

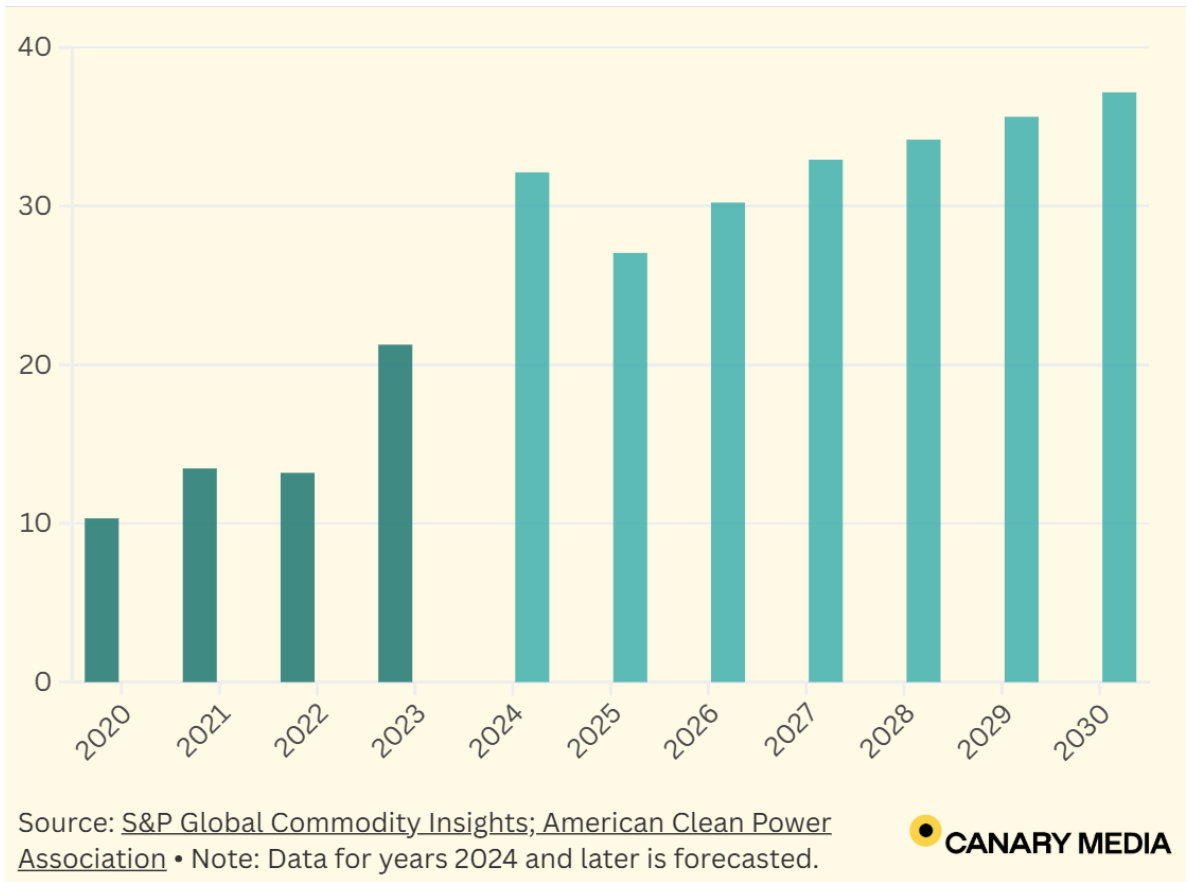


TPG Rise Climate Insight Digest

December 12th, 2024

Chart of the Week

Annual US Utility-Scale Solar Capacity Installed Each Year, In Gigawatts



Source: Canary Media, December 2024

The American Clean Power Association and S&P Global Commodity Insights report that more than 32 gigawatts of utility-scale solar installations will be completed in the US this year. This year's growth of over 50 percent compared to last year's is largely attributable to the expiration of a tariff moratorium on solar panels made in Southeast Asia. S&P Global predicts that this growth could decline thereafter due to the potential risk of eliminating clean energy tax credits included in the Inflation Reduction Act, leading to higher costs and slowing down installations. [[Canary Media](#)]

Energy Transition

President Biden's administration hit a new milestone by reaching over \$100 billion in awarded grants for clean energy projects through the Inflation Reduction Act. With this milestone, over 80 percent of the available IRA grant funds are on track to be obligated by the end of the administration's term, with significant funding directed to federal building electrification, climate data collection, and rural energy programs. [[Reuters](#)]

E-Storage's subsidiary, Shelbyville Battery Manufacturing, invested \$712 million to establish a facility in Shelbyville, Kentucky that will produce 6-gigawatt-hour battery cell energy storage systems. The facility, which will create over 1,500 jobs, is set to begin production by the end of 2025 and reach full-scale operations by early 2026. [[Utility Dive](#)]

Renewable energy sources, including wind, solar, and hydropower, are set to generate more electricity than fossil fuels in the UK for the first time this year. This shift marks a significant milestone in that 10 years ago, coal and gas made up 60 percent of the UK's electricity generation. [[Financial Times \(Subscription\)](#)]

Green Mobility

BMW announced plans to transition its factory logistics fleet to hydrogen fuel cells by 2030, starting at its Regensburg electric automotive plant in Germany. The transition will begin in 2026, with BMW aiming to power

around 230 forklifts and tugger trains with hydrogen, reducing downtime associated with battery changes and installing a 2-kilometer pipeline network with six refueling stations to ensure its hydrogen supply. [[H2 View](#)]

Eni and MSC Group announced a partnership to decarbonize cruise operations using low-carbon fuels, aiming for a 50 percent reduction in greenhouse gas emissions per passenger by 2030 and net-zero emissions by 2050. This initiative will involve biofuels, liquefied natural gas (LNG), and hydrogen, as well as the adoption of energy efficiency measures and carbon capture technologies. [[ESG News](#)]

The U.S. Department of Energy proposed a \$7.54 billion loan to the joint venture between Stellantis and Samsung SDI to build two electric vehicle lithium-ion battery plants in Indiana. The project aims to produce approximately 67 gigawatt-hours of batteries annually, enough to supply approximately 670,000 vehicles. [[Reuters](#)]

Sustainable Fuels

Qatar Airways and Formula 1 partnered to promote the use of Sustainable Aviation Fuel (SAF), with Formula 1 joining as the inaugural member of Qatar Airways' SAF program. This initiative aims to reduce carbon emissions associated with air travel and motorsports, contributing to Formula 1's net-zero carbon emissions goal by 2030. [[Sustainability Magazine](#)]

DHL Express and Shell announced a 1-year agreement to supply 25,000 tons of Sustainable Aviation Fuel (SAF) to Brussels Airport. This initiative is expected to reduce greenhouse gas emissions by approximately 80,000 tons of carbon dioxide compared to traditional fossil jet fuel, supporting DHL's GoGreen Plus service to help customers lower their supply chain emissions. [[ESG News](#)]

Mitsubishi Heavy Industries (MHI) announced that its cryogenic hydrogen pump successfully operated for 1,200 hours without downtime at FirstElement Fuel's Livermore Hydrogen Hub in the US. This achievement underscores the reliability and efficiency of MHI's technology, which will now

be installed at a large-scale hydrogen station in Japan for commercial operation next year. [[H2 View](#)]

Sustainable Materials & Products

ExxonMobil revealed a \$200 million investment to enhance its advanced recycling operations at the Baytown and Beaumont locations in Texas. ExxonMobil's expansion will boost the company's annual recycling capacity to 500 million pounds by 2026, with the goal of reaching 1 billion pounds globally by 2027. [[ESG News](#)]

Swedish steel manufacturer SSAB will supply fossil-free steel to Amazon Web Services (AWS) under a new agreement, for the construction of a new data center in Sweden, expected to be completed by mid-2025. This deal incorporates SSAB's HYBRIT technology, which significantly cuts carbon emissions from the steelmaking process, aligning with AWS's objective to achieve net-zero carbon across its operations by 2040. [[ESG Today](#)]

Unilever partnered with Nufarm to develop a new variety of sustainable sugarcane known as 'energy cane' to reduce Scope 3 emissions. The companies aim to create plant-based oils for consumer goods, replacing petrochemical-based components and supporting Unilever's ambition to achieve net-zero emissions across its entire value chain by 2039. [[Sustainability Magazine](#)]

Notable Corporate Commitments

Holcim committed to enhancing biodiversity and reducing freshwater usage at its 800 limestone quarries globally by 2030. The company evaluated 64 percent of its quarries for biodiversity impact to date using the Biodiversity Indicator Reporting System (BIRS) developed in collaboration with the International Union for Conservation of Nature (IUCN). [[Trellis](#)]

Maersk announced its ambitious plan to power up to 20 percent of its fleet with alternative fuels by 2030, aiming for net-zero emissions by 2040. The company is focusing on biodiesel, green methanol, and bio-methane,

launching dual-fuel methanol vessels, and securing contracts for bio-methanol. [[ESG News](#)]

Global Climate Commitments and Progress

Barbados completed the world's first debt-for-climate resilience swap, which will invest \$165 million in water infrastructure, food security, and environmental protection projects. This innovative financial arrangement is designed to boost the Caribbean island's climate adaptation efforts without increasing its public debt burden. [[Reuters](#)]

Despite 100 countries being in favor, the latest U.N. treaty talks on plastic pollution did not get finalized due to divisions over the issue of completely phasing out plastic production. While some countries advocate for a total ban on plastics, others prefer more balanced approaches including recycling and waste management, yet over 100 countries agreed to take significant action against plastics, highlighting strong governmental support for addressing the issue. [[Washington Post \(Subscription\)](#)]

Multimedia Insights

An **Nov 26th** release of [Bloomberg Green Zero](#) features Mette Frederiksen, the Prime Minister of Denmark, who emphasizes the need for broader participation from emerging economies like China and Gulf states in climate finance. Mohamed Khaled, Minister of Energy and Oil for Mauritania also shares his perspective on the critical need for financing to address climate impacts in Africa, highlighting the mixed reactions from developed and developing countries.

An **Nov 27th** release of [The Energy Gang](#) features a discussion with Melissa Lott from Microsoft and Amy Harder from Cipher, analyzing the implications of the financial agreement and its impact on the global energy transition. Additionally, Anca Gurzu, who was on the ground in Baku, provides insights from the talks, emphasizing the challenges and expectations for COP30 in Brazil.

Climate Events

[World Future Energy Summit](#)

Dates: January 14 – 16, 2025

Location: Abu Dhabi, United Arab Emirates

Preview: The World Future Energy Summit is a global think tank, powered by global innovation, pioneering minds, and groundbreaking insights. Bringing together industry influencers, problem solvers and cutting-edge solutions, the summit focuses on creating the blueprints for a sustainable future.

[Cleantech Forum North America](#)

Dates: January 27 – 29, 2025

Location: San Diego, California

Preview: The Cleantech Forum North America is an annual event designed to connect the latest generation of start-ups with investors and corporate partners seeking new collaborations. The forum provides detailed briefings on key investment trends and opportunities to engage with leading innovators, including companies from the upcoming 2025 Global Cleantech 100 list.

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