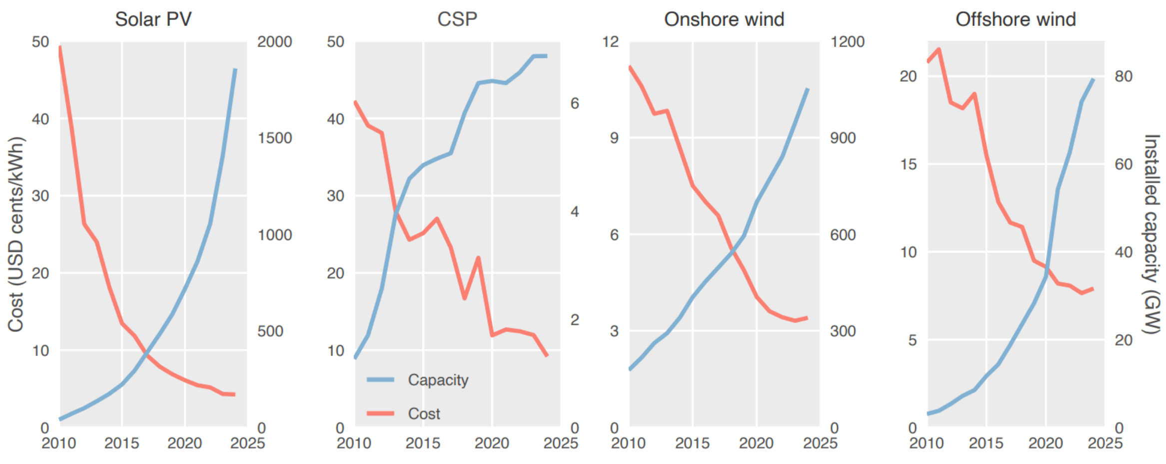
TPG Rise Climate Insight Digest

July 31st, 2025

Chart of the Week

Rapid Cost Declines and Growth in Installed Electricity Capacity of Solar and Wind Technologies Globally (2010 – 2024)



Data source: IRENA.[1] (The cost shown represents the levelized cost of electricity; CSP = concentrated solar power.)

Source: United Nations, July 2025

From 2010 to 2024, solar and wind technologies experienced rapid cost declines and unprecedented growth in installed electricity capacity globally, making them the least expensive options for new power generation. By 2024, solar photovoltaic (PV) and onshore wind energy costs dropped to 4.3 and 3.4 cents per kilowatt-hour, respectively, outperforming new coal power at 9.5 cents/kWh and new gas power at 8.3 cents/kWh. [United Nations]

Energy Transition

Saudi firms announced clean energy deals worth $8.3 billion for projects with a total capacity of 15 gigawatts, including five photovoltaic solar plants and two wind power projects. The deal involves both public and private entities, including ACWA Power and Aramco's subsidiary, along with the government-connected Water and Electricity Holding Co (Badeel). [Reuters]

Zelestra committed to investing $1 to $1.5 billion over five years to build 1 gigawatt of renewable energy capacity for mining operations in southern Peru. The company recently inaugurated the San Martin Solar Park, Peru's largest solar plant with a capacity of 300 megawatts. [ESG News]

Enbridge Inc. made a $900-million investment in the Clear Fork solar project in Texas to expand its presence in renewable energy. With a capacity of 600 megawatts, the project will provide clean energy to Meta's data operations. [Yahoo! Finance]

Green Mobility and Sustainable Fuels

The Netherlands allocated over €700 million in subsidies to 11 green hydrogen projects with a combined capacity of 602 megawatts, significantly expanding its current hydrogen production capabilities. These projects are set to reduce fossil fuel dependency by supplying hydrogen to industries such as refineries, chemical producers, and the mobility sector. [H2 View]

GB Railfreight unveiled new Class 99 hybrid locomotives, designed to reduce rail freight emissions by more than half during a typical journey. The locomotives operate on electric lines where possible and switch to renewable fuels elsewhere, making them the cleanest and fastest rail freight solution in the United Kingdom. [BBC]

Seabound, a United Kingdom startup, is set to launch the first commercial-scale trial of its onboard carbon capture technology. The system uses pebbles of calcium hydroxide to absorb carbon dioxide from ships' exhaust and converts it into calcium carbonate, which can subsequently be reused as a key material in cement production. [Trellis]

Sustainable Materials & Products

French company, Veolia announced a $95 million investment to build its largest plastic recycling facility in Britain. This facility will be the country's first closed-loop recycling plant capable of recycling polyethylene terephthalate (PET) trays into food-grade materials and expected to be operational by early 2026. [Reuters]

HP Inc.'s decision to allow sales partners to offer refurbished products highlights its dedication to sustainability and circular economy practices. By compensating equally for new and refurbished sales, the company supports waste reduction and progresses toward its goal of sourcing 75 percent of materials from recycled, reused, or renewable sources by 2030. [Trellis]

Toyota Tsusho America, Inc. (TAI) finalized the acquisition of Radius Recycling, a North American recycling company, to advance its circular economy goals and accelerate progress toward carbon neutrality. This acquisition aims to ensure metals are efficiently reused and integrated into products within the automobile lifecycle, reducing environmental impact and fostering sustainable material usage. [PR Newswire]

Notable Corporate Commitments

Kimberly-Clark UK & Ireland committed approximately $168.9 million to invest in green hydrogen infrastructure at its manufacturing sites in Kent and Cumbria. This makes Kimberly-Clark the first major consumer products company in the UK to sign long-term offtake agreements for green hydrogen. [ESG Today]

Palo Alto Networks entered into a five-year agreement with 1PointFive to purchase 10,000 metric tons of carbon removal credits utilizing Direct Air Capture (DAC) technology. The captured carbon dioxide will be permanently stored underground through saline aquifer sequestration. [Carbon Herald]

Global Climate Commitments and Progress

Australia introduced a $1.5 billion program to reduce household battery installation costs by 30 percent for solar-connected systems. Australia is targeting residential batteries due to the significant penetration of rooftop solar systems among households, with about a third of households having solar panels but only one in forty having storage. [Bloomberg (Subscription)]

The Scottish government has approved SSE Plc to build the Berwick Bank wind farm off Scotland's eastern coast, set to be the world's largest offshore wind farm. The project is expected to supply power to 6 million homes. [Bloomberg (Subscription)]

Multimedia Insights

A **July 15th** release of Columbia Energy Exchange discusses how extreme weather events reshape energy security and national security. The conversation emphasizes the need for strategic planning, climate model integration, and sustained multi-sector funding to prepare for an increasingly rapid pace of climate-driven disruptions.

A **July 15th** release of The Interchange discusses how geothermal energy is seeing a major boost this year, with US$1.7 billion in public funding in Q1, which is already 85 percent of last year’s total. With these advancements, geothermal could supply up to 15 percent of global power by 2050.

Climate Events

Climate Week NYC
Dates: September 21 – 28, 2025
Location: New York City, New York
Preview: Climate Week NYC will bring together global leaders from business, government, tech, academia, and civil society to address environmental

challenges. Over 900 events will focus on themes like health, energy, finance, and food, inspiring systemic change and clean technology investments.

[Blue Earth Summit]
Dates: October 15 – 17, 2025
Location: London, United Kingdom
Preview: Blue Earth Summit connects founders, investors, and changemakers to drive innovation and collaboration for a regenerative and sustainable world. At its core, the BE100 will spotlight over 200 start-ups leading advancements in climate tech and circular economy solutions to tackle global challenges.