

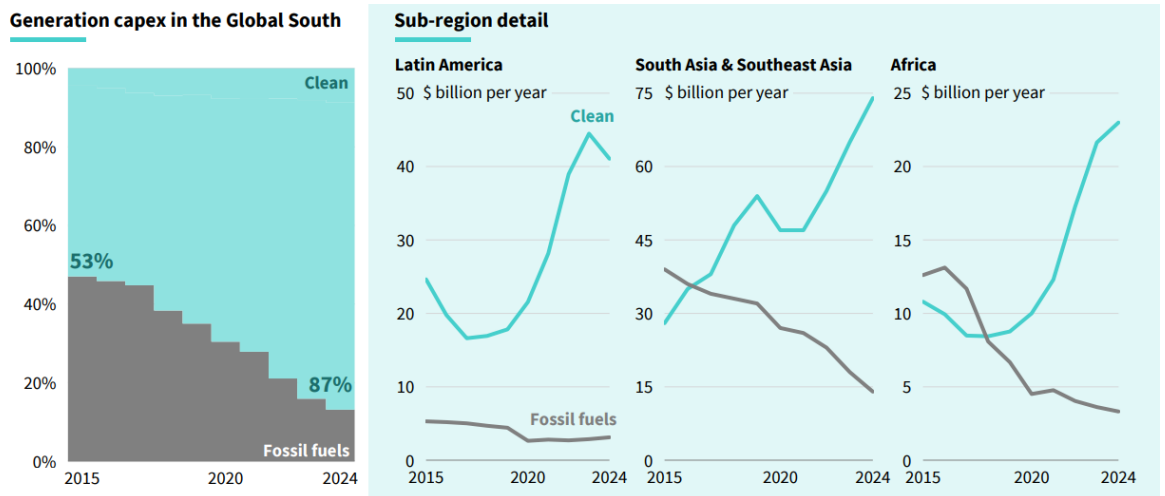


TPG Rise Climate Insight Digest

October 31st, 2024

Chart of the Week

The Global South Can Be a Renewable Superpower



Source: RMI, October 2024

The Global South is poised to continue growing renewable deployment, leveraging its richness in renewable resources and benefiting from improved unit economics in cleantech. In 2024, 87% of Global South electricity generation capex is estimated to flow into renewables. By 2030, electricity generation from solar and wind is expected to grow by over four times. [[RMI](#)]

Energy Transition

Emirates Airline signed an agreement with Etihad Clean Energy Development to introduce a 23-megawatt solar energy array at its \$950 million Emirates Engineering Centre in Dubai. The installation will involve solar panels, providing 37 percent of the facility's annual energy consumption and reducing carbon dioxide emissions. [[Energy Tech](#)]

LongPath Technologies received a \$162 million loan guarantee from the U.S. Department of Energy (DOE) to support the deployment of a methane emissions monitoring network of more than 1,000 remote monitoring towers. This initiative aims to enhance the monitoring and reduction of methane emissions across major U.S. oil and gas production regions, leveraging advanced technology to detect and mitigate leaks during oil and gas production and compression more effectively. [[U.S. Department of Energy](#)]

Petrobras will launch its first renewable hydrogen pilot plant by 2026 with a \$90 million investment. The plant will use solar-powered water electrolysis to produce clean hydrogen, positioning Petrobras as the first Brazilian company to explore blending renewable hydrogen with natural gas in microturbines. [[ESG News](#)]

Green Mobility

Kenya's BasiGo raised \$42 million in equity and debt funding to expand its 'pay-as-you-drive' e-bus initiative, the largest investment to date by an African fund in an e-mobility company. This funding will help scale operations in East Africa and expand into new markets, contributing to reducing pollution and reducing Africa's dependence on imported fuel. [[Impact Alpha \(Subscription\)](#)]

Nestlé Purina PetCare started using a Nikola hydrogen-powered truck for deliveries across California. Partnering with The Kenan Advantage Group (KAG) and Nikola, the truck has a range of up to 500 miles and is part of

Purina's efforts to reduce greenhouse gas emissions in its supply chain. [[H2 View](#)]

General Motors announced its increased investment in a lithium mine to nearly \$1 billion, the biggest investment in a lithium project by a U.S. carmaker. This decision is part of GM's strategy to secure a long-term supply of lithium for electric vehicle batteries and manage battery cell costs. [[Financial Times \(Subscription\)](#)]

Sustainable Fuels

The Australian Gas Infrastructure Group (AGIG) started its 10-megawatt green hydrogen blending projects. The \$65 million Hydrogen Park Murray Valley project will produce 500 tons of hydrogen per year for injection, supplying around 40,000 homes and businesses with up to 10 percent blended hydrogen. [[H2 View](#)]

INNIO Group initiated a pilot 1-megawatt project in Austria to use green hydrogen produced and stored during the summer to power the company's combined heat and power plant. The project, located at RAG Austria's Underground Sun Storage 2030 site, aims to decouple renewable energy generation from consumption to ensure sustainable energy supply throughout the year. [[H2 View](#)]

Windcat Workboats launched its first hydrogen dual-fuel commissioning service operation vessel (CSOV). The vessel is powered by a hybrid-electric propulsion system using CMB.TECH's dual-fuel hydrogen engine technology and eliminates the need for a backup diesel generator. [[H2 View](#)]

Sustainable Materials & Products

In 2023 alone, Home Depot eliminated 39 million square feet of plastic film and approximately 6 million cubic feet of Styrofoam from its product packaging and replaced with molded pulp and paper. This initiative is part of a broader effort to reduce plastic waste and improve sustainability,

replacing hard-to-recycle materials with compostable, recyclable, and recycled fiber. [[Trellis](#)]

EBay is expanding its Circular Fashion Fund to global markets with a \$1.2 million investment by 2025. Fashion start-ups and small businesses can apply for \$50,000 in funding and pitch their business model to eBay's global investment team to receive an additional \$300,000 investment and be awarded "Circular Fashion Innovator of the Year". [[ESG News](#)]

As part of the HyBit green hydrogen-based steel production project, 10-megawatt of Plug Power electrolyzers have been delivered to ArcelorMittal's Bremen facility in Germany. The project aims to produce and utilize green hydrogen to decarbonize steel production, normally a highly carbon-intensive process due to its heavy reliance on fossil fuels to generate heat. [[H2 View](#)]

Carbon Solutions

Univers launched EnOSTM Ark, the first end-to-end AI-powered decarbonization software for enterprises. Recognized by the UN Global Compact Network Singapore, the platform offers real-time tracking of emissions, asset efficiency management, and a carbon credit inventory to support various industries in achieving their net zero goals. [[ESG News](#)]

Microsoft entered a partnership with Ebb Carbon to remove up to 350,000 tons of carbon dioxide over the next decade using Ebb's Electrochemical Ocean Alkalinity Enhancement (OAE) technology. This agreement aims to leverage the ocean's natural carbon removal processes and includes a first-of-its-kind verification protocol to ensure transparency and accuracy in carbon credit delivery. [[ESG News](#)]

Under the Nature Positive for Climate Action Report produced by the Carbon Disclosure Project (CDP) and the High-Level Climate Champions, over 450 businesses and financial institutions are advancing nature-positive solutions to contribute to halving global emissions by 2030. The Nature Positive for Climate Action report underscores the critical role of nature in achieving climate goals, highlighting that nature-based solutions

could save up to \$104 billion in adaptation costs by 2030 and requires an annual investment of \$542 billion to build resilience, create jobs, and ensure sustainable food systems. [[ESG News](#)]

Notable Corporate Commitments

Pizza Hut reduced its dairy emissions by 10 percent in just over a year. The company was able to achieve this milestone by sourcing 60 percent of its U.S. milk from the Dairy Farmers of America cooperative that use practices aimed at cutting methane and carbon dioxide emissions by 30 percent by 2030. [[Trellis](#)]

Amazon's subsidiary, AWS, followed its fellow tech giants in announcing that it will also invest in the development of small modular nuclear reactors (SMRs) to meet the company's increasing clean energy demands for its data centers. Amazon signed agreements with Dominion Energy to explore SMR development in Virginia and with Energy Northwest to fund and develop four SMRs in Washington state. [[CNBC](#)]

Global Climate Commitments and Progress

Algeria announced its \$5.4 billion initiative to expand its desalination capacity to address severe drought conditions due to the dramatic decline in rainfall over the past two decades that has periodically dried out reservoirs. The plan includes constructing five new plants this year and six more by 2030, aiming to boost the country's drinking water production and target getting 60 percent of its drinking water from desalination by the end of the decade. [[Bloomberg \(Subscription\)](#)]

Canada announced that it will set mandatory climate-related financial disclosure criteria for large private companies to enhance transparency and help investors understand how businesses are managing climate-related risks. Combined with the Made-in-Canada sustainable investment guidelines, these mandatory disclosures aim to foster investor confidence and accelerate the \$125 to \$140 billion needed annually in green investments to achieve Canada's 2050 net zero target. [[ESG News](#)]

Multimedia Insights

An **Oct 15th** release of [World Wild Life Nature Breaking](#) discusses the importance of the UN's Convention on Biological Diversity (CBD COP16) and emphasizes the need for inclusive conservation efforts and substantial financial commitments. The conference will be crucial for assessing progress on the Global Biodiversity Framework established at COP15, with targets such as conserving 30 percent of the planet's land and ocean by 2030 and mobilizing \$200 billion annually for biodiversity conservation.

An **Oct 15th** release of [Bloomberg Green Zero](#) highlights the inadequate impact of market-driven solutions like catastrophe bonds in helping developing countries deal with climate change. Despite these instruments, there remains a significant gap in effective financial support for poorer nations facing extensive climate damages.

Climate Events

[United Nations Climate Conference](#)

Dates: November 11 – 22, 2024

Location: Baku, Azerbaijan

Preview: The 29th Conference of the Parties (COP29) aims to accelerate climate action amidst record global temperatures and extreme weather events. The conference will focus on securing trillions in finance for reducing greenhouse gas emissions, updating national climate action plans to meet the Paris Agreement by 2025, and aiming to limit global warming to 1.5°C while advancing the Sustainable Development Goals.

[World Climate Summit](#)

Dates: November 17, 2024

Location: Baku, Azerbaijan

Preview: The 15th edition of World Climate Summit 2024 aims to significantly strengthen the impact of public-private sector cooperation to achieve the policies, innovations and investments required in the real economy to reach 2030 transition targets and a net zero and nature-positive world by 2050.

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