

Zeroing In: The Path to a Greener Future

NET ZERO BY 2045



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Global: COP29 - Baku, Azerbaijan

Climate funding and energy storage goals

The main task for the November summit is for countries to agree on a new annual target for funding that wealthy countries will pay to help poorer nations cope with climate change.

The COP29 presidency also hopes to build support around a pledge to increase global energy storage capacity six times above 2022 levels, reaching 1,500 gigawatts by 2030. This would include a commitment to scale up investments in energy grids, adding or refurbishing more than 80 million km (50 million miles) by 2040.

[COP29 leaders unveil climate funding and energy storage goals | Reuters](#)

UK: Fleets continue to buy majority of new EVs

Fleet and business sales accounted for 75.9% of EV registrations.

The Society of Motor Manufacturers and Traders (SMMT) announced a record milestone in electric vehicle (EV) registrations on October 4, with EVs accounting for one in five UK car registrations in September. While plug-in hybrids (PHEVs) saw a significant increase of 32.1%, reaching an 8.9% market share last month, pure EVs are expected to represent 18.5% of all registrations in 2024. Overall new car registrations market driven by fleet purchases.

[September registrations | Fleets continue to buy majority of new EVs \(fleetnews.co.uk\)](#)

UK: the first G7 country to abandon coal power

How the UK phased out coal in 12 years

The last coal plant Ratcliffe-On-Soar officially closed its doors at the end of September. This followed a series of measures like introducing carbon taxes, tightening regulations on emissions and setting ambitious climate targets, making coal increasingly expensive to operate. At the same time, subsidies and support for renewable energy sources like wind and solar were increased, driving the rapid growth of clean energy and a smoother transition away from coal.

[How the UK phased out coal in 12 years by nudging power plants to close and boosting renewables | Euronews](#)

The EU Emissions Trading System (EU ETS) - CBAM

The EU Emissions Trading System (EU ETS) in a nutshell:

- requires **polluters to pay** for their greenhouse gas (GHG) emissions;
- launched in 2005, it is the world's first carbon market and among the **largest ones globally**;
- helps bring overall EU emissions down while **generating revenues** to finance the green transition;
- covers emissions from the electricity and heat generation, **industrial manufacturing** and aviation sectors - which account for roughly 40% of total GHG emissions in the EU;
- started covering emissions from **maritime transport** in 2024;
- operates in **all EU countries** plus Iceland, Liechtenstein and Norway, and is linked to the Swiss ETS (since 2020).

[What is the EU ETS? - European Commission \(europa.eu\)](#)

Offsetting or Greenwashing



Meta closes deal to buy up to 3.9 mln carbon credits in Latin America

Facebook owner Meta has finalised a deal to purchase over 39 million carbon credits from Latin America, marking one of the largest carbon credit transactions to date. The credits were generated by forest restoration projects in Latin America, where it claims to have planted more than 7 million seedlings.

Meta plans to use these carbon credits to offset its carbon emissions, aligning with its goal of achieving net-zero emissions across its value chain by 2030.

[Meta closes deal to buy up to 3.9 mln carbon credits in Latin America | Reuters](#)



British Airways agrees to buy £9m worth of carbon removal credits

British Airways has signed a deal to purchase more than £9 million worth of carbon removal credits over six years, with the airline describing itself as “the largest carbon removals purchaser in the UK”.

The carrier, which has also called itself the largest purchasing airline of carbon removals, has bought 33,000 tonnes of credits through its CUR8 portfolio, while further credits have been sourced from Climeworks and 1PointFive.

[British Airways agrees to buy £9m worth of carbon removal credits | Travel Weekly](#)



Dutch advertising board finds against MSC Cruise in greenwashing complaint

Sustainability claims by MSC Cruise, including that it targets “net zero by 2050” do not meet standards, the Dutch advertising board found in one of the first decisions against a cruise operator following a greenwashing complaint.

Fossil Free Netherlands, which won a civil lawsuit against airline KLM with similar arguments in March, said the SRC decision was another landmark and further confirmation of its positions.

[Dutch advertising board finds against MSC Cruise in greenwashing complaint | Reuters](#)

Innovations



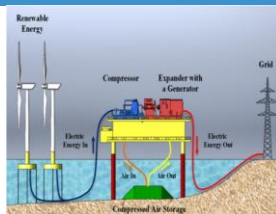
Toyota's portable hydrogen cartridges

The latest cartridges are lighter and easier to transport and have been developed with the experience the company has gained in reducing the size and weight of the hydrogen tanks used in its fuel cell electric vehicles.

The cartridges would allow fuel cell electric vehicle drivers to swap out their power source when hydrogen levels run low.

But Toyota also feels that these refillable and renewable cartridges could be used in a multitude of situations, such as to generate electricity in a fuel cell to power the home or even providing hydrogen to burn for cooking.

[Toyota's portable hydrogen cartridges look like giant AA batteries – and could spell the end of lengthy EV charging | TechRadar](#)



Sea-bed 'air batteries'

Compressed air energy storage (CAES) involves using excess energy to run compressors, typically pumping air into large, rigid tanks where it can be stored at high pressures, then released through some kind of turbine that can drive a generator to recover the energy.

It is already quite a cost-effective energy storage option – but BaroMar says it can beat traditional systems over long-duration energy storage using a low-tech solution.

Baromar’s target is a Levelized Cost of Storage (LCoS) of US\$100 per MWh, as compared to “other LDES technologies” which, it claims, come in closer to \$131/MWh.

[Sea-bed 'air batteries' offer cheaper long-term energy storage \(newatlas.com\)](#)



Solar panels between train track rails

Solar-Ways system integrates renewable energy production into railway infrastructures. Due to its flexibility and adaptability, the device makes it possible to easily install and remove all or part of a solar power plant placed between the rails of a railway track. Ultimately, the solution will be able to take advantage of the current development of power electronics in the field of linear photovoltaics for the injection of the electricity produced into the train traction network and thus create a railway Smart Hub. In addition, the system has no visual or environmental impact, making it a sustainable and consensual energy solution.

[Sun-Ways solution turns the space between railroad tracks into removable solar power plants | AltEnergyMag](#)