpful than road maps. In terms of its deforestation and human rights record, JBS has long run out of road."

In September, GFANZ leaders wrote to members urging more institutions to join the 30 that last >

Activists protest against greenwashing outside Deutsche Bank headquarters. The bank, which is part of GFANZ, is one of several still investing in companies linked to deforestation.



year signed a Commitment on Eliminating Commodity-driven Deforestation from their portfolios. “In our view, transition plans that lack objectives and clear targets to eliminate and reverse deforestation are incomplete,” the letter said. By COP27, the number of signatories had only risen to 35.

“There are a lot of financial institutions that have not thought about the deforestation that they are exposed to,” says Sarah Draper, Global Canopy’s corporate performance programme manager. Some put it down to a lack of information, she says, but many are also knowingly continuing to invest.

Draper has even been told by companies with net-zero commitments that their focus is on climate and they don’t have the resources to think about deforestation as well, even though the two are inexorably linked. “It’s not possible to reach net-zero without tackling deforestation... (it) needs to be explicit in climate strategies,” she says.

A lack of data is often cited as a reason why deforestation risks haven’t been properly assessed, continues Draper, but information is freely available to help investors find the most exposed companies in their portfolio.

Global Canopy’s own Forest 500 uses publicly available company data to identify organisations with the greatest exposure to deforestation risk. Investors like Norwegian-based Storebrand use the



You can’t transform an ecosystem as large and complex as agricultural commodities without engagement. We want to influence them so we can invest with less risk

OLGA HANCOCK, Church Commissioners for England

GFANZ members have invested in produce from cattle in Brazil allegedly associated with deforestation.

tool to assess how aware potential investees are of the risk of deforestation, and what they do to address it, explains Vemund Olsen, a senior analyst in sustainable investments at the company.

Another tool is Trase, a data-driven transparency initiative that maps supply chains. “Trase uses trade documents to monitor which companies are selling and buying commodities from areas where deforestation is high,” continues Olsen. “It gives you an idea of the impact of the companies, but it stops at the point of first import. So, it will tell you who >

imports the most high risk soy (for example) ... but then that soy moves through various manufacturing processes before it ends up in the supermarket.”

Next year, Global Canopy is launching Forest IQ, which combines Forest 500, Trase and ZSL Spott data to assess key companies in timber, paper, palm oil and rubber supply chains. By bringing all the data together in one place it will be easier to map the companies, explains Draper, and help investors to deliver deforestation-free portfolios.

Another initiative launched at COP27 was Finance Sector Deforestation Action (FSDA), a member organisation with a focus on using engagement to eliminate deforestation from key agricultural soft commodities by 2025.

The FSDA has published shared investor expectations for companies, explains Olga Hancock, deputy head of responsible investment at asset managers the Church Commissioners for England. “You can’t transform an ecosystem as large and complex as this without engagement,” she says. “We want to influence them so we can invest with less risk.”

FSDA has now written to all the companies listed in the Fortune Global 500, she continues, detailing their expectations. These include setting a public



We have a blanket ban on coal, and that you can easily test ... The issue with deforestation is that it’s a negative side effect of legitimate production

VEMUND OLSEN, Storebrand

commitment to be deforestation-free by 2025, tracing suppliers in their supply chain and giving time and resources to collaborative actions.

Global Canopy has also produced a Finance Sector Roadmap, which sets out a six-phase approach to address deforestation risk, beginning with mapping risk before moving through monitoring and engagement. “Companies get more leverage by staying invested, so we advocate an engagement-first approach but there needs to be the threat of divestment,” explains Draper.

Disinvestment is something that Storebrand’s Olsen has had to consider. The company, which has committed to be deforestation-free by 2025, invests



PAULO WHITAKER/REUTERS

in 4,500 companies around the world. “Most of our exposure to deforestation will not be in the companies that are present in the forest and cutting down the trees. We will be exposed through larger companies that buy commodities produced on deforested areas,” he explains.

“We have a blanket ban on coal, and that you can easily test by looking at data about how much of the company’s revenue comes from coal,” he continues. “The issue with deforestation is that it’s a negative side effect of legitimate production.”

The fact that it is not necessarily a direct link, he says, makes it more challenging for financial institutions to understand their role, their exposure and the financial impact it could have.

In December 2021, Storebrand placed U.S. agricultural traders Archer Daniels Midland (ADM) >

Soybean harvest at a farm in Matto Grosso state, Brazil.



BRUNO KELLY/REUTERS

and Bunge on its observation list after deeming their efforts to eliminate deforestation risks from their supply chains as insufficient. Both companies have been asked to implement full traceability of their supply chains to farm level, and commit publicly to not sourcing from suppliers that have converted land since 2020.

The observation list is “an escalation of regular dialogue,” says Olsen. “You are very close to being excluded, but we do think you have the opportunity to speed up your implementation of policies.”

Companies stay on the list for two years and must show “verified progress” to come off it, he explains. Investment is capped at the current level until changes are made.

But others have been dropped, he says, including palm oil plantations and most recently JBS “because we feel they are persistently linked to deforestation in their supply chains,” says Olsen.

“One of the expectations that we have of companies is that they disclose how much of the commodities they use is verified deforestation-free – how much can be traced back to the point of production,” he explains. “If they (the buyers) were to refuse to accept any commodities potentially linked to deforestation, we think that would make a big change in how the farmers operate.”

But working with businesses can only achieve so much, concedes Olsen. “Realistically, we have a better chance of succeeding by engaging with governments,” he says, and points to new EU regulations on deforestation which will demand that companies can trace commodities right back

to where they were grown. The UK also has laws requiring that commodities weren’t grown on land from illegal deforestation.

Some NGOs, including Global Canopy, argue that while such legislation is to be welcomed, legislators have missed the boat by not including the financial sector in the new rules. In an open letter to the European Commission, nine financial institutions, including Triodos Bank and the ASN Bank, called on the EU regulators to reverse this decision citing the failure of voluntary regulations to make a noticeable difference to the sector.

However, Olsen believes that new regulations will force the whole market to act rather than relying on individual engagement with companies, which can be a slow process.

There needs to be a level playing field, he says. “If we engage with a soy-trading company and they agree to improve their transparency, traceability and efforts to avoid deforestation, that will require a lot of money and resources ... but their competitors that do not commit to end deforestation can sell at lower prices and gain an unfair competitive advantage.

“Rules need to apply to everyone in order to ensure a fair marketplace, and that will be an incentive for more companies to take action against deforestation.”

And that’s the crux, he says. “Far too few investors are prioritising this issue... we really need many more financial institutions to join this push to end deforestation.” ●

Global Canopy is launching Forest IQ, which combines data to assess supply chains of key companies in forest products such as timber.



WILLY KURNIAWAN/REUTERS

VIEW ONLINE

Needed: a sea-change in climate finance for oceans

With marine nature-based solutions attracting a fraction of the capital going into those on land [Sarah LaBrecque](#) reports on the drive to boost investment in the blue economy

The oceans are inextricably connected to the health of the planet, and humans: they absorb up to [30% of annual greenhouse gas \(GHG\) emissions](#) and 90% of excess heat, and provide livelihoods for countless coastal communities.

Healthy coastal ecosystems are also critical to the world's ability to withstand the impact of climate change. Not only do mangrove forests, for example, hold four times the amount of carbon per hectare as tropical forests, [according to WWF](#), their interlocking roots and branches interrupt rising water, protecting people, homes and businesses from powerful storm surges.

Yet they and other critically important ecosystems, such as coral reefs, salt marshes, and seagrasses, are under threat from acidification, changing currents and increasingly severe climate instability, as well as damaging manmade threats from pollution, aquaculture and industrial fishing. Among the most threatened are mangroves, with climate change and human activities driving their destruction. It is estimated that a fifth of mangrove forests were lost globally between 1980 and 2005.

There is growing corporate and investor interest in putting money towards marine nature-based solutions, with companies such as Stripe and >

Mangrove planting at a village in West Java province, Indonesia.

Shopify invested in ocean carbon removals companies including Vesta, Running Tide and Planetary Technologies. But investment in these so-called “blue economy” ventures is still nascent, with SDG 14, Life Below Water, receiving less than 1% of climate finance, the least of all the sustainable development goals.

According to the United Nations Environmental Programme’s (UNEP) newly released [State of Finance for Nature report](#), investment in marine nature-based solutions is only \$980 million, whereas terrestrial protected areas receive almost \$23 billion. That deficit is something that Karen Sack, executive director of the Ocean Risk and Resilience Action Alliance (ORRAA), is looking to change.

“The existing impact funds that are in this space do some amazing work, but they are largely small,” says Sack. Additionally, “There’s this pipeline of projects that aren’t seen as investable and the space is also seen as quite risky.”

ORRAA’s mission is to drive investment into ocean and coastal natural capital by building up the ocean financing “ecosystem” and getting

the global financial community to work together. “When ORRAA was set up about three years ago, we wanted to build radical collaboration between different sectors that often only work in separate silos,” says Sack, referring to governments, the private sector, finance, insurance and civil society.

ORRAA launched the [Sea Change Impact Financing Facility \(SCIFF\)](#), an organisation that Sack describes as a sort of global convener for ocean financing. It aims to attract at least 1 billion pounds of private investment into ocean and coastal ecosystems by 2030, while mobilising at least 2.5 billion pounds more of broader capital. Existing impact funds are very focused on Europe, she says. “They’re quite focused on technology, aquaculture and fisheries. ... What kind of funds need to be developed to close the gap, particularly to drive investment into small island developing states and least developed countries, and coastal communities? But also, how do we scale existing impact funds so that they can move from being \$50-\$150 million funds to \$300 million, \$1 billion?” >

IN NUMBERS

Of the **17%** of global waters designated as marine-protected areas, only **6.2%** are closed to destructive activities

Investment in marine nature-based solutions is only **\$980 million**, whereas terrestrial protected areas receive **\$23 billion**

The Sea Change Impact Financing Facility aims to attract at least **1 billion pounds** in private investment into marine ecosystems by 2030



CHRISTOPHE VAN DER PERRE/REUTERS

An activist protests to highlight the need to protect the world's largest seagrass meadow within the Mascarene plateau, Mauritius.

BLUE CARBON CREDITS

Sack emphasises the need for equity and accountability to be built into any ocean investment product, “blue carbon” being one of them. One particular mangrove conservation project in Cispatá Bay, Colombia, is often cited as a good example of what high quality means in this space, where communities as well as carbon are factored in. The project, on Colombia’s Caribbean coast, was the first to measure and monetise the carbon that mangroves sequester in their soil, using methodology developed by non-profit organisation Verra. The forest is expected to sequester nearly 1 million metric tons of CO₂ over its 30-year lifespan.

It is also fully verified by Verra’s Climate, Community & Biodiversity Standards, which evaluate whether projects also deliver tangible community and biodiversity benefits.

Maria Claudia Diazgranados, Conservation International’s blue carbon director, says: “Nineteen different community-based associations are part of the project ... (and) we are directly benefiting around 500 families.” This means, for example, providing families with technical assistance to plant crops that they can sell at local markets, or helping local women bring to market honey produced from bees that feed on the nectar of mangrove flowers.



Ocean activities are embedded in such a wide array of companies, including really big ones. ... Are you going to make your investment decision specifically because of the ocean element?

TED JANULIS, Investable Oceans

“Empower people” is one of five principles of the [High-Quality Blue Carbon Principles and Guidance](#), which was launched at COP27. Developed by ORRAA, Conservation International, The Nature Conservancy, technology company Salesforce, and others, the principles seek to provide a framework for those involved in blue carbon credits, including purchasers, investors, suppliers and project developers.

Ted Janulis is founder of Investable Oceans, a U.S.-based investment hub that seeks to simplify and accelerate market-based ocean investing. He says while investing in the ocean has been



NYIMAS LAULA/REUTERS

Algae is cleaned from a coral nursery in Bali, Indonesia.

happening for some time, the type of concerted action we’re seeing today is relatively new, and is accompanied by a new nomenclature.

“Ocean ESG”, for example, which is one of Investable Oceans’ focus areas, refers to an increasing number of science-based frameworks that are laying the foundation for rigorous sustainable ocean investing, measuring things such as plastic pollution, fishing practices and decarbonisation strategies.

But a key challenge is materiality.

“Ocean activities are embedded in such a wide array of companies, including really big ones,” says Janulis. “Let’s say you’re evaluating a large company with multiple business lines, and you don’t think they’re moving quickly enough to address an ocean-related issue – but they are addressing other ESG or sustainability issues. Are you going to make your investment decision specifically because of the ocean element? Is that enough of a differentiator?” Perhaps not.

To help companies navigate these waters, new research and platforms are being developed. The UNEP Finance Initiative, [has created a roadmap and toolkit](#) to help ensure investment, underwriting and lending aligns to SDG 14. WWF, meanwhile, has developed [a model and dataset](#) to assess how financial risks arise in the blue economy. Of the six ocean-based industries they looked at, they found that \$8.4 trillion was at risk under a business-as-usual scenario.

Ports and shipping, for instance, stand to lose \$874 billion, due to the fact that shipping emits >



A progress report on green shipping corridors at COP27 identified more than 20 initiatives, including between Shanghai and Los Angeles

1 billion tonnes of CO₂ into the atmosphere every year, is heavily destructive of natural ecosystems, and is exposed to physical damage from extreme weather events.

Green shipping corridors, defined by the Global Maritime Forum as “maritime routes between major port hubs where zero-emission solutions are supported and demonstrated”, are actively being developed after an initiative was launched at COP26 to establish at least six by 2025. A progress report at COP27 identified more than 20 initiatives, including between Shanghai and Los Angeles, a route that carries 40% of all the goods that go between China and the U.S.

“The enthusiasm has been terrific,” says Jesse

Fahnestock, project director, decarbonisation, at the Global Maritime Forum. “Eight of the biggest container shipping companies, accounting for 85% of container shipping volume” are engaged in the green shipping corridor movement.

Enthusiasm or none, there is a lot of money still to find: **\$175 billion per year** until 2030, in fact. Encouragingly, support for the COP15 goal to protect 30% of land and sea areas by 2030 is already widespread, despite the fact its particularities have yet to be worked out.

“We know that we don’t have a lot of time,” says Sack at ORRAA. “(But) the answers are hidden in plain sight, and many of them lie with nature. We don’t need to develop new high-tech tools that are going to take 15 years to get there. What we need to do is sit around the table and move quickly, deploy investments, and stop making excuses for inaction.” ●



Sarah LaBrecque is a freelance writer who splits her time between Ottawa, Canada and Hertfordshire. She writes about sustainable business and ethical living for publications such as the Guardian, Positive News, and for a range of B2B clients.

To plug the green economy data gap we need regulators to mandate climate reporting

With disclosure varying from 98% on the FTSE 100 to 12% for the Russell 2000, voluntary reporting is not working, says **Cornelia Andersson** of the London Stock Exchange Group



JOMNICHAY/SHUTTERSTOCK

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his year has been a challenging one for investors looking to capitalise on the green transition. Energy security concerns, rising inflation and an underperforming global equity market have abruptly ended a decade-long bull run in green stocks, which has delivered a compound annual growth rate of 14% since 2010. By the end of November, the FTSE Environmental Opportunities Index had fallen 18.9% year-to-date, in contrast to the FTSE All-Share, which was up by 1.8% over the same period.

[VIEW ONLINE](#)

So, does this mean that the rising tide of ESG is abating and we are seeing a slowing interest in sustainable stocks and assets? Not necessarily. If you look beneath the headline figures you can see that the total value of green revenues, that is revenues generated from sustainable products and services, has been largely unaffected by the market turbulence, declining by just 2% between 2021 and 2022 to \$4.8 trillion.

Despite the unprecedented rise in wholesale energy prices, the green economy is almost >



BORJA SUAREZ/REUTERS

\$2 trillion larger than the global oil and gas sector and now accounts for 9% of global market cap. [FTSE Russell data](#) shows that, if seen as an industry, the green economy would be the fourth-largest industrial super-sector by market capitalisation. The recent correction is a result of market turbulence and a “flight to safety” as investors switch to more traditional assets, seeking to make the most of increasing energy prices. Longer term, there is every reason to expect continued investment in green stocks.

While commonly thought of as solely focused on renewable energy, the green economy represents a diverse set of activities up and down the value chains, providing solutions across several environmental objectives.

FTSE Russell’s data from May 2022 shows that energy management and efficiency represents 39% of the green economy, while transport equipment is one fifth by size, having recently grown with the shift towards electric vehicles. Renewable energy generation and equipment makes up a further 18%. Its diversified nature means it spans many sectors,



Despite the rise in wholesale energy prices, the green economy is almost \$2 trillion larger than the global oil and gas sector

from utilities, to auto and technology.

The picture for the autos sector is a reminder of why it is important to look beneath the data. With the rise of electric vehicles, the sector’s exposure to the green economy tripled between 2018 and 2021 from 15% to 42%. However, until recently, one company, Tesla, accounted for 68% of this.

While concentration in a small number of large-cap stocks clearly exists, the green economy is globally diverse, albeit with larger representation in certain countries such as the United States >

COMMENT

followed by China. While smaller in total size, Japan and European countries such as France and Germany have comparatively higher exposure than the global average.

DRIVERS OF FUTURE GROWTH

The green economy needs to become substantially larger to achieve a net-zero climate target, growing from around 7% of the global economy in 2021, to between 16-25% by 2050. This requires enormous capital reallocation. The Glasgow Financial Alliance for Net Zero (GFANZ) estimates that \$125 trillion is needed by 2050, much of it for scaling low-carbon solutions in sectors from energy and construction to shipping.

This recalibration of the economy would have a knock-on effect for investors. FTSE Russell estimates that exposure to the green economy in global benchmarks would jump significantly in a scenario where the global economy pivots to a 1.5C path, increasing more than threefold between 2020 and 2030. Even in a scenario where countries achieve their nationally determined contributions (NDCs), today's exposure would almost double to 11% by 2030. It is no wonder that future growth estimates imply the green economy could become the first or second largest industry.



The auto sector's exposure to the green economy tripled between 2018 and 2021, but one company, Tesla, accounted for most of it

However, performance is not the only reason why almost 90% of investors are now engaging with sustainable investment strategies. They are driven by a powerful combination of three Rs – risk, returns and regulation. A 2022 survey of almost 200 global asset owners found that 57% of investors globally say the top reason for implementing sustainable investment is to mitigate long-term investment risk. Almost half cite the desire to capture better returns and meet client demand as a driver, while over a third point to regulatory requirements as a key driver.

Yet, the challenges facing this rapidly evolving industry are numerous and well documented.



TOBY MELVILLE/REUTERS

Perhaps the top of the list is a lack of corporate sustainability reporting. As a market infrastructure and data provider, we see a mixed picture by geography and company size, even on basic metrics such as carbon emissions disclosure. For example, the proportion of companies disclosing on Scope 1 and 2 emissions data varies drastically, from 98% for the FTSE 100, to 39% for the FTSE Emerging Index and just 12% for the Russell 2000, which tracks mid-cap U.S. equities.

Voluntary disclosure is clearly not working and there is an opportunity for regulation to deliver positive change. London Stock Exchange Group continues to call on regulators to mandate companies to make sustainability disclosures to help bridge the data gap. The adoption of sustainability reporting standards aligned to the International Sustainability Standards Board (ISSB) by 2025 would be a game changer.

As sustainable investment expands into other asset classes such as fixed income, the need for high data verifiable data only increases. Sustainable investment is no longer just an equities game. Despite being over \$50 trillion larger than public equity markets, fixed income has been a laggard. But it is increasingly integrating sustainable >

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KIM KYUNG-HOON/REUTERS

investment considerations. It isn't hard to see why. In recent years, an ultra-low interest rate environment has buoyed bond markets, prompting a significant rise in green bond issuance. Refinitiv data shows that global green bond issuance has surpassed \$100 billion every quarter since the start of 2021. But as central banks continue to hike rates to combat inflation, the big question now is whether issuance will continue at the same pace.

Sustainable investment strategies are as much about capitalising on the opportunities presented by a green transition as mitigating risks such as climate change. Investors are exploring ways to mitigate exposure to climate risks, particularly in the sovereign debt market as governments are uniquely exposed to a warming climate. By modelling impacts to debt levels and loss of GDP, FTSE Russell research found that in a disorderly climate transition scenario, multiple countries

Flooding in Japan in 2021. Investors are exploring ways to mitigate exposure to climate risks.

would default on their government debt by 2050, including Japan, Australia and Italy.

Whether it is channelling capital to scale low carbon solutions, or hedging exposure to growing climate risks across portfolios, data is the essential ingredient for investors. Data creates transparency in your decision making. The right regulation can not only support investors to access the data they need to make better decisions, but also direct capital to where it is needed to grow the global green economy. ●



Cornelia Andersson is group head of sustainable finance and investment at the London Stock Exchange Group

COMMENT

How companies can lead to make the energy transition work for people and planet

Meredith Sumpter explains how members of the Council for Inclusive Capitalism are putting its private sector guide to the just transition into practice



THILO SCHMUELGEN/REUTERS

The COP27 [Sharm el-Sheikh Implementation Plan](#) was the result of intense multilateral negotiations, and further aligned world leaders in taking on the climate crisis. But government action alone will not be enough to avoid the most catastrophic socioeconomic and environmental effects of climate change, some of which we are already experiencing.

Businesses must also lead, and not just because it is the right thing to do. It's because businesses can't afford not to act.

VIEW ONLINE

Over the next five years, climate change is expected to cost businesses up to \$120 billion through supply chain disruptions alone. According to the World Health Organization, [some 700 million people](#) are at risk of being displaced as a result of drought by 2030, disrupting local societies and economies.

The good news is that confronting climate change and creating a more sustainable and inclusive global economy presents a tremendous opportunity, including in the near term. [United >](#)

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We need climate action anchored in the needs of people and our communities, and the private sector has a key role to play



NOEL KOKOU TADEGNON/REUTERS

Nations’ analysis suggests transitioning to a more sustainable economy, including investments in renewable energy and sustainable infrastructure projects, could directly produce \$26 trillion in direct economic gains through 2030. The renewable energy sector alone is expected to create as many as 18 million net jobs by 2030, loss of fossil fuel jobs included.

The bad news is that, if we transition to clean energy without concurrently acting to address the transition’s negative impact on society and economy – including high prices for consumers, a loss of carbon-intensive jobs and investments in communities – the energy transition itself will be at risk. We need climate action anchored in the needs of people and our communities, and the private sector has a key role to play in contributing to this global shift.

All companies, especially those within energy-intensive industries, can transition in ways that advance not just environmental goals but social and economic goals, too. This is known as the “just transition”. There will be costs, but this inclusive approach to business would make company bottom lines stronger and more resilient as the climate changes. It would also create sustainable value for

investors and a broad range of stakeholders.

As chief executive of the Council for Inclusive Capitalism, I have spoken with hundreds of business leaders about their role in driving a just energy transition. We’re at the beginning of this journey, and many companies are still figuring out what a just transition entails and what actions they can take. This is why the Council for Inclusive Capitalism developed the Just Energy Transition Framework for Company Action. It is the first private-sector guide for use by companies, investors and governments, and defines 20 areas of business action to transition justly, organised by four core pillars:

1. Supporting universal access to energy and a net-zero emissions world;
2. Evolving the energy workforce to support a low- and zero-carbon energy future;
3. Building community resilience; and
4. Fostering collaboration and transparency throughout the process.

The framework draws from foundational literature from organisations such as the International Labor Organization, the U.N. Framework Convention on Climate Change, and the B Team. It is mapped to >

A man works on a solar-powered milling machine in Togo – supporting universal access to energy is one of the main pillars of the Just Energy Transition Framework.

COMMENT

Climate Action 100+ and World Benchmarking Alliance indicators, used to benchmark and assess company progress toward a just transition so investors can recognise and reward the companies doing the work, scaling market impact.

The framework is increasingly being used by industry and global investor networks as the benchmark for advancing environmental, social and economic goals with the transition.

Many Council for Inclusive Capitalism members are already showing what a just transition looks like in practice.

Take Japan's Suntory, a global leader in the beverage industry working to develop Japan's largest 16 megawatt (MW) green hydrogen power system at one of its facilities. The company plans to use the energy produced as fuel for its facilities, as well as in surrounding communities.

As part of the Climate Innovation for Adaptation and Resilience Alliance, PayPal is supporting the development of a fintech innovation ecosystem by 2030 to help vulnerable populations build resilience in the face of climate change.



REUTERS/BENOIT TESSIER



Scotland's SSE is helping former oil and gas workers find new jobs at the company's Beatrice wind farm

Scotland's SSE is retraining and reskilling employees for the low-carbon careers of the future through its STEM Returner programme, with former oil and gas workers finding new jobs at the company's Beatrice wind farm.

And Next Step Network is helping low-income families gain access to climate resilient, affordable, factory-built homes that help lower energy costs.

Naturally, navigating a just energy transition will require tradeoffs and bold steps, such as developing responsible strategies for converting, retiring or selling greenhouse gas-intensive assets. But plenty of business leaders are meeting this challenge with further innovation and cross-sector collaboration.

For example, ACEN, the listed energy company of Ayala Corporation in the Philippines, has committed to divesting all thermal plants and its remaining coal plants by 2025, working with the Asian

A worker at a wind farm installation in Meneslies, Picardie region, France.

Development Bank's Energy Transition Mechanism to leverage low-cost, long-term funding designed toward reinvestment in renewable energy.

Regardless of the short-term costs or tradeoffs, surveys show that markets and the public increasingly expect companies to deliver on climate action in ways that create broader value. From nature loss and extreme weather events to rising inequality and energy poverty, the need for a just transition is here and now. I invite companies across all sectors to make use of the Just Energy Transition Framework to determine what actions they can take.

Every company has a role to play and can share their just transition actions on the Council for Inclusive Capitalism platform for business peers to learn from. The business community has a once-in-a-generation opportunity with the energy transition. How we rise to the occasion will impact the quality of economic growth and social vibrancy for decades to come. ●



Meredith Sumpter is CEO of the Council for Inclusive Capitalism