Zeroing In: The Path to a Greener Future

NET ZERO BY 2045



Global: CDP independent disclosure platform

Companies setting climate transition plans up 44% in 2023

The number of companies saying they have a climate transition plan in line with the world's most ambitious goal has jumped by nearly half, but 39% disclosed information on at least two-thirds of the CDP target metrics, whilst just 1% of the companies gave information on all the metrics.

Regulators in the U.S., European Union and elsewhere are increasingly making reporting by companies mandatory.

Companies setting climate transition plans up 44% in 2023, research shows I Reuters

UK: Call for UK climate

Sustainability to be at the heart of UK priorities

The government has committed to making Britain a clean energy superpower and creating a modern educational curriculum.

The report highlights the many opportunities to bring quality climate and sustainability education into the curriculum.

The report also highlights how greater inclusion of climate education fits with the government's stated aim to make the curriculum rich, broad and inclusive.

climate-education-in-curriculum.pdf (reading.ac.uk)

UK: Britain's climate change plan in landmark court case

Friends of the Earth legal action over Britain's national adaptation programme

In a landmark legal challenge, Friends of the Earth and ClientEarth have taken legal action against the British Government, claiming that their plan is insufficient to meet legally binding carbon reduction targets.

The outcome of this case could set a significant precedent for future climate litigation and influence the UK's policy direction towards more transparent climate action.

Britain's climate change plan challenged in landmark court case I Reuters

BEAMA Launches Climate Change Report

The CCC suggest the UK

Government includes a strategy for industrial electrification, resource management and addressing the decarbonisation of small facilities

not covered by the UK Emissions Trading Scheme, which is around

40% of industrial emissions



They also urge Government to address the fact that even if all the climate commitments made by manufacturing companies to date are met, the industry would fall far short of what's needed to decarbonise for

Net Zero by 2050.

76%
Companies have as much responsibility to reduce emissions as governments.¹⁵

68%

If businesses do not act now to combactimate change, then they are failing their employees and customers.¹⁵

59%
Businesses in their country are not working hard enough to tackle climate change.

https://netzero.scotena.ora/courses/NZL

Standards

The Corporate Sustainability Reporting Directive (CSRD): Reporting of E, S, and G metrics aligned with the EU taxonomy

A PwC survey shows that many EU business leaders see CSRD reporting as a meaningful tool to mitigate risks.

Business size	2024	2025	2026	2027	2028
Largest 500+ employees *These companies were previously subject to the Non-Financial Reporting Directive (NFRD)	Calculate + Report	Disclosure required - be	eginning with FY 24 Limited auditing		Reasonable auditing*
Large 250+ employees and/or €40M in turnover and/or €20M in total assets		Calculate + Report	Disclosure required - t	beginning with FY 25	Reasonable auditing*
SME 50+ employees *Can opt out until 2028			Calculate + Report	Disclosure required - t	beginning with FY 26 Reasonable auditing*

* The EU will determine reasonable audit requirements by October 2028

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Innovations







Transforming offshore wind with a pivoting turbine

The proprietary SBM mooring design, developed through the EU-supported PivotBuoy project, combines the advantages of SPM and TLP mooring systems.

This allows the floater to weathervane passively and maximize energy yields, with an electrical swivel ensuring electricity transfer without the risk of cable twisting.

In addition, the TLP mooring system reduces the seabed footprint compared to other floating offshore wind designs based on catenary mooring lines, minimizing environmental impact while maximizing compatibility with other sea uses.

X30 floating wind pilot generates first offshore power I Offshore (offshoremag.com)

Diving deep for the power of ocean currents

Start-up Equinox is developing turbines that are laid out to generate electricity from steady flowing ocean current.

Turbine blades are to be constructed from concrete to be able to withstand the typical kind of loads, vibrations and pulsations, that occur on long and slim appendixes like turbine wings under water.

The innovative design is question concept, allowing for easy manufacturing, installation operation. The fixed base and pulsation operation.

Equinox has come up with the idea of installing tip generators at the ends of the turbine blades, a so called two-staged turbine. With a 50 meter blade span, the tips move through water at considerable speed. Small high speed generators at these tips provide a lot of electricity.

Ocean current energy is the third source - Offshore Energy (offshoreenergy.biz)

Bladeless turbines revolutionise wind power

Spanish energy company Vortex Bladeless is developing a new wind power generating technology without blades, gears or shafts, encouraging a new urban opportunity for wind power.

The innovative design is quite simple in concept, allowing for easy manufacturing, installation and operation. The fixed base and cylindrical mast are joined by a carbon rod and oscillate freely, perpendicular to the wind direction, with inner parts that never collide with each other, but interact to generate electricity.

Vortex Bladeless reinvents the wind energy power solution I Energy Magazine (energydigital.com)