

# MONTHLY ZCA CLEANTECH NEWS



## The Cleantech Insight You Need

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Vol. 11



### **ZCA Cleantech Awards 2025 Winners Announced!**

*Recognising trailblazers driving the world's transition to net zero – from renewable energy and AI to circular materials and clean manufacturing.*

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## Editor's note

It's been a genuinely pivotal period in cleantech, marking a definitive shift from mere aspiration to tangible, structural commitments. This month's insights reveal that high-impact progress rarely happens in isolation.

The PepsiCo and Soil Capital partnership to scale regenerative agriculture is a profound statement. By covering 35,000 acres and offering deep financial and technical backing, this initiative empowers farmers—the very bedrock of our food system—to deliver material environmental results, with GHG reductions already topping 38% in some regions.

Similarly, Microsoft's decade-long deal with Arca Climate Technologies for 300,000 tonnes of carbon removal validates mineralisation as a scalable, permanent solution. This strategic investment sets a robust standard for durable decarbonisation.

Finally, the focus on greening by digital' seen at COP30, the inspiring innovations from the 2025 Earthshot Prize winners, and innovation in TV & film courtesy of Sky's new hydrogen generators.

## **PEPSICO, SOIL CAPITAL SCALE REGENERATIVE FARMING**

PepsiCo and Soil Capital launched a strategic partnership to support regenerative agriculture across 35,000 acres in the UK, France, and Belgium. The initiative offers financial incentives, expert guidance, and digital tools to help rapeseed farmers adopt practices like cover crops and reduced tillage, aiming to improve soil health and cut greenhouse gas emissions.

## **MICROSOFT BUYS PERMANENT CARBON REMOVAL**



Microsoft has deepened its climate commitment by signing a 10-year deal with Arca Climate Technologies to purchase nearly 300,000 tonnes of

permanent carbon removal credits. Arca utilizes mineralization, repurposing industrial waste like mine tailings into stable carbonate minerals to capture atmospheric CO<sub>2</sub>. This approach offers a low-cost, permanent solution, verified by autonomous robots, that helps the tech giant offset rising emissions from its expanding AI and data center operations.

### COP30: PROGRESS ON FINANCE AND INNOVATION, BUT FOSSIL FUEL AMBITION FALLS SHORT

COP30 closed in Belém with a mixed verdict: meaningful strides on finance, digital innovation, and circularity, set against a glaring gap on fossil fuels. The Amazon backdrop made this summit symbolically powerful—and the outcomes reveal both momentum and unresolved tensions in global climate action.

After tense negotiations, countries agreed to mobilise \$1.3 trillion annually by 2035, significantly increase adaptation funding, and operationalise the Loss and Damage Fund. New initiatives—the Global Implementation Accelerator and the Belém Mission to 1.5°C—aim to push countries from planning to delivery. But hopes for a clear fossil fuel phase-out roadmap collapsed under opposition from major producer nations. Brazil's proposed transition "roadmaps," sitting outside formal COP decisions, offer a workaround, but their legal weight remains uncertain.

Beyond negotiations, COP30 showcased a growing emphasis on innovation and standards. The launch of the Green Digital Action Hub positions digital transformation—AI, data platforms, and emissions tracking tools—as a core lever for climate resilience, with a strong focus on supporting the Global South. Meanwhile, the debut of the Global Circularity Protocol for Business set a new benchmark for harmonised circularity metrics, offering companies a science-based framework to measure and scale circular performance. Early analysis suggests its adoption could save 120 billion tonnes of materials and avoid 76 gigatons of CO<sub>2</sub> by 2050.

The broader context underscored why this moment matters. COP30 arrived as nations faced a deadline to submit stronger NDCs, persistent climate finance gaps, and escalating pressure to protect nature—particularly the Amazon. Forests, Indigenous rights, adaptation, and accountability all featured prominently, with Brazil pushing to reconnect climate action with people and local economies.

Ultimately, COP30 delivered progress, but not the breakthrough many hoped for. Finance, digital solutions, and circularity all took important steps forward. Yet without a unifying fossil fuel commitment, the summit leaves the world still searching for the clarity and urgency required to keep 1.5°C within reach.

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## **EARTHSHOT WINNERS DRIVE GLOBAL GREEN CHANGE**

The 2025 Earthshot Prize announced five winners, each receiving £1 million to scale their work across five categories. Highlights include re.green's AI-driven forest restoration in Brazil, Lagos Fashion Week's sustainable fashion supply chain focus in Nigeria, and the global High Seas Treaty. The awards celebrate innovation and optimism driving urgent environmental transition ahead of COP30.

## **HYDROGEN POWER TRANSFORMS FILM PRODUCTION**



Sky is trialling a first-of-its-kind hydrogen generator at its Elstree studios to cut emissions from studio and on-location shoots. The hybrid system combines green hydrogen fuel cells with sodium batteries, delivering quiet, zero-emission mobile power. Designed to replace diesel generators and ease pressure on mains supply, the solution aims to shrink production footprints while improving air quality and reducing noise.

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