

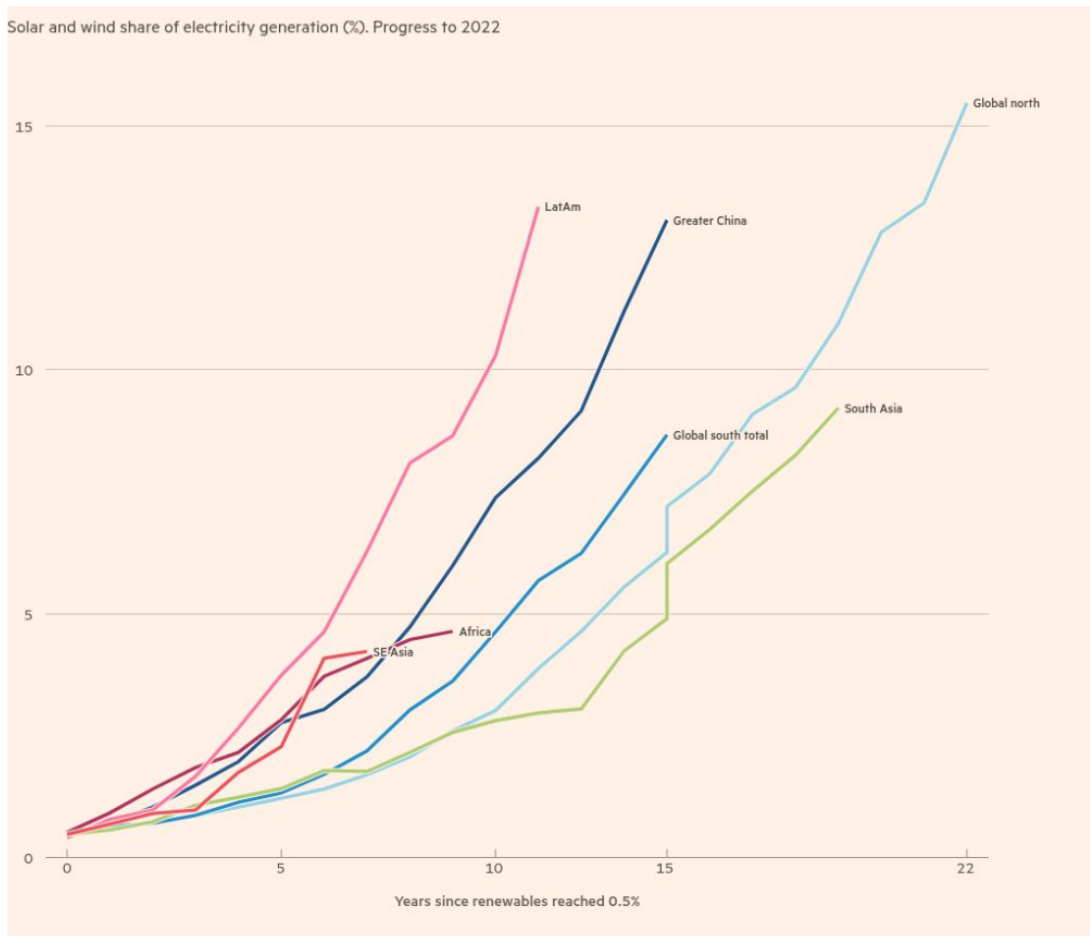


# TPG Rise Climate Insight Digest

October 17<sup>th</sup>, 2024

## Chart of the Week

### Global South Renewables Take Off



Source: Financial Times, October 2024

**Renewable energy generation in the global south is growing faster than in the global north, with a compound annual growth rate of 23 percent over the past five years.** Driven by declining costs of renewable technologies, the global south's growth of renewable energy is expected to surpass the total generation capacity of rich economies by the end of the decade. [[Financial Times \(Subscription\)](#)]

## Energy Transition

**Ferrari shut down its methane gas-fueled electricity generation plant in Maranello, Italy and intends to reallocate funds to doubling its solar power production.** The decision aligns with Ferrari's goal to reach 10-megawatt peak solar production by 2030. [[Reuters](#)]

**World Resources Institute (WRI) and Sustainable Energy for All (SEforAll) formed a strategic partnership to accelerate energy access and the energy transition.** The partnership aims to provide affordable, reliable, and sustainable energy by developing sectoral tools and data resources to support developing countries make data-driven decisions and integrated energy plans. [[World Resources Institute](#)]

**Nexceris finalized a \$60 million deal with the U.S. Department of Energy to scale up its solid oxide electrolysis cell (SOEC) technology for power generation.** The funding will be used to develop automated SOEC stack manufacturing processes, aiming to increase manufacturing capacity 10-fold and reduce production costs. [[H2 View](#)]

## Green Mobility

**Mexico City will install 36,000 solar panels on the roofs of its Central de Abasto food market to generate 18 million kilowatt-hours annually to power its public buses.** With rooftop panels already powering parts of the Central de Abasto market, the second phase will begin in January to channel energy toward the city's transit system. [[Bloomberg \(Subscription\)](#)]

**Chevron invested in a waste-to-green hydrogen conversion project in Richmond, California, which aims to produce zero-carbon hydrogen for transportation applications.** Developed by startup Raven SR, the project will convert biogenic waste and landfill gas into renewable hydrogen. [[Trellis](#)]

**Toyota Motor will invest an additional \$500 million in Joby Aviation to support the certification and commercial production of Joby's electric air taxi.** This investment builds on \$394 million in previous investments and is part of a strategic alliance, further establishing Toyota as Joby's largest external shareholder. [[Reuters](#)]

## Sustainable Fuels

**Microsoft will pilot using hydrogen to power its data center control and administration building in Dublin, Ireland.** The project, in collaboration with Irish firm ESB, will use hydrogen fuel cells to provide up to 250 kilowatts of clean energy over eight weeks, aiming to replace diesel generators. [[H2 View](#)]

**Accelera by Cummins opened a 500-megawatt proton exchange membrane (PEM) electrolyser factory in Guadalajara, Castilla-La Mancha, Spain to produce green hydrogen through electrolysis.** The new facility produces 70 percent of its energy demand on site. [[H2 View](#)]

**Crysalis Biosciences Inc. invested \$239.5 million to develop an alcohol-to-jet sustainable aviation fuel (SAF) plant in Sauget, Illinois.** Supported by the Reimagining Energy and Vehicles Illinois program, this investment aims to produce low-carbon intensity SAF with a carbon intensity score 90 percent lower than that of traditional fossil-derived jet fuel. [[Illinois Gov](#)]

## Sustainable Materials & Products

California signed into law the Responsible Textile Recovery Act of 2024 (SB 707), establishing the USA's first Extended Producer Responsibility (EPR) textile recycling program. The Act mandates producers to manage the full lifecycle of textiles, including repair, recycling, and reuse, and aims to reduce landfill waste. [[Innovation In Textiles](#)]

Meta, Holcim, and other investors are investing in startups like CarbonBuilt and Sublime Systems to clean up concrete. These startups are developing innovative technologies to decarbonize cement production, such as CarbonBuilt's alternative cement binder and Sublime Systems' fully electrified cement production process. [[Canary Media](#)]

Climeworks is collaborating with Coca-Cola HBC to produce Valser, the world's first carbon dioxide-neutral sparkling water in Switzerland. The partnership leverages Climeworks' Direct Air Capture (DAC) technology to supply Coca-Cola HBC with carbon dioxide captured from the atmosphere. [[ESG News](#)]

## Carbon Solutions

Microsoft announced a new purchase agreement with carbon removal project developer UNDO to permanently remove 15,000 tons of carbon dioxide from the atmosphere using enhanced rock weathering. Under this agreement, UNDO will spread 65,000 tons of crushed basalt and wollastonite across agricultural soils in the UK and Canada to remove carbon dioxide and enrich the soil with essential nutrients. [[ESG Today](#)]

California Resources Corporation (CRC) and the Los Angeles Rams launched the "Football Without the Footprint" carbon management initiative, which aims to reduce or offset carbon emissions from the team's operations. As part of the partnership, CRC will become the Rams' Official Carbon Management Partner, providing locally sourced carbon credits and energy solutions while investing in community impact efforts and carbon management education. [[Business Wire](#)]

**Crescent Midstream will lead the development and construction of the integrated carbon capture and sequestration (CCS) project for Entergy Corporation's 994-megawatt Lake Charles Power Station in Westlake, Louisiana.** Collaborating with Samsung E&A and Honeywell, the project aims to capture and transport three million metric tons of carbon dioxide per year. [[PR Newswire](#)]

## Notable Corporate Commitments

**India's Tata Power will invest approximately \$14.3 billion in Rajasthan over the next 10 years, primarily in renewable energy projects.** The development of extensive renewable projects – such as solar module manufacturing and EV charging infrastructure–will facilitate the adoption of Tata Motors' EVs and boost India's EV ecosystem. [[Reuters](#)]

**Spain's largest fashion companies announced a voluntary pilot scheme to start collecting discarded clothes from April 2025, ahead of anticipated EU regulations set for 2026.** Brands such as Zara, H&M, Decathlon, Ikea, and Primark are participating in the trial, which aims to separate textiles and shoes from other waste to facilitate recycling and reuse. [[Reuters](#)]

## Global Climate Commitments and Progress

**Colombia is set to unveil a \$40 billion investment plan to transition away from fossil fuels, following the country's halt on new oil and gas exploration.** The plan aims to attract up to \$10 billion from international financial institutions and developed countries, focusing on clean energy, electrification of transport, nature-based climate solutions, and agricultural practices. [[Bloomberg \(Subscription\)](#)]

**The UK committed to investing £22 billion over 25 years in carbon capture and storage projects.** This funding will support two undersea carbon storage sites and pipelines, with the capacity to store over 8.5

million tons of carbon dioxide per year combined, as well as carbon capture at three planned projects to produce hydrogen, power, and energy-from-waste. [[Financial Times \(Subscription\)](#)]

## Multimedia Insights

A **Sept 25th** podcast release of [Volts](#) discusses a pilot project supported by NYSERDA in Syracuse with David Goldstein, founder of Hydronic Shell Technologies. The project aims at retrofitting old multifamily buildings using exterior facade panels and heating, ventilation, and air conditioning (HVAC) systems to improve building efficiency and reduce emissions.

[The Energy Gang's Climate Week NYC Special](#) addresses the challenges and opportunities facing the US electricity system as it experiences a new era of demand growth. The discussion highlights the need for significant infrastructure investment and innovative business models to manage increased consumption driven by factors like AI, electrification, and climate resilience efforts.

## Climate Events

### [Bloom: Accelerating Business Action at COP 16](#)

**Dates:** October 24 – 25, 2024

**Location:** Cali, Colombia

**Preview:** Bloom 24 brings together a vibrant community of thought leaders and practitioners through interactive problem-solving, learning and networking to operationalize ambitious nature strategies.

### [Verge: Deploying Climate Tech at Scale](#)

**Dates:** October 29 – 31, 2024

**Location:** San Jose, CA

**Preview:** VERGE is for professionals catalyzing transformative, profitable change through decarbonizing their operations and supply chains, while sharing their successes, setbacks, and insights to smooth the path forward for all.

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