

FT Climate **Capital** Council

**ENERGY EFFICIENCY:
HOW TO REACH NET ZERO
AT A TIME OF CRISIS**

The FT Climate Capital Council is supported by



Moderator

Emiliya Mychasuk, Climate Editor, Financial Times

Panel

Laura Cozzi, Chief Energy Modeller, International Energy Agency

Suzanne DiBianca, Chief Impact Officer, Salesforce

In the latest meeting of the FT Climate Capital Council, Emiliya Mychasuk, climate editor at the Financial Times, moderated a discussion on how companies can reach net zero at a time of crisis. Laura Cozzi, chief energy modeller at the International Energy Agency, and Suzanne DiBianca, chief impact officer of Salesforce, were on the panel.

Here are the highlights of the event.

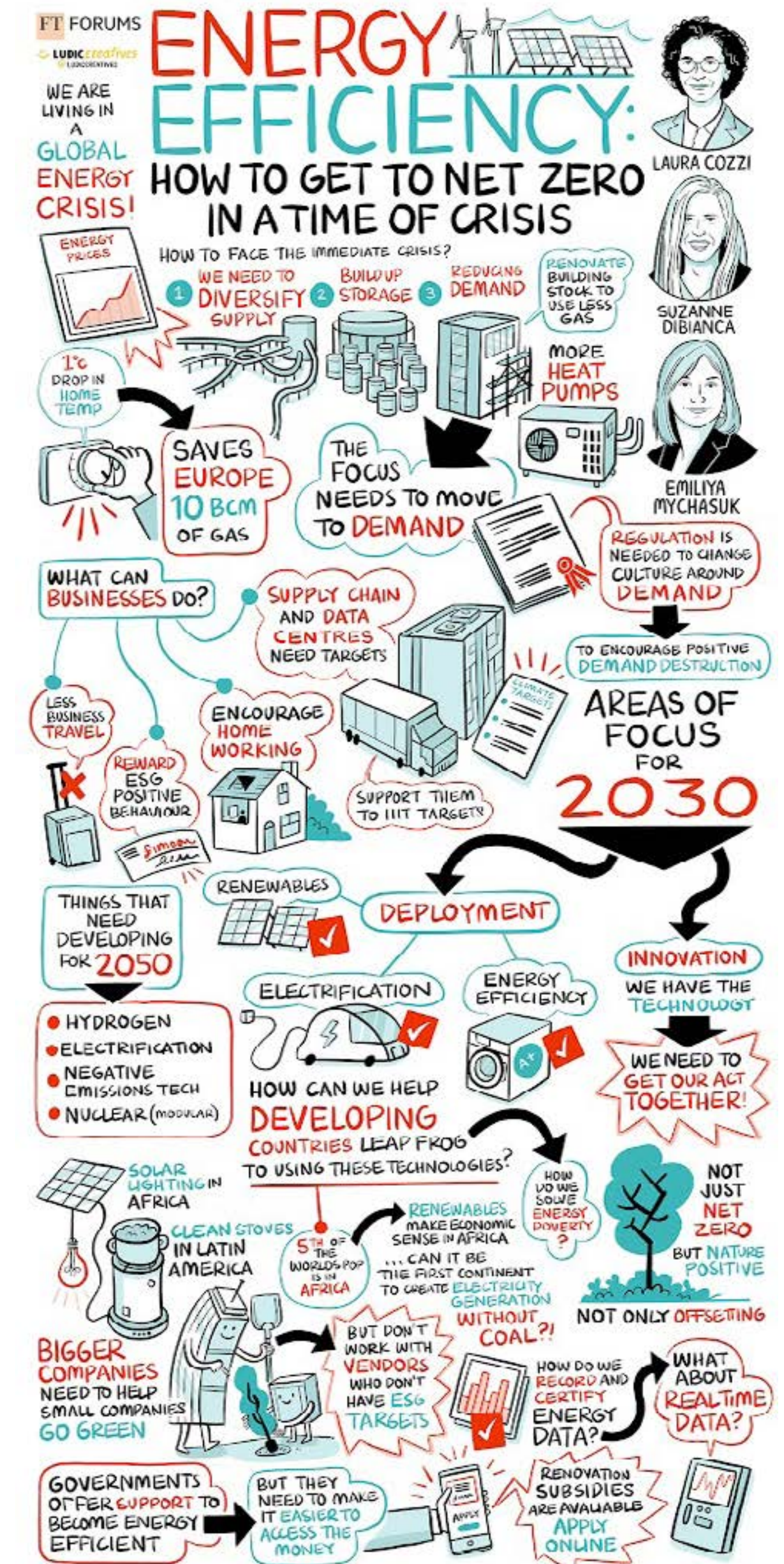
QUIZ: WHICH MEASURE WOULD DO MOST TO STOP CLIMATE CHANGE?

Mychasuk invited the audience to answer this question: which measure will save the most oil? The possible answers were: working from home three days a week; car-free Sundays or not flying when there is an alternative. Nearly half (49 per cent) voted for not flying, 13 per cent for car-free Sundays and 38 per cent for working from home, which was the correct answer.

THE FIRST GLOBAL ENERGY CRISIS

Cozzi pointed to comments by Fatih Birol, executive director of the IEA, who said that the world is experiencing the first global energy crisis. The reasons for this view are threefold.

First, in the 1970s, there were high oil prices; now, there are high oil, gas, coal and electricity prices, which impinges on “inflation, affordability, and energy security in general”. Second, post-Covid carbon emissions have increased to such a degree “that we have reached another peak”. Third, with the war in Ukraine continuing, energy shortages are likely to affect Europe into winter.



THE IEA BLUEPRINT FOR CHANGE: A 10-POINT PLANS FOR OIL AND GAS

The IEA has prepared two 10-point plans to reduce oil and gas consumption, built on the pillars of diversifying supply, increasing storage and focusing on demand.

Cozzi said policymakers had not paid enough attention to demand and she recommended three measures to bring about a reduction: the renovation of building stock, the introduction of heat pumps and the installation of digital thermostat controllers.

On building stock, Cozzi said buildings in Europe accounted for a third of the gas used on the continent. Renovation will make them more climate-friendly but government insulation programmes needed to cover 3 per cent of buildings a year rather than the current 1 per cent.

“You can have builders come into your house very quickly and have the building renovated,” Cozzi said. “We cannot wait until 2030. This has to start now. We cannot continue to say it is longer term.”

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“GOOD DEMAND DESTRUCTION” VERSUS “BAD DEMAND DESTRUCTION”: HOW TO DISTINGUISH BETWEEN THEM

Some economists talk about “demand destruction” as a way to solve the climate change crisis. Cozzi warned that there are two types of demand destruction, good and bad, and that it is important to know the difference.

The good type, which is to be encouraged, is where a new technology allows people to “use less energy but have the same service”. It is about efficiency.

The bad type is where the price of energy rises so high “that either some businesses are forced to close or people cannot pay their bills and forgo some use”. She said this was happening in Europe and in Africa, where 80 million people [have been] disconnected from the grid.



SALESFORCE: WHAT A SELF-DESCRIBED “NET ZERO COMPANY” IS DOING

DiBianca said Salesforce was “a net zero company”, meaning that it is committed to reaching net zero carbon emissions. Its target is to reach “a 50 per cent reduction by 2030 and near zero by 2040”. As a software company, its biggest challenges are its supply chain, its data centres and its properties.

On real estate, DiBianca said that office use had declined due to the pandemic. Some Salesforce buildings have shut which has helped the company to reduce emissions. To try to ensure that those emissions do not simply shift to employees’ homes, staff have been issued with a guide to sustainability at home.

Also all senior executives have been given targets that align with environmental, social and governance criteria, and these will directly affect their compensation. The two sustainability targets focus on business travel emissions and the number of suppliers that can be persuaded to align with Salesforce net zero targets.

To help suppliers, Salesforce has created a tool called “net zero cloud” and published a series of white papers. DiBianca drew attention to one in particular – More than a Megawatt: Embedding Social and Environmental Impact in the Renewable Energy Procurement Process.

THE AGENDA FOR 2030: DEPLOYMENT, DEPLOYMENT, DEPLOYMENT

Cozzi said governments should focus on deployment with the priorities being renewables, electrification and energy efficiency. Asked if innovation should be a greater priority, she said this was unnecessary to meet the 2030 targets. “We have the technology, we have the financing. We just need to get our governance act together,” she said.

THE AGENDA FOR 2050: INNOVATION, INNOVATION, INNOVATION

The agenda for 2050 has to be different, Cozzi said, because 50 per cent carbon emissions reduction is needed to get us on track to net zero. She said this would have to come “from technologies that are not on the market or are not yet competitive on the market”. She highlighted hydrogen, electrification, nuclear and negative emission technologies as areas of innovation.

THE RISE OF THE ECOPRENEURS

DiBianca said Salesforce was increasingly working with sustainability entrepreneurs, also known as ecopreneurs. She mentioned Sylvera, a British company that does carbon ratings and helps companies to invest in high-quality offset projects; Measurable, a US internet-of-things business that helps companies to gain real-time data on energy usage, and CarbonCure, a Canadian group that is creating “green cement” which stores carbon.

DiBianca said Salesforce had joined the First Movers Coalition, launched by John Kerry, the US presidential envoy on climate. This organisation has invested \$100 million to develop innovative technologies.

Salesforce is also a co-founder of the Renewable Energy Buyers Initiative, which commits members to being powered by 100 per cent renewables.

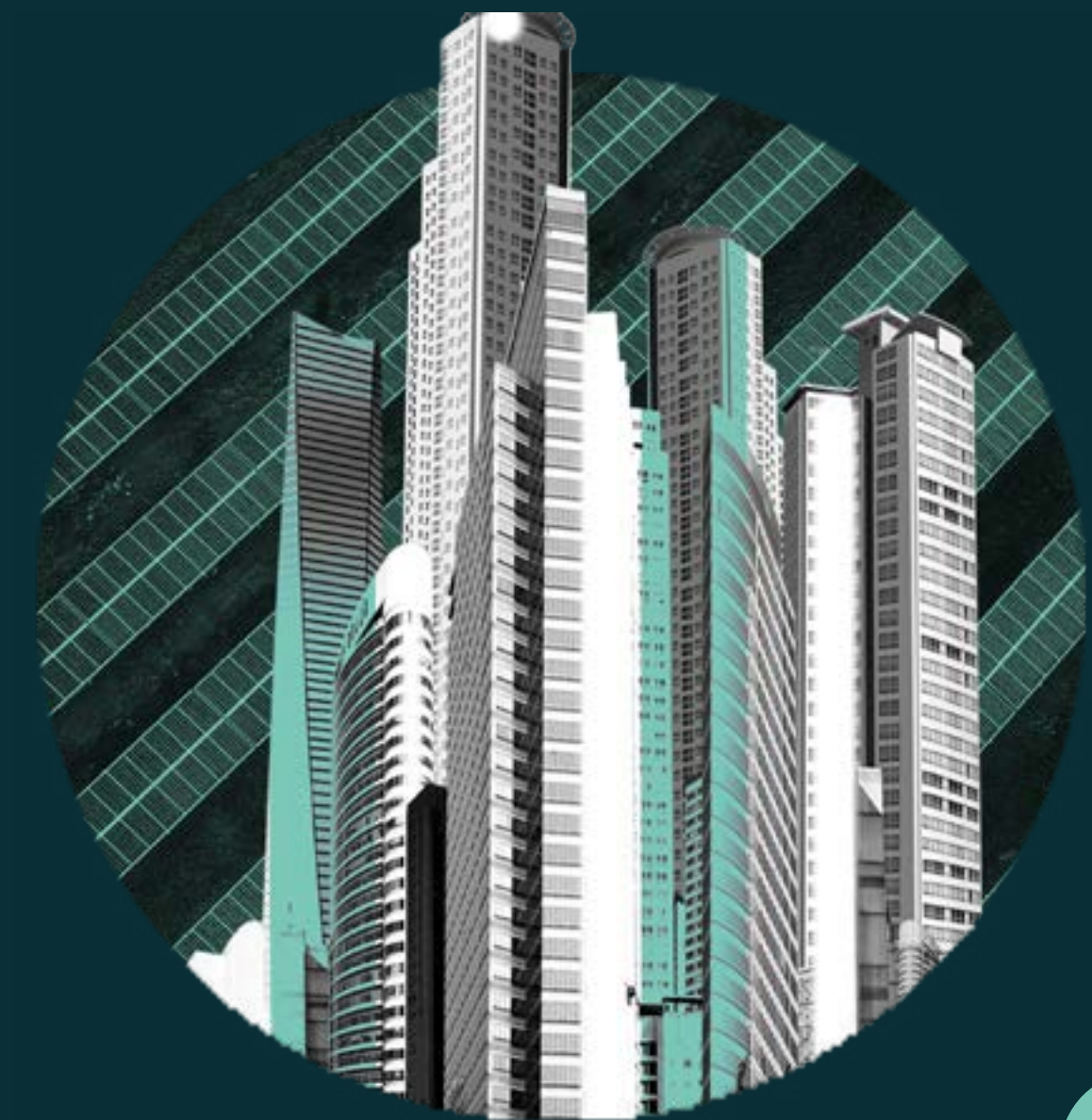
FROM “NET ZERO” TO “NATURE POSITIVE”

Salesforce is moving “beyond net zero” to thinking about being “nature positive”, DiBianca said. Reaching net zero is also about making the planet a better place. The company has hired the former head of nature at the UN environment programme to drive this strategy.

Salesforce has also launched the Blue Carbon Buyers Alliance, she said, which is designed to protect and conserve coastal ecosystems. It has committed to supporting the conservation of 100 million trees over the next decade, part of the World Economic Forum’s 1t.org initiative.

REASONS TO BE CHEERFUL, PARTS ONE AND TWO

Cozzi said that while investment was still short of where it needs to be, solar power and the sale of electric cars are bright spots. She said that if the growth seen over the past two years is kept up, “we will hit the 2030 targets for net zero”. Lessons learnt by the solar power and automotive industries would be valuable for everyone, she said.



QUESTIONS FROM THE ONLINE AUDIENCE

How do you square the circle of reducing energy consumption and promoting economic growth?

Cozzi said the IEA “sees economic growth and declining emissions” as “doable” with a “technology uptick and some behavioural changes”.

The big challenge is emerging markets, she said, which need dramatic economic growth in order to achieve basic living standards, but which are also seeing the fastest growth in carbon emissions.

Cozzi said 600 million people in Africa did not have electricity. Given this, it is unsurprising that Africa accounts for only 3 per cent of global greenhouse gas emissions: “It’s nothing”. In the next decade, this will increase as the continent’s population rises from a fifth of the world’s population to a quarter. However even if Africa develops all the gas that has been found on the continent, it will still account for only 3.5 per cent of global emissions.

“The good news is that, especially in the power sector, we do have the solutions to produce electricity ... with zero emissions,” she said.

How does Salesforce incentivise senior executives to deliver ESG targets? How does it ensure compliance by suppliers?

DiBianca said ESG targets affected 15 per cent of the senior executives’ bonus “and if the targets aren’t met in a comprehensive manner, they’re not paid against it”. Their performance is reported every quarter.

On the second part of the question, DiBianca said Salesforce told suppliers: “We won’t do business with you if you’re more than a certain size and you refuse to take a science-based target.” As a result, the sustainability strategy “became everybody’s plan”.

How should we deal with oil groups’ profits? How can governments help consumers pay or reduce energy bills?

The IEA estimates that energy companies’ windfall profits will be \$4tn this year, Cozzi said. This is the amount that it believes is needed globally to invest in the development of “zero carbon fuels” up to 2030. The companies, however, had only put in 5 per cent of the desired investment in the development of renewable sources of energy in 2021. “There has to be a push for the windfall profits of this year to be reinvested in the right way,” Cozzi said.

On the second part of the question, she said that governments in advanced economies were offering subsidies to help citizens insulate their homes. Communication was a problem, though, and information had to be relayed more effectively.

COUNCIL PARTNERS

The FT Climate Capital Council is supported by its partners, Iberdrola and High Meadows Institute. The partners share their business perspective on climate change.

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THE ELECTRIFICATION OF THE ECONOMY IS KEY TO A NET ZERO WORLD – SMARTER AND MORE EFFICIENT GRIDS WILL BE THE BACKBONE OF IT ALL

Iberdrola

A Net Zero world is only possible with the electrification of the economy. Vehicles, buildings, heating systems, and a wide range of industrial processes need to shift from being powered by fossil fuels, to being powered by electricity produced from renewables.

As well as the requirement for more renewables and more energy storage, the world also needs enhanced electricity grids, that are smarter, more resilient and more efficient.

Currently, in many countries, grid infrastructure is not fit to manage the demands that the near future will bring. With ambitious carbon reduction plans all over the world, we are quickly deploying more renewables, battery storage systems, electric vehicle infrastructure and heat pumps. Yet grids are largely still designed for the power system of the past.

Modernisation of our grids is essential to efficiently introduce these new technologies and ensure we make the most of every kilowatt of clean power generated.

Recognising the importance of clean power and enhanced grids, Iberdrola is investing €150 billion to 2030. The company aims to triple its global renewable energy capacity, but also double the value of its grid assets.

In Bilbao, we recently launched our Global Smart Grids Innovation Hub, which works with an ecosystem of more than 70 companies and institutions to help drive innovation in grid systems around the world.

Projects currently being delivered in Bilbao aim to enhance digitisation, expand automation, and develop power electronics and storage systems. Other initiatives are seeking to boost the incorporation of Artificial Intelligence and improve big data analytics to optimise the use and flexibility of the grid and make it more resilient and efficient.

In the past, energy flowed one way from large, centralised power stations to homes and businesses. Soon, power will flow in every direction, allowing homes, businesses, vehicles, and batteries to sell to the grid, as well as buy. Renewables projects will be built where the resources are best, from wind power out at sea to solar panels in urban areas.

The energy system of the future will be more complex, but the rewards will be clear. Smarter grids will be the backbone of a modern and efficient energy system that allows us to reach Net Zero.

Iberdrola's views are separate from other partners, the FT and the FT Climate Capital Council.

TIME TO GET SERIOUS ABOUT THE ROLE OF FINANCE IN CLIMATE CHANGE

Chris Pinney, CEO, High Meadows Institute

To read the headlines, you could easily be forgiven for thinking that climate change and ESG is a number one issue in capital markets. When it comes to equity markets, ESG integration does seem to be fully underway, as the value of global assets applying environmental, social and governance data to drive investment decisions has soared to \$40.5 trillion, representing more than a third of the \$95 trillion equity market in 2020. Whether ESG integration is having a meaningful impact on climate change, however, is currently a matter of serious debate, with many critics saying this is having little impact and, in many cases, is simply greenwashing. In fairness to the investment management industry, however, most equity analysts will tell you that the goal of ESG integration is to minimize social and climate related financial risks, not to save the planet, despite what their marketing teams may claim.

Turning to credit markets, we find an even bigger challenge. While a 2020 BBVA Global Markets Research report estimated that the current size of the green and sustainable bond market is now approaching \$1 trillion, this is a drop in the bucket in the \$128 trillion bond market that services private firms and sovereign debt and where some of the world's largest sustainability challenges reside.

For example, when it comes to climate, a 2017 study by the Carbon Disclosure Project notes that over 70% of greenhouse gasses are emitted by just 100 companies. Of these 100, 38 are private or state-owned companies that account for 41.07% of emissions globally, while 62 publicly traded companies, including familiar public companies like Exxon and Shell, account for 27.93% of emissions. The private or state-owned corporations, while not participating in equity markets, are active participants in credit markets that have little or no ESG consideration or oversight.

As a senior investment manager for a global bank's equity business noted, engaging a portfolio company on setting climate change goals led the company to divest some of its most problematic greenhouse gas-producing subsidiaries. He later discovered these subsidiaries were then bought by a private equity firm using debt financing through the credit window of his own firm.

To address these challenges, capital markets leaders and managers now need to move beyond analyzing ESG issues through the lens of a single materiality framework focused on financial risk (sustainable finance 2.0) to a double materiality model (sustainable finance 3.0) that also measures social and environmental impacts of financial products across all asset classes, from equity investing to credit markets.

As with the struggle to define ESG standards, defining and disclosing data on non-material societal impacts is complicated by the lack of widely agreed upon impact measurement frameworks and disclosure standards. At the same time, we see signs that these challenges are beginning to be addressed by both markets and public policy. Recent initiatives like the Capitals Coalition and the Impact-Weighted Accounts Initiative are creating new pathways and frameworks for impact integration, while the recent EU Corporate Sustainability Reporting Directive (CSRD) will support the Sustainable Finance Disclosure Regulation (SFDR) built around a double materiality framework.

While in many ways an even more challenging journey than the move to sustainable finance 2.0, the urgent need to move to sustainable finance 3.0 is clear and may surprise us with how quickly impact becomes an integrated part of mainstream capital market management.

'High Meadows Institute' views are separate from other partners, the FT and the FT Climate Capital Council.

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