Greenworkx, 2023 Q4 news summary

Green-tech private sector news

Airloom’s carousel-like wind turbines slashes costs

Airloom have secured a $4 million round of seed funding, led by nBreakthrough Energy Ventures. The funding will facilitate Airloom's transition from the current 50-kilowatt development phase to megawatt-scale devices,.The company aims to achieve significant cost savings, estimating wind farm construction expenses at less than 25% of conventional projects and asserting that its device costs less than 10% of comparable wind turbines.

<https://airloomenergy.com>

Northvolt’s Game-Changing Battery sparks energy revolution

Northvolt unveils a high-performance sodium-ion battery with an energy density exceeding 160 watt-hours per kilogram. Safer, more cost-effective, and sustainable than traditional chemistries, it uses abundant minerals like iron and sodium. The breakthrough technology aims to accelerate the energy transition, with plans for industrialization and commercial markets. This sodium-ion battery holds promise for cost-efficient energy storage, particularly in emerging markets like India, the Middle East, and Africa. It complements Northvolt's portfolio, offering a low-cost alternative for renewable power generation.

<https://northvolt.com>

Newcleo signs partnerships with Assystem, Ingérop, and Onet Technologies.

Newcleo, part of the "Innovative Nuclear Reactors" initiative in the "France 2030" investment plan, aims to commission a 30 MWe lead-cooled fast reactor (LFR 30) and a pilot unit for MOX fuel manufacturing and multi-recycling by 2030.

This project entails a €3 billion investment in France between now and 2030.

The new partnerships enhance Newcleo's capabilities across digital engineering, reactor and fuel plant design, construction, general installation studies, and nuclear safety. These collaborations strengthen the collective efforts toward achieving the ambitious objectives more efficiently.

<https://www.newcleo.com>

Arbonics revolutionizes carbon removal in Europe’s forests

Estonian naturetech pioneer, Arbonics, secured a €5.5 million Seed investment to expand its scalable forest carbon removal platform in Europe. With a total funding of €7.3 million, Arbonics aims to cover 50% of European forests by 2024, revolutionizing the transparency, scalability, and impact of forest carbon projects. The platform utilizes 30+ layers of data, including sensors, soil readings, and satellite imagery, to accurately calculate carbon removal potential, bridging the gap between nature and technology. Arbonics' approach, already implemented in afforestation in the Baltics and Finland, is set to cover existing forests, meeting the increasing demand for transparent and trusted carbon projects. This expansion aligns with the increasing demand from landowners, both within and outside of Europe, for transparent and trusted carbon projects.

<https://www.arbonics.com>

Agreena and Al Dahra transform EU’s largest farm.

UAE agribusiness Al Dahra and Danish climate agtech firm Agreena are partnering to transition the EU's largest consolidated arable farm, covering over 55,000 hectares on Romania's Agricost farm, to regenerative agriculture. Signed at COP28, the Memorandum of Understanding (MoU) marks a significant global collaboration. Agreena's soil carbon program aims to sequester CO2, with Al Dahra's CEO emphasizing sustainability in this major step. The program, supported by Agreena's validated methodology, contributes to the world's largest voluntary carbon market standard. Agreena, having recently contracted two million hectares on its AgreenaCarbon program, sees this project as a substantial step in impactful climate change mitigation.

<https://agreena.com>

Ed-tech private sector news

Lepaya Expands Global Learning Impact with Acquisition of Speak First

EdTech scaleup Lepaya has acquired Speak First, a UK-based company specializing in communication and leadership training for managers and leaders. This acquisition enhances Lepaya's learning platform by incorporating Speak First's offerings, maximizing learning impact for existing and potential clients. Lepaya aims to accelerate innovation in the traditional Learning and Development (L&D) sector. With a focus on cutting-edge technologies such as VR and AI-coaching, Lepaya strengthens its position in the L&D industry. The acquisition demonstrates significant scalability and potential for talent transformation.

<https://www.lepaya.com>

General

<https://cleanenergyrevolution.co/2024/01/15/biden-allocates-623-million-for-ev-charging-expansion/>

Biden-Harris administration’s investment in EV charging infrastructure creates new green-tech jobs.

The Biden-Harris administration has announced a substantial $623 million grant to advance the expansion of electric vehicle (EV) charging infrastructure across the United States, addressing the current 'charging void.' This move aligns with the government's commitment to combat climate change and promote sustainable transportation. The funding, part of the broader $7.5 billion allocation for EV charging infrastructure from the bipartisan infrastructure package, focuses on building charging hubs at high-demand locations which aim to boost EV adoption and support the sharing economy in transportation. Notably, the initiative is expected to create significant job opportunities in construction, green-technology, and customer service. Despite facing opposition in Congress, the administration's commitment to cleaner transportation is evident with the opening of the first funded charging station, showcasing tangible progress.

<https://www.pwc.com/gx/en/news-room/press-releases/2023/pwc-2023-state-of-climate-tech.html>

Insights from PwC's 2023 State of Climate Tech Report

Investment in climate tech faced a 40% dip in 2023, hit by economic uncertainties and global tensions, as per PwC's 2023 State of Climate Tech report. However, the decline was less severe compared to the 50% average fall in other sectors. Despite challenges, climate tech's share of venture capital and private equity funding rose to over 10%, up from 7% in 2018. Notably, there's a shift toward more efficient spending on emissions reduction. Investors are now showing interest in mid-stage deals over early-stage ones, and more first-time investors are entering the climate tech space. The report suggests a continued allure for the industry.

<https://assets.publishing.service.gov.uk/media/65393f4ae6c968000daa9b0e/ccc-annual-progress-report-2023-government-response.pdf>

Notable takeaways from the Climate Change Committee’s annual 2023 progress report

The UK will remain committed to spending £11.6 billion of International Climate

Finance between financial years 2021/22 and 2025/26 building on the

Prime Minister’s recent announcement of the UK’s largest ever contribution

to international climate through the $2 billion contribution to the Green

Climate Fund.

Department for education has located an additional £3.8 Billion to support green skills through apprenticeships, T-Levels and Skills bootcamps.

"Unlocking the Macro Trends in Workforce Dynamics for a Shift from Early Retirement to the 'Great Unretirement'

A significant portion of individuals in their 50s and 60s are contemplating early retirement, with 39% considering it likely. While some retirees leave their jobs for positive reasons like family time, others are compelled to do so due to health concerns or skills deficits. The societal impact includes reduced economic activity, productivity challenges, and a potential brain drain from companies. Retiring early also poses challenges for businesses, as workers over 50 bring valuable experience and knowledge. The individual impact varies, with some leaving jobs they enjoy due to circumstances beyond their control. The key question for policymakers and business leaders is how to better support this age group and keep more employees in the labour market. Research suggests that skills, training, and development are effective ways to incentivize individuals over 50 to stay in the workforce. Digital transformation poses challenges, with concerns about adapting to new technology and feeling deprioritized compared to younger colleagues. The analysis reveals a significant number of individuals contemplating early retirement due to difficulties keeping up with modern workplace skills. Addressing skills gaps through upskilling and reskilling is crucial, requiring a focus on training, development, and better preparation for changing skill requirements. The goal is to transition from the "great retirement" to the "great unretirement" by understanding and acting upon the mechanisms that can have a substantial impact, such as return programs for those seeking opportunities to re-enter the workforce.