ESG WATCH

Mike Scott reports on banks back-pedaling on net-zero commitments in New York

POLICY WATCH

Angeli Mehta looks at some bright spots in gathering gloom on deforestation

BRAND WATCH

Oliver Balch hears how blockchain can boost trust in voluntary carbon markets

SOCIETY WATCH

Mark Hillsdon on how Europe's energy crisis is galvanising community renewables

THE SUSTAINABLE BUSINESS

Review



October 2022

A week of getting real about the climate challenge in New York



limate Week New York has been a fixture in the sustainable business calendar since it was launched by The Climate Group in 2009. The annual summit takes place alongside the United Nations General Assembly, leading top international leaders from business, government and civil society to descend upon Manhattan in droves.

As Mike Scott reports in his ESG Watch this month, this year's event took place against the backdrop of Russia's mobilisation of troops for its war in Ukraine, a fractious U.N. General Assembly, and another wave of climate change-exacerbated natural disasters.

While on the one hand, the recent passage of the Inflation Reduction Act has lifted the mood and led many to believe the U.S. is back in the climate game, against that is a growing backlash against ESG.

September saw the Net-Zero Banking Alliance weaken its language on phasing out fossil fuels after a number of America's biggest banks, including JPMorgan Chase, Bank of America and Morgan Stanley, raised concerns about legal liabilities related to phasing out the commodities and antitrust rules.

In her Policy Watch column, Angeli Mehta reports on the mood at the General Assembly, where Secretary-General Antonio Guterres >

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Oliver Balch meets Jim Andrew, chief sustainability officer of PepsiCo

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Rachel Kyte of The Fletcher School cites five ways to break the deadlock on funding climate damage excoriated leaders for their failure to tackle multiple crises, including climate and biodiversity loss, and Colombia's new president, Gustavo Petro, called for finance to help that country stem its escalating deforestation in the Amazon.

One bright spot was a deal reached in September that will see Norway once again pay Indonesia for cutting carbon dioxide emissions by reducing deforestation and preserving carbon-rich peatlands. Indonesia had pulled out of a previous agreement with Norway last year, saying it hadn't been paid.

Oliver Balch stays with the deforestation theme in his Brand Watch column. With forestry projects accounting for 38% of all tradeable carbon credits, he reports on how blockchain technologies such as the Open Forest Protocol, Veritree and Veridium Labs are bringing muchneeded transparency to voluntary carbon markets.

He also reports on how the widespread global adoption of mobile phones reduces initial concerns that forest communities would be unable to engage with the digital technology underlying blockchain.

In Society Watch, Mark Hillsdon looks at an alternative to fossil fuels that is gaining traction at a grassroots level in Europe as fuel prices soar: community energy. It's a movement that is being supported financially by the outdoor clothing brand Patagonia, whose founder, Yvon



Chouinard, recently announced would be converted into a charitable trust dedicated to fighting climate change.

Oliver Balch's interview subject this month is Jim Andrew, chief sustainability officer of PepsiCo, who talks about Pepsi's biggest challenge yet: winning over millions of farmers to regenerative practices.

And we have guest commentary from Rachel Kyte, dean of The Fletcher School at Tufts University, who explains five ways the world can break the deadlock on funding climate damage.

That's it for now. We'll be back in November ahead of the COP27 climate talks.

Terry Slavin

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ESG WATCH

Banks' net-zero pledges in the spotlight at Climate Week New York

NGOs raise fears of backtracking as coal phase-out language softened



his year's Climate Week
NYC took place against
the backdrop of Russia's
mobilisation for its war in
Ukraine, a fractious United Nations
General Assembly, and another
wave of climate change-exacerbated
natural disasters, most recently the
devastating floods in Pakistan and
Nigeria, as well as record September
heatwaves in the western U.S.

The annual meeting highlighted that the growing urgency of climate action continues to come up against



Mike Scott ESG correspondent

the messy business of politics, economics and human nature, exposing a widening gap between what is needed and what business says is possible.

The recent passage of the Inflation Reduction Act (IRA) in the U.S. "clearly dialled up the energy level" at the summit, said Antoine Halff,

co-founder and chief analyst at geoanalytics group Kayrros, and adjunct senior research scholar at the Center on Global Energy Policy, Columbia University. "There was something of a mood swing and a shift in attitude from 'just talking about' climate action to 'just doing it'."

Ahead of Climate Week a global coalition of NGOs, including ShareAction, BankTrack, Reclaim Finance and the Sierra Club, called on Net-Zero Banking Alliance (NZBA) members to set more >

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ESG WATCH

stringent rules on financing fossil fuel projects, in line with tougher criteria issued by the U.N.'s Race to Zero campaign in June.

"In order for financial institutions' net-zero commitments to be credible, they must explicitly commit to phase out financing for new fossil fuels. It's time for the NZBA to make clear that banks who continue to finance massive fossil fuel expansion, while making grand pronouncements about climate goals, are not welcome in the alliance," said Adele Shraiman, campaign representative in the Sierra Club's Fossil-Free Finance campaign.

Instead, the NZBA, part of the Glasgow Financial Alliance on Net Zero (GFANZ) set up by former Bank of England governor Mark Carney, weakened its language on phasing out coal and other fossil fuels after a number of the world's biggest banks, including JPMorgan Chase, Bank of America and Morgan Stanley, raised concerns about legal liabilities related to phasing out the commodities and antitrust rules.

U.N. climate champion Nigel Topping sought to play down fears that commitments are being weakened, saying members of Race to Zero have to sign up to sciencebased targets, which preclude new coal developments.

But John Willis, head of research at Planet Tracker, said: "There is a concern about these big alliances. They can generate a form of 'greencrowding', where organisations hide in the crowd of members and move at the speed of the slowest. I hope they're not backtracking."

Rather than having an explicit ban on funding new coal projects, the Race to Zero campaign now says that banks should phase out the "development, financing and facilitation of new unabated fossil-



The Glasgow Financial Alliance on Net Zero was set up by former Bank of England governor Mark Carney.

fuel assets, including coal, in line with appropriate global, science-based scenarios".

It also emerged that two pension funds, Australia's Cbus and Bundespensionskasse of Austria, have left the GFANZ organisations, the Net-Zero Asset Owners Alliance and the Paris Aligned Asset Owners group, respectively, in recent months, saying they lacked the resources to track the data and file the reports needed to comply with membership.

It is no surprise, then, that data was one of the key themes of the week, in fields ranging from the measurements for climate action to the growth of carbon offsets to certifying responsibly sourced products and commodities. "This

is probably the beginning of a trend that will continue to grow as we move to the hard edge of the practical implementation of policies and the regulation of those policies," Halff of Kayrros added.

The Inflation Reduction
Act's requirement for the U.S.
Environmental Protection Agency to
measure methane emissions is one
illustration of why more, and better,
data is important. "Without reliable,
verifiable data that can be trusted
by all, it will be difficult to dispel
the suspicion of greenwashing and
effectively move forward together,"
he said.

The recent methane leak from a Pemex facility in Mexico, and the government's reaction to it, shows how data can both shed >

(ACPER PEMPEL/REUTERS

ESG WATCH



An open source Global Registry of Fossil Fuels was launched in New York.

light on previously hidden emissions and put pressure on asset owners to tackle them.

Similarly, the new open source Global Registry of Fossil Fuels, which was launched in New York by the Carbon Tracker Initiative and Global Energy Monitor, will increase transparency, help to identify stranded assets and tackle greenwashing. The register includes data on oil and gas reserves, production and emissions for more than 50,000 fields around the world.

The database will help investors to understand which assets could be at risk of being uneconomic, or "stranded", in the low-energy transition, said Alex Rafalowicz, director of the Fossil Fuel Non-Proliferation Treaty initiative. "The

registry is the transparency tool that has been missing in our toolkit for holding governments and corporations accountable on fossil fuel production."

According to the Capgemini Research Institute, although 85% of organisations recognise the business value of emissions measurement and analytics, half of the those it surveyed said that they were not equipped to capture or use the data they generate to drive decision-making.

This is especially the case for Scope 3 emissions, in companies' supply chains and in the use of their products. "The coverage of Scope 3 emissions, accounting for a significant 65-95% of a company's carbon footprint, is especially low," said Zhiwei Jiang, chief executive

of Capgemini's insights and data global business. "Additionally, only 43% of organisations have set short-term targets to support their net-zero ambitions."

But in an example of how those Scope 3 emissions are starting to be addressed, the Mission Possible Partnership (MPP) used the event to announce new sector transition plans for zero-emissions aluminium, ammonia and steel, some of the hardest-to-abate parts of the economy. "These transition plans are operationally relevant and industry-backed, not wishful thinking or pie in the sky," said Matt Rogers, chief executive of MPP. "We know how to reduce emissions. The imperative is to act now, in this decade."





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POLICY WATCH



Norway deal with Indonesia a bright spot amid deepening deforestation crisis

More money on the table for countries that show results in curbing tree loss could have a catalysing effect

ood news was in short supply at September's United Nations General Assembly, as its Secretary-General Antonio Guterres excoriated leaders for a failure to tackle multiple crises, including climate and biodiversity loss, thanks to a swathe of geopolitical tensions. Colombia's newly elected president



Angeli MehtaPolicy correspondent

Gustavo Petro was no less critical: endless consumption and the war on drugs are destroying the Amazon rainforest, he said. He called for finance to protect the Amazon and for debt forgiveness to allow his country to use its own resources to tackle forest loss. The Colombian government has promised to go after "land grabbers" who turn forest into cattle ranches, after illegal logging made 2021 one of the worst years for deforestation.

One bright spot on this darkening horizon is a deal reached in >

POLICY WATCH



United Nations Secretary-General Antonio Guterres speaking at the U.N. General Assembly in New York in September.

September that will see Norway pay Indonesia for cutting carbon dioxide emissions by reducing deforestation and preserving carbon-rich peatlands. Indonesia, home to the planet's third-largest expanse of tropical rainforest, with one of the richest levels of biodiversity, has cut deforestation rates every year for the past six.

Norway will now pay for a portion of the resulting verified emissions reductions for the three years to 2020 under a previously agreed REDD+ mechanism. Last year Indonesia pulled out of that agreement, which specified a range of actions the country should take to cut deforestation, saying it hadn't been paid.

The new partnership focuses on outcomes rather than mechanisms and will support Indonesia's aim to create a carbon sink in its land and forest sector by 2030, absorbing 140 million tonnes more carbon dioxide than it emits.

Payments for the years from 2020 will be determined by a new, mutually agreed measurement, reporting and verification protocol, and all the money will go into Indonesia's Environment Fund. A new methodology for reporting and verification is expected to lead to financing from other public or private institutions, which will help pay for the reduction in emissions.

"It was hard to imagine, back in 2016, that the scale of reductions would have been achieved. It's actually quite remarkable," says Daniel Zarin, executive director of forests for international conservation NGO, the Wildlife Conservation Society. The Indonesian government reported a 90% reduction in deforestation between 2015 and 2020, although there is debate about definitions, with Global Forest Watch assessing a far smaller reduction in the loss of primary forest.

But the agreement isn't just

important for its own sake, suggests Zarin. "They're getting recognition and finance for delivering results, but it's also built trust and confidence into this space." Previously, he says, tropical forest countries have complained of overly bureaucratic mechanisms that don't reward them adequately for their efforts, whilst donor countries refuse to put up more cash until they see results.

"We seem to be breaking through that chicken and egg problem." More money on the table to support payment for the delivery of results "should have a catalysing effect" on efforts to end deforestation.

Investors and banks were urged to step up their own contribution to those efforts by eliminating commodity-driven deforestation from their portfolios in a report from the U.N. Climate Change High-Level Champions.

It says nature and land use is a "major blind spot" for investors, >

POLICY WATCH



A blue jeans poison-dart frog, native to jungles in Costa Rica. Germany has pledged to more than double its financial support for international biodiversity funds.

despite forest, land and agriculture industries contributing 22% of global emissions. Without action the report predicts that some of the world's most valuable food and agriculture companies could lose up to 26% of their value by 2030.

On the sidelines of the U.N. assembly, Germany pledged to more than double its financial support for international biodiversity funds to 1.5 billion euros (\$1.4 billion) a year; while the governments of Ecuador, Gabon, the Maldives and UK set out a political vision to scale up funding. No figures are included, but the 10-point plan commits the (so far 16) signatories to work together and with others to close the biodiversity funding gap.

Guillermo Lasso, president of Ecuador, said the shared vision "defines what we expect from governments, financial institutions, the private sector, philanthropists and civil society, to face the challenge of increasing and mobilising resources for biodiversity."

It calls on developed countries to increase international finance, and the multilateral and bilateral funding agencies – particularly the Global Environment Facility (GEF) – to "develop innovative and inclusive solutions to accelerate, simplify and streamline access to financial resources for developing countries as soon as possible".

These renewed commitments

send clear signals to other world leaders about priorities, but in the words of Marco Lambertini, director general of WWF International "the time is over for just bold statements. These pledges must be fulfilled (and) change must be delivered".

Such new and increased resources are urgently needed to underpin the goals of reversing biodiversity loss and protecting 30% of land and oceans by 2030, which many countries are pledging to support at the long-delayed biodiversity summit (COP15) due to take place in December in Canada. But whether holdouts, including Brazil and Argentina, will agree remains to be seen.

BRAND WATCH

Can blockchain help indigenous people turn the tide on deforestation?

Platforms such as the Open Forest Protocol are designed to be accessible to forest communities and build trust in voluntary carbon markets





Oliver Balch
Sustainable business
correspondent

he failure of efforts to curb global deforestation continues to frustrate forest conservationists, brands and consumers alike. A recent study from the Coordinating Body of Indigenous Organizations of the Amazon Basin (COICA) and Stand. earth finds the Amazon rainforest

at a tipping point, with one-third of the Amazon rainforest (34%) in the process of transforming into a savannah, the latest dark chapter in an increasingly desperate story.

One partial good news story is the rapid growth in voluntary carbon markets amid corporate net-zero commitments. Forestry projects account for nearly two-fifths (38%) of all tradable carbon credits, which are issued for reforestation and other forest-linked projects that generate emissions savings. Collectively, such credits could potentially save around

41.5 million tonnes of carbon dioxide equivalent, according to a recent study by researchers at Cambridge University.

The less good side of the carbon market is the lack of confidence in their real-world impact. Problems of double-counting, impermanence (forest projects lost to wild fires) and leakage (when actions to reduce emissions in one area create emissions elsewhere) have long plagued the market.

An array of tech-based solutions are now cropping up with what, if >

BRAND WATCH



Wildfires affecting forestry schemes linked to carbon credits can dent confidence in the market.

the marketing spiel is to be believed, could provide a corrective. All have one element in common: a cast-iron belief in the potential of blockchain technology.

Already a growing favourite with fintech firms in the financial sector, blockchain essentially works as a digitised accounting ledger. One of the main appeals to the forest conservation sector, and the brands that support them, is that highly specific data – such as the number and location of newly planted trees or project-related emissions savings – can be registered, stored and shared quickly, transparently and with almost zero chance of adulteration.

"With blockchain we can create a system whereby the measurement data is collected by the locals on the ground, reported on-chain and permanently kept on-chain, and then validated on-chain, with the decision also being permanently

recorded," says Michael Kelly, cofounder of the Open Forest Protocol, an open source blockchain-based platform designed to measure, verify and fund forest projects worldwide.

So not only do buyers have greater confidence that credits they purchase directly link to impacts on the ground, but the data embedded in those credits offers a compelling story to communicate to consumers and other interested parties.

The same logic underpins the business proposition of a suite of tech startups touting blockchain solutions for the voluntary carbon market.

A notable example is Veritree, which, like the Open Forest Protocol, provides a blockchain-based verification tool that makes available real-time data, collected in situ.

Many of the emerging solution providers, however, go beyond the monitoring stage and instead create fungible (interchangeable) or non-fungible (unique) tokens that have project impact data embedded within them.

Tokens generated through these forest-linked blockchain pioneers (which include the likes of Universal Carbon, Carbon Credit Token, ForestCoin) can then be sold to raise revenues for the conservation efforts to which they are linked.

Another early innovator looking to join the ranks of the above is Veridium Labs, a tech startup that has been working with IBM and others to develop an updatable token that can be integrated into corporate supply chains.

Co-founder Todd Lemons compares a yet-to-be-launched tradable token, christened Verde, to a rechargeable battery that can be continually topped up with real-time impact information. The innovation is designed to get around the problem of credits going out of date after their initial issuance.

In time, he envisions corporations >

EKSIY MARK/SHUTTERS

BRAND WATCH

transacting in Verde with their raw material suppliers and thus retaining geolocated impact data right through to the final manufacturing process.

"We realised that it gave us an opportunity (to) literally match very specific, highly auditable environmental impact credits with specific commodities and the underlying impacts that they had," he says.

Imagine a chocolate bar manufacturer, he adds. At best, it can assure consumers that it has purchased carbon credits to offset the carbon impacts of its products. However, the specific project that these credits relate to, plus the current state of that project, remain unknown.

With a procurement chain grounded in impact-informed tokens, the communications proposition is also completely different, he maintains.

"A company could say, 'Yes, this candy bar did have impacts, which were offset, and you can audit those offsets and actually see where the money went – it went here to orangutan conservation and down here to gorilla conservation – then you begin to incorporate the consumer into the solution."

The technology sounds revolutionary, but the road to mass uptake is pitted with challenges.

Most obvious are blockchain's high energy requirements. While crypto providers are increasingly shifting to clean power sources, the energy needs of a mass uptake of blockchain solutions would likely add to the climate problems they were set up to address.

Other concerns centre on the centralisation of blockchain credit schemes. With many initiatives created by developed-world firms for developed-world purchasers,



Blockchain is driving demand for data centres. Its high energy requirement is one of its most obvious challenges.

the involvement of forest-based communities – most of which are based in emerging or underdeveloped markets – is held open to question.

In the Cambridge University study, researchers observe that local communities without land rights are particularly vulnerable to being sidelined by blockchain solutions, even under solutions that adopt a more decentralised model.

"Such a model ... could also reinforce existing power dynamics and risk locking those without power out of these systems, thereby exacerbating those challenges that created pressures on these forests in the first place," the study concludes.

More positively, the widespread global adoption of mobile phones reduces initial concerns that forest communities would be unable to engage with the digital technology underlying blockchain.

The researchers cite the example of villagers in the Democratic

Republic of Congo who rapidly adapted to GPS-enabled tablets in order to map their customary lands.

By the same token, the development of new, user-friendly protocols such as NEAR make it easier for non-specialist users to develop their own blockchain applications and derive direct financial benefits, says Kelly of the Open Forest Protocol.

Later this year, the Open
Forest Protocol plans to use the
NEAR Protocol to enable forest
communities to start generating
their own non-fungible tokens. The
tokens use project data that are
compiled and verified through the
protocol's front-end tools.

"We put people before tech," says Kelly, clarifying that the data verification is carried out manually and the financial benefits of token sales will go directly to project owners: "The blockchain is just sitting quietly in the background doing its boring old job as a record keeper."





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SOCIETY WATCH

Energy crisis puts wind in the sails of community renewables push

Patagonia has lent its backing to a do-it-yourself form of energy generation that is gaining ground in Europe

VIEW ONLINE



Brixton Energy produces solar power from the roofs of a local housing estate in London.



Mark Hillsdon Civil society correspondent

s the cost-of-living crisis bites, and the price of fuel continues to rise, politicians and policymakers have been casting round for solutions, from ill-conceived notions of reinvigorating fossil-fuel extraction, to more

enlightened arguments around insulation and energy efficiency.

But another idea is also gaining traction in Europe. Community energy, with its emphasis on green power, was pioneered in Denmark during the 1970s and sees energy produced and distributed at a local level. Last year, a study commissioned by the European Climate Foundation reported that 61% of those questioned said they would be likely to join an energy

cooperative if one was set up in their local area.

Community energy involves people coming together to develop their own renewable energy, usually through wind or solar. Local people and businesses can then use this local power instead of paying market prices, with any excess sold back to the national grid, and profits reinvested back into the local community.

It is an issue that outdoor clothing >

SOCIETY WATCH

brand Patagonia is backing as part of its support for the clean energy transition. In September, its founder, Yvon Chouinard, announced that Patagonia would convert into a charitable trust, with all profits not reinvested in running the business ploughed into fighting climate change.

In 2021, the company released We The Power, a film which looks at how local cooperatives, from deep in Germany's Black Forest to the rooftops of London, are taking power back from big energy companies and paving the way for a renewable energy revolution.

"In the middle of the energy crisis, we are sitting on a solution that could make a real impact," says Beth Thoren, Patagonia's director of environmental action.

Community energy projects can help fight fuel poverty, she says, as well as creating local jobs, greater local cohesion and a sense of empowerment. They can encourage people back to live in rural areas, too, and turn what was once a cost for businesses into an income stream, with energy sold back to the grid. They also mean less dependence on foreign fuel.

Dirk Vansintjan, president of REScoop, an organisation that promotes community across Europe, agrees. "Local communities producing renewable energy are able to shield themselves better from the inputs of high wholesale electricity and gas prices and volatility," he says.

REScoop represents a network of 1,900 European energy cooperatives, with more than 1.25 million citizens active in the energy transition. But it's an uneven geographical spread, he says, with many more groups in northern Europe than the rest of the continent. This is despite the fact that the EU's Clean Energy Package placed a legal obligation on all



Octopus Energy is offering discounted electricity to customers who live near its turbines.

member states to support energy communities, with a deadline of June 2021, he explains.

Community energy can also challenge people's negative view about renewables, continues Thoren. Once people start to benefit personally from green energy "whole attitudes change, and that allows the rapid scaling of (renewable) energy".

Jon Hallé, co-founder of the Big Solar Co-op in the UK, highlights its potential to make energy systems more resilient. "In theory, distributed energy helps to balance the grid," he says. "If we're going to have a much more complicated energy supply system, which decarbonisation involves, then encouraging people to put in energy in smaller places, further down the grid... is generally perceived as a good thing for the system as a whole."

Big Solar is looking to unlock

the potential of rooftop solar on community and commercial buildings in UK cities, centralising processes and resources such as feasibility studies, designs and legal studies to make it as easy as possible for community groups and time-pressed businesses to make the most of their roof space.

"There are hundreds of thousands of suitable buildings which still don't have solar PV," he explains, which Big Solar has calculated are capable of contributing at least 5 gigawatts (GW) of energy, and at peak times match the combined output of the UK's nuclear power stations.

Leisure centres, care homes and hospitals are all big energy users that could benefit from community schemes, while they also offer opportunities for people who don't own their own homes, or can't >

SOCIETY WATCH



Big Solar aims to unlock the potential of rooftop solar on community and commercial buildings in the UK.

afford their own rooftop panels, to get involved.

But not all big energy companies see things the same way, says Thoren, with some unwilling to connect small producers to the grid, while at the same time lobbying government to change the regulations and make the process much more bureaucratic.

While energy companies argue it is cheaper to build renewables at scale, that doesn't recognise the full costs of the extra infrastructure needed to supply energy to remote locations, costs that ultimately end up on consumers' bills, she says.

"What you are seeing is blockages ... they sure haven't made it easy for us," she says.

In the UK, says Hallé, energy and distribution companies have been largely supportive of community energy, keen to avoid any accusations of stalling the decarbonisation process.

Octopus Energy Generation, for instance, has launched Fan

Club, an alternative to traditional community energy projects. It has set out to reward people who live close to generation projects so that they can tap into electricity that is 50% cheaper when their local wind turbines are spinning.

In an email, Octopus chief executive Zoisa North-Bond said: "We think consumers should also be able to benefit from local green energy without having to invest themselves."

Although just three wind turbines are currently up and running as part of the project, serving 800 customers, Octopus has received more than 13,000 enquiries about the initiative, with a target of 1,000 local wind turbines by 2030. The company is now building a database so it can match-make where communities have registered their interest with where landowners can provide sites for local wind turbines, before overlaying this with data on grid capacity, wind speeds and environmental considerations.

"In our future renewable energy system there will need to be lots more small-scale decentralised local green generation across the country," says North-Bond. "Green energy will be integrated into communities, with green electrons travelling shorter distances to the people using it."

Vansintjan of REScoop says:
"Policymakers need to recognise
local ownership of renewable energy
as an urgent matter of securing
energy supply." He believes the
success of a community energy
revolution in Europe hinges on
three important factors: fewer
barriers to developing projects;
greater knowledge-sharing with
those countries in Europe where
community energy hasn't yet taken
off; and greater public awareness of
the benefits projects can bring.

Patagonia's Thoren remains upbeat. "The vision for decentralised energy is extraordinary," she says. "It starts local and builds to this really beautiful solution."





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INTERVIEW



USAID and PepsiCo are partnering to make the business case for women's empowerment in the PepsiCo potato supply chain in West Bengal, India.

PepsiCo's biggest challenge: winning over millions of farmers to regenerative practices

Oliver Balch meets Jim Andrew, the man charged with delivering the consumer goods giant's ambitious climate pledges

epsiCo is known for many things: soda pop, Super Bowl ads, its decades-long rivalry with The Coca-Cola Company, to name but a few. Now the \$235 billion-valued company has a challenge of a different order of magnitude on its hands.

In an eye-raising move, the U.S. food and beverage giant last year pledged to "spread regenerative farming" across 7 million acres by

the end of the decade, equal to its entire agricultural footprint, and to sustainably source 100% of its key ingredients and crops by the same date.

The PepsiCo Positive (or "pep+") strategy is central to Pepsi's climate strategy. One of the first companies to set a science-based target in 2016, Pepsi joined the United Nations Business Ambition for 1.5C campaign in 2021, adopting a 2030

deadline to reduce its absolute Scope 1 and 2 greenhouse gas (GHG) emissions by 75% and scope 3 GHG emissions by 40%.

Tasked with delivering on this commitment in eight short years is Jim Andrew, former head of strategy at the company and, since September 2020, its chief sustainability officer.

"This is not a CSR (corporate social responsibility) programme," >

INTERVIEW



Jim Andrew is chief sustainability officer at PepsiCo.

states Andrew, a former management consultant (he was with Boston Consulting group for 24 years). "It's a fundamental, centre-of-the-plate business transformation of what we're doing."

That makes sense. PepsiCo's sodas may be household names, but it derives over half (55%) of its revenues from its extensive portfolio of food brands (think: Frito-Lay, Walkers, Doritos, Cheetos and Quaker Oats, among others), sourcing 25 ingredients from 60 countries.

A regenerative approach to farming promises to bake greater resilience into PepsiCo's food business, but only if delivered at massive scale. Whether that is possible or not is far from certain. In the first 12 months of the new strategy, it inched a mere 345,000 acres towards its goal.

So, is Andrew worried that the company remains 95% shy of its target? It would seem not. Progress was always going to be slow initially, he says: "The agricultural community is really just starting to scratch the surface of this (but) it is an area that's going to very clearly ramp up over time."

To accelerate this ramping-up process, the company has established



A cover crop of tillage radishes.

a network of 72 "demonstration farms" around the world. The basic concept is simple: local farmers visit to see first-hand how regenerative farming works, get inspired, and duly go home and do the same.

Of course, in practice, switching away from intensive, fossil-fuel-dependent farming is more complex. That is one of the reasons why PepsiCo also provides direct farmer training through a network of alliances with expert partners.

By way of example, Andrew cites one such programme for female farmers in India. Delivered in partnership with U.S. development agency USAID, the course offers agroeconomic skills that are "really micro, really practical" but promise a "big impact".

The approach is working, he insists. Farmers participating in PepsiCo's various projects in India saw an average yield improvement of almost 7%, for instance, coupled with an increase in farmer income of \$55 per acre.

This uptick in incomes is crucial. Farmers, as Andrew readily concedes, are "risk averse". As a profession schooled over generations, change comes hard. Change with no economic logic is harder still.

"Farmers are business people, >

INTERVIEW

right? This is how they earn a living. And if it doesn't work for them, there's not going to be adoption, they're not going to change."

PepsiCo is also working to sweeten the pill, therefore, helping farmers with loans and grants to cover some of the upfront costs involved in transitioning to a regenerative approach.

Does such help go far enough? After all, PepsiCo cannot inoculate its supply chain totally against climate and biodiversity shocks. As long as the global farming industry is pumping out emissions and dowsing its crops in chemicals, it will remain exposed.

PepsiCo is not blind to this fact, Andrew insists. Hence, its enthusiasm to work through partnerships with other actors in the global food chain wherever possible, ideally at a landscape level.

He points to PepsiCo's decision to join the efforts of Anglo-Dutch consumer goods company Unilever to de-risk the shift to regenerative farming by farmers in Iowa. The pair have so far been able to support over 600 farmers in the planting of cover crops on around 250,000 acres across the state.

Such cooperation is "unusual", according to the business-led sustainable agriculture advocate, Field to Market. "While the companies may compete for retail shelf space in certain product categories, their relationships have transformed into pre-competitive collaboration."

Similarly, PepsiCo is looking to support the acceleration of climate-smart startups, illustrated by its close partnerships with tech innovators such as UK-based waste-to-fertiliser specialist CCm and Israel-headquartered irrigation innovator N-Drip.

If PepsiCo's commitments on regenerative agriculture are going to



PepsiCo is planning to trial low-carbon hydrogen gas at its Walkers crisps plant in Skelmersdale, Lancashire.

fly, however, it will take more than supply-side initiatives. Consumers have to want what it is proposing to sell, especially if, down the track, it might come with a price premium attached.

Andrew agrees, repeating his point about the pep+ programme being "a business strategy that has sustainability at its centre", and not the other way around.

That said, he remains tight-lipped about how PepsiCo might use its marketing budget (which, at an estimated \$3.5 billion, is one of the largest in the world) to support its regenerative switch.

Frito-Lay's introduction of a QR code on its Lay's crisps packaging in a few pilot markets offers an indication of the potential direction of travel. Consumers can access the code for details of where and how the product's ingredients are made, Andrew explains.

The move marks a response to consumers' growing sense of feeling "disconnected" from their food,

Andrew adds: "This is an attempt to really link it very directly, while at the same time letting consumers know how their choices are making an impact."

However, he is cautious about following the lead of some other sustainable agriculture initiatives and promote an on-pack labelling system specifically for regenerative farming.

Andrew's view: "Certifications are a step in the right direction ... but they often stop short of really ensuring that there's been a delivery of measurable outcomes."

Certifying bodies may well debate that point, but Andrew's focus on outcomes can brook no argument. A global shift to regenerative farming marks a gargantuan task. If PepsiCo really does manage to reach its goal of spreading regenerative farming practices to 7 million farmers in its supply chain, another stellar association, besides the Super Bowl, will be justifiably added to its name.





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Five ways the world can break the deadlock on funding climate damage

Rachel Kyte looks at priorities for urgent action ahead of COP27 in November



A man with milk-canisters walks along a flooded street in Hyderabad, Pakistan, in August.

he aerial photos of
Pakistan in August were
devastating in a year of
the unprecedented, from
heatwaves across Europe, floods in
Australia and South Africa, extreme
heat and drought across the United
States, China, and Europe, and fires
everywhere. A thousand bridges
are gone, 90% of food crops are
submerged, and the cotton cash
crop is lost. Estimates are that flood
damage will be around \$10 billion,
or at least 3% of the country's GDP.
More than 1,000 people have died,



Rachel Kyte Dean of The Fletcher School, Tufts University

and livestock too; 33 million people are displaced. The numbers are still rising.

This pummeling of Pakistan is the effect of carbon pollution. Sherry Rehman, Pakistan's climate minister, is clear: this is not a natural disaster but a disaster of the "Anthropocene – it is man-made".

Just under a year ago, at the end

of the most recent climate talks, COP26, in Glasgow, developing country delegates packed their bags and set off home "deferred, not defeated" in their quest to create a financial mechanism for loss and damage. Those countries who suffer the impacts of climate change, yet did not contribute to the climate crisis historically, have long sought support for the loss and damage they experience.

After years of slow progress, developing countries went to Glasgow to get an agreement on financing >

COMMENT



Tuvalu's Finance Minister Seve Paeniu shows a picture of his grandchildren as he attends COP26 in Glasgow, Scotland.

for loss and damage. What they got instead was a two-year dialogue. Their demands were kicked again into the long grass by developed countries, with some other large powers, for whom this finance won't apply, standing quietly by.

So how is that dialogue going, as the world experiences an even more punishing year of extreme weather? The answer: falteringly.

Long-held fears of admission of liability, and an aversion to a concept of reparations, have not diminished with growing climate impacts. And the world got more complicated: Russia's war on Ukraine has taken up bandwidth, diverted public aid and climate finance, and led to a European scramble for energy supply. Recession looms for some, and the line up of countries outside the

IMF as the food, fuel, and financial crisis takes its toll, is growing. The enabling environment for global climate cooperation has turned hostile.

So how can this square be circled? How can Pakistan's plight, with just 1% of global emissions yet a third of its country underwater, its glaciers melting because of our carbon pollution profligacy, push us forward to break our deadlock on loss and damage?

With the next round of climate talks just a month away, here are five points for urgent action.

First, it's about liability – but it's not.

Concerned by implications of liability and reparations, negotiations on loss and damage and its financing have become bogged down. Nevertheless,

countries are taking liability into their own hands. Eyes are on Vanuatu as it seeks an opinion from the International Court of Justice on the right to be protected from the impacts of climate change. That right would apply to current and future generations.

There is also a wave of strategic litigation as plaintiffs seek to force governments to follow climate action plans on a pathway to 1.5C of warming – the target advised by international scientific consensus.

While some developed countries argue that humanitarian responses and adaption finance already cover loss and damage, neither is sufficient to cope with what we already see, let alone the stacking of crises as climate impacts grip every region.

Second, it is all about solidarity.

If the concept of loss and damage >

COMMENT



U.N. Secretary-General Antonio Guterres on a visit to Pakistan in August.

is anathema in Washington D.C., Bern or Paris, we need, in the short term, to move to some solidaritybased financing mechanism. We broke it, we fix it.

Building agreement on this is urgent work between now and COP27 in Sharm el-Sheikh in November. We should be able to agree on a principle of moral responsibility to act urgently in solidarity with countries that have not contributed to emissions to date.

"Solidarity" funding can flow quickly by using many different mechanisms, from government allocations above and beyond commitments for mitigation and adaptation – admittedly under pressure – and international disaster funds.

But we can also, and thirdly, get creative.

Let's introduce solidarity levies across a range of luxury, or high emissions intensity, activities. A dollar on business class travel and above. Taxes and levies on carbon pollution, debt for climate swaps, and fees on voluntary carbon market transactions for the buyers. And finally, a solidarity fund levy on windfall profits for the fossil fuel firms.

Sherry Rehman has noted that big polluters who have net profits "larger than the GDP of many countries need to take responsibility". The U.N. Secretary-General has called the windfall profits of energy companies "grotesque". In addition to paying their fair share of taxes at home, a portion of their international profits could fill the solidarity fund for loss and damage funds.

And fourthly, there's room for rich guys, too. We need philanthropy off the bench and on the pitch. The Children's Investment Fund Foundation, Open Society Foundations and the William and Flora Hewlett Foundation stepped up in Glasgow, seed-funding a loss and damage fund. Only 2% of global giving is going to climate.

Very little is going to climate justice, and almost none of it is funding for international loss and damage. Laurence Tubiana of the European Climate Foundation and Christie Ulman of the Sequoia Climate Fund have even given philanthropists a quide on what and how to do this.

We need an "all of the above" approach, and there's no time to waste. The U.N. has launched an appeal for \$160 million for Pakistan, less than 2% of the estimated costs, with the flood water not yet receding. The Secretary-General Antonio Guterres has been blunt. He noted that next time this could be your country. This time we need solidarity for Pakistan. Tomorrow it could be you. This is ours to do. Rachel Kyte is dean of The Fletcher School at Tufts University. She is a member of the U.N. Secretary-General's high-level advisory group on climate action and co-chair of the **Voluntary Carbon Markets Integrity** Initiative (VCMI).





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