



The WEF's Centre for Nature and Climate is a multistakeholder platform that seeks to safeguard our global commons and drive systems transformation. It is accelerating action on climate change towards a net-zero, nature-positive future:

Scaling up green technologies: Through a partnership with the US Special Presidential Envoy for Climate John Kerry, and over 65 global businesses, the First Movers Coalition has committed US\$ 12 billion in purchase commitments for green technologies to decarbonize the cement and concrete industry.

1 trillion trees: Over 90 global companies have committed to conserve, restore and grow more than 8 billion trees in 65 countries through the 1t.org initiative - which aims to achieve 1 trillion trees by 2030.

Sustainable food production: The WEF's Food Action Alliance is engaging 40 partners who are working on 29 flagship initiatives to provide healthy, nutritious, and safe foods in ways that safeguard our planet. In Vietnam, it supported the upskilling of 2.2 million farmers and aims to provide 20 million farmers with the skills to learn and adapt to new agricultural standards.

Eliminating plastic pollution: The WEF's Global Plastic Action Partnership is bringing together governments, businesses and civil society to shape a more sustainable world through the eradication of plastic pollution. In Ghana, more than 2,000 waste pickers are making an impact cleaning up beaches, drains and other sites.

Protecting the ocean: The WEF's 2030 Water Resources Group has facilitated almost US\$ 1 billion to finance water-related programs, growing into a network of more than 1,000 partners and operating in 14 countries/states.

Circular economy: The WEF's SCALE 360 initiative is reducing the environmental impacts of value chains within the fashion, food, plastics and electronics industries, positively impacting over 100,000 people in 60 circular economy interventions globally.

5. BROADER LEADERSHIP ON CLIMATE CHANGE

COP28 will also look to engage a broader range of leaders to convert climate pledges into action. The COP28 Local Climate Action Summit will bring together hundreds of mayors, governors and leaders from business and NGOs who play a critical role in implementing climate policy at city and regional levels in their home countries.

Recognizing the impact these sub-national leaders can deliver, United Nations Secretary-General António Guterres said: "Cities are where the climate battle will largely be won or lost. We all need to push further and faster; keep collaborating, innovating and raising ambition. Mobilizing and equipping local governments with the capacity and financing to accelerate climate action is necessary if we are to bend the emissions curve".

COP28 President-designate Sultan Ahmed Al Jaber added: "By bringing hundreds of local leaders to COP28, we will foster new, multi-level partnerships to help fast-track the energy transition, fix climate finance, focus on people, lives and livelihoods, and make sure local voices are heard at the international climate table".

Looking ahead to the next 10 years, climate and environmental risks dominate global risk perception, with failure to mitigate climate change the most pressing, according to the WEF's Global Risk Report 2023 ■

MAI HƯƠNG

(Source: World Economic Forum)

As the impacts of climate change continue to increase, concerns over climate risks are compelling companies and organizations to invest in carbon offsetting. Voluntary initiatives serve as a strategic approach employed by corporations to enhance their environmental performance and foster innovation for climate solutions.

Barriers to the development of voluntary carbon offsetting

Almost a fifth of global emissions are now covered by some kind of carbon market, and the cumulative value of all of those was an estimated US\$ 850 billion (€ 768.1 billion) in 2021. But we still need to do more if we are to reach net zero emissions by 2050. More companies than ever are aware of the severity of the challenge we face, and they are searching for ways to be part of the global solution to the climate crisis.

To address climate risks, a carbon offset broadly refers to a reduction in greenhouse gas emissions - or an increase in carbon storage (through land restoration or the planting of trees) - that is used to compensate for emissions that occur elsewhere. Although, voluntary carbon offsetting has picked up steam in recent years, these offsets are definitely not perfect. For instance, there is no internationally defined standard for what constitutes a valid offset, meaning schemes can be marketed to businesses with little oversight. Companies with good intentions have to navigate an oversupply of low-quality offsets that do little to actually remove carbon dioxide from the atmosphere in a permanent way. Companies can easily offset today's emissions against new forest growth that may not begin to store significant amounts of carbon for another 70 years and which might not grow successfully at all.



Carbon offset generates reductions in greenhouse gases

Nor do “avoided emissions credits” solve the problem. Avoided emissions credits let one party emit the amount someone else claims they would have emitted but didn’t. These offsets are hard to verify, and they risk creating complacency from participating companies without contributing to the critical challenge of rapid emissions reduction. If we are to achieve our net zero goals as a society, carbon capture has to be part of the solution.

The Intergovernmental Panel on Climate Change (IPCC) has said that to limit global warming to 1.5 degrees Celsius, between five and 15 billion tons of CO₂ will have to be removed from the air and stored permanently every year. So, how do we bring more certainty to world of offsets while at the same time scaling up the amount of carbon removed in the first place?

Need to ramp up carbon removal technology

The answer could lie in an emerging ecosystem of so-called carbon removal credits (CRCs). CRCs follow strict quality criteria involving permanence, additionally and verifiability. However, there are obstacles to overcome before carbon removal credits are truly mainstream.

Many carbon removal initiatives are still in the early stages, permanent storage facilities are just being developed, and the carbon markets are only starting to understand the differences in credit quality. And, the price per ton removed is high, for now. We believe that despite these challenges, CRCs should sit at the center of companies’ emissions policies.

Organizations are beginning to build the infrastructure we need to ramp up carbon removal technology. Remove is one example of a newly launched European accelerator for early-stage carbon removal startups designed to support the emerging carbon removal ecosystem. And some of the biggest and most influential private and public companies see the benefits of an innovation-led approach. Stripe, Alphabet, Shopify, Meta, and McKinsey founded the Frontier Fund, which is an “advance market commitment” to select and invest in the most promising climate technologies and teams.

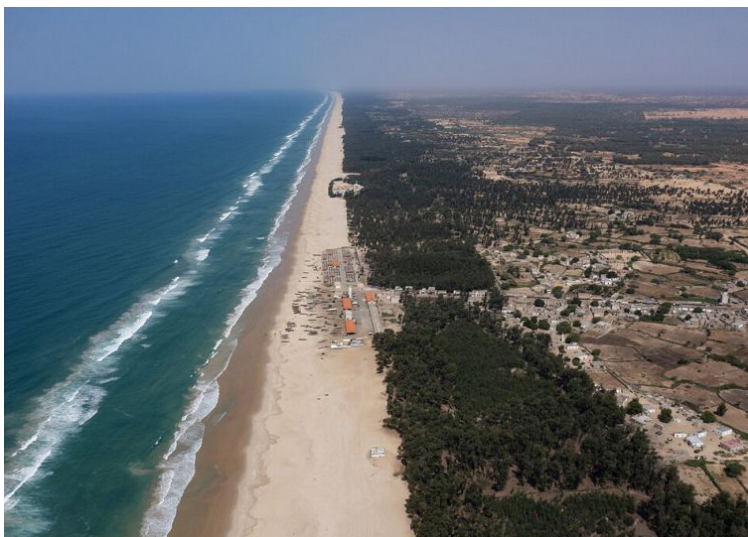
Albeit at a smaller scale, Ledgy has decided to invest its climate budget along similar principles. After a rigorous evaluation process, Ledgy has decided to buy carbon removal credits from SeaO₂ as a first investment. Why? It’s simple: 24% of all global carbon emissions are bound up in our seas and oceans. Additionally, the concentration of carbon in the ocean is more than 150 times higher than in the air, making oceanic carbon capture technology a potent weapon in the fight against climate change.

SeaO₂’s carbon capture technology could offer a new route to oceanic carbon capture at scale. SeaO₂’s first prototype, which has the capacity to extract one ton of carbon dioxide per year, launches in the North Sea this month. The prototype is just a stepping stone: the next “pilot plant” - which will be able to extract 250 tons of carbon per year - is on track to launch by the end of 2023.

In recent decades, disruptive startups have turned many industries upside down by reinventing established ways of working. We are confident in the potential of oceanic carbon capture and CRCs, more generally, in helping the push towards net zero. Companies thinking about funding and financing new climate innovations should look at CMC Company and the startups building carbon removal technology as part of a balanced and effective emissions reduction strategy. The world needs more startups thinking differently about commercializing technologies, and in turn, they need forward-thinking early customers ■

PHẠM ĐÌNH

(Source: Euronews)



▲ Filao trees form a curtain that protects the beginning of the Great Green Wall, planted to slow coastal erosion along the Atlantic Ocean in Senegal