Pathways to a coal phase out diverge in South Korea and Japan

Press release

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A new report from Global Energy Monitor finds a growing divergence in the approach to coal phase out in two of Asia's largest economies, with South Korea taking stronger steps than Japan in spite of short term headwinds from the closure of the Strait of Hormuz.

According to Boom and Bust 2026, the definitive report on the global coal fleet now in its eleventh year, South Korea has articulated a long-term objective to move beyond unabated coal and has halted new coal development, creating space to reassess the scale and role of public investment in coal and place greater emphasis on clean energy deployment.

At present, around half of South Korea's 42 GW of operating coal capacity has a planned closure before 2040. South Korea commissioned its final coal plant in 2025 and now has no coal capacity under development. Coal retirements reached 0.5 GW in 2025, bringing total retirements since 2015 to 3.9 GW.

At the same time, Japan continues to rely primarily on incremental emissions-reduction measures within its existing coal fleet, while broader decisions on coal retirement remain less defined.

The country's coal policy showed limited change in 2025 under a conservative government that has largely emphasized continuity and gradual adjustment in coal use rather than setting a clear target year for the phaseout of coal power. At 53 GW, Japan continues to operate one of the largest coal fleets in the OECD and the fifth largest fleet in the world. The country has not yet adopted a binding, national coal phaseout timeline.

Christine Shearer, Project Manager of Global Energy Monitor's Global Coal Plant Tracker, said, "For both South Korea and Japan, accelerating renewable energy deployment will be central to reducing reliance on imported fossil fuels and stabilizing long-term power costs. South Korea has made a meaningful first move, with its recent coal phaseout commitment signaling a fundamental shift in how the country views coal's place in its energy future – leaving Japan increasingly isolated among major economies still without a clear coal exit plan."

Ayleen Lippert, Energy Finance Researcher of Solutions for our Climate, said, "The global coal transition is gaining momentum, and with its national climate target to significantly reduce emissions, South Korea has an opportunity to play a leading role in shaping a more forward-looking energy system. In a context of growing energy market uncertainty, scaling up investment in renewable energy — including through instruments such as sovereign green bonds — can strengthen energy security while supporting long-term economic competitiveness."

Yasuko Suzuki, Program Coordinator for KikoNetwork, said, "At a time when Japan is facing a fossil fuel energy crisis driven by conflict in the Middle East, we should urgently expand renewable energy and reduce our dependence on imported fossil fuels. Despite this situation, the Japanese government continues to promote the co-firing of ammonia and hydrogen at coal-fired power plants as an emissions reduction measure, while positioning LNG as a 'transition fuel.' Unless Japan clearly sets a target for phasing out coal, its international isolation will only deepen. How we address the challenges of energy security is now being put to the test."

Key global developments of 2025

- **In 2025, global coal power capacity continued to grow even as coal-fired generation declined**. Global coal capacity increased by 3.5%, while coal generation fell by 0.6%, reinforcing a widening disconnect between coal capacity additions and how much coal was actually used.
- **Coal generation fell most sharply in China and India even as both countries recorded high commissioning**. In China, coal capacity expanded by 6% while generation declined 1.2%; in India, capacity grew by 3.8% while generation fell 2.9%. In both countries, wind and solar met most or all incremental demand, contributing to the divergence between rising capacity and falling output.
- **In China, new and reactivated coal power projects in 2025 surged to a record high** of 161.7 GW. In all, China has over 500 GW of coal-fired capacity in development. If built, the projects would commit China to years of coal expansion well into its 15th

Five-Year Plan period (2026–2030), during which the government has pledged to reduce coal consumption.

- **India recorded 27.9 GW of new and reactivated coal plant proposals in 2025**. In all, India has 107.3 GW of capacity in pre-construction planning and another 23.5 GW under construction. The Indian government has set a target to add 100 GW of new coal capacity over the next seven years, even as record additions of solar and wind pushed non-fossil capacity to more than half of total installed power capacity in 2025.

- Globally, **nearly 70% of coal-fired units scheduled to retire in 2025 did not do so**, including 69% of scheduled retirements in the EU and 59% in the U.S. In the EU, most missed retirements reflect postponements that began during the 2022–23 energy crisis, even as formal coal phaseout commitments remain in place. In the U.S., retirement delays were more directly tied to government intervention that kept aging coal plants online through explicit orders.

- **Coal development continued to narrow geographically.** The number of countries proposing or building new coal plants fell from **38 in 2024 to 32 in 2025**. Countries exiting the coal pipeline included South Korea, which pledged in 2025 to phase out coal power by **2040**, and Brazil and Honduras, leaving **Latin America free of any new coal power proposals**.

- **Coal construction outside China and India hit a record low**, at just 5% of global construction capacity in 2025. Global coal expansion is increasingly driven by a small set of countries rather than broad-based global demand.

- **Indonesia's coal fleet grew by 7% in 2025**, with a quarter of the increase tied to captive coal for nickel and aluminum processing. The country also ranked third globally for total proposed coal capacity (11 GW) behind China and India, including both new on-grid plans and the ongoing persistence of off-grid captive proposals.

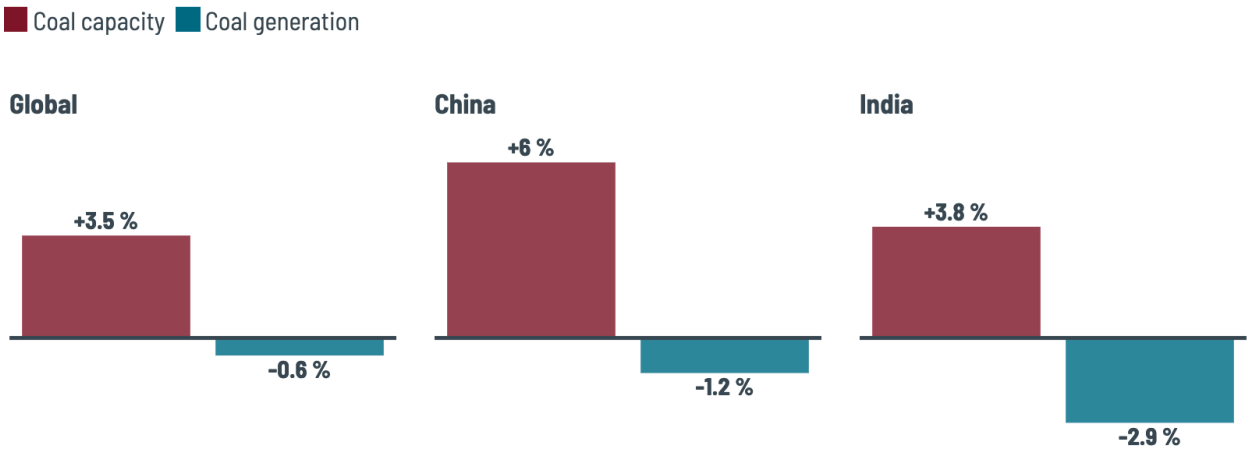
- In Türkiye, **just one active coal plant proposal remains** as the country prepares to host the upcoming COP31 climate conference, down from over 70 proposed coal plants in 2015.

- In South Asia outside of India, coal generation is largely import-dependent. While Pakistan has rapidly deployed distributed solar that stabilizes against shifting fossil fuel markets, Bangladesh has faced technical and fuel supply challenges with its fossil power and has yet to implement significant renewable capacity.

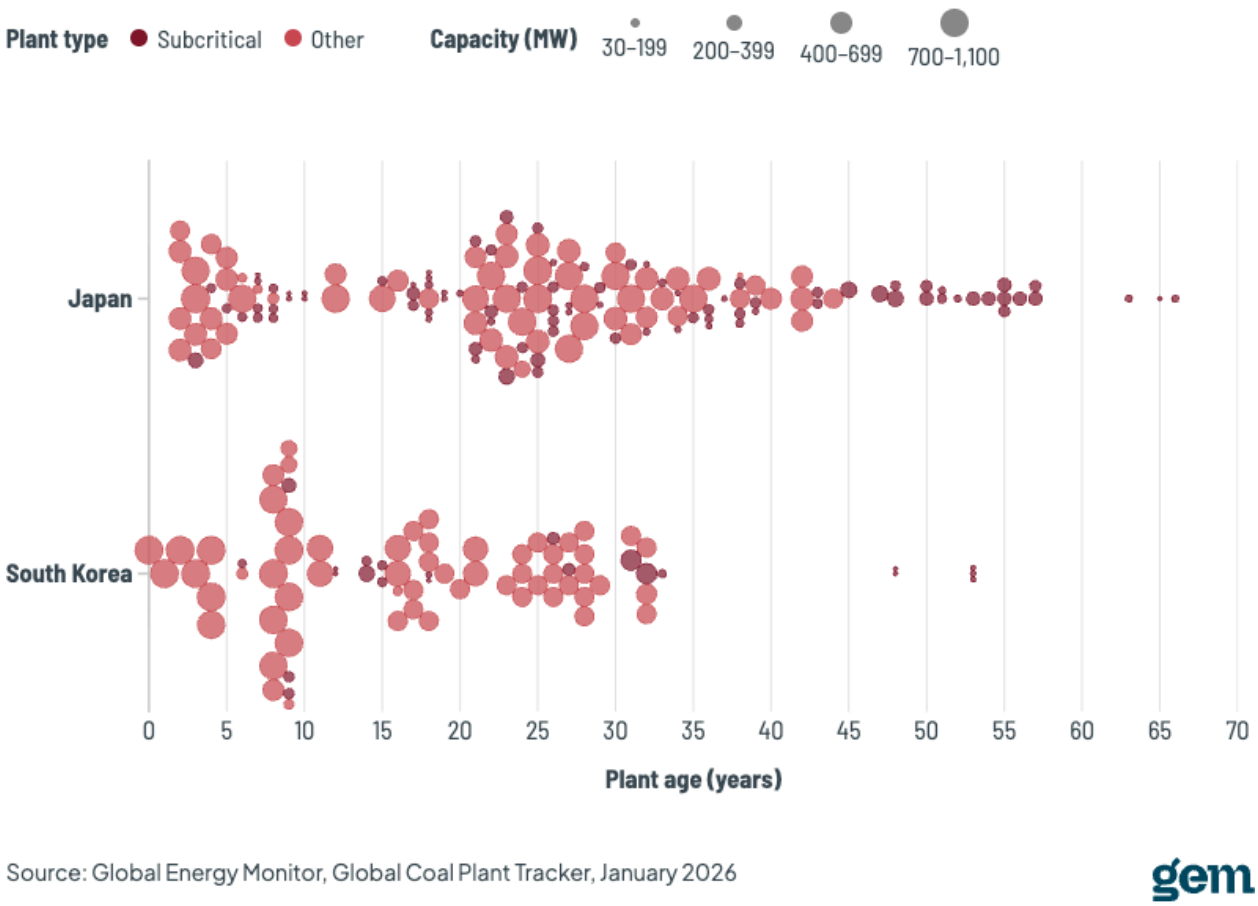
- In Southeast Asia outside of Indonesia, **new coal capacity commissioning declined for the third year in a row**, even as emerging gas supply disruptions in 2026 have prompted some countries to lean more heavily on existing coal capacity.

Global coal capacity rose in 2025 even as coal generation fell — driven by China and India

Annual change in global coal power capacity and generation, 2024–2025



Source: Global Energy Monitor, Global Coal Plant Tracker, January 2026, Ember Global Electricity Review 2026



Source: Global Energy Monitor, Global Coal Plant Tracker, January 2026

In addition to Global Energy Monitor, the report's co-authors are the The Africa Just Transition Network (AJTN), ARAYARA International Institute,Bangladesh Working Group on Ecology and Development (BWGED), CEE Bankwatch Network, Beyond Fossil Fuels, Centre for Research on Energy and Clean Air (CREA), Chile Sustentable, Climate Action Network (CAN) Europe, Coastal Livelihood and Environmental Action Network (CLEAN), Dhoritri Rokhhay Amra (DHORA), E3G, The Institute of Lawyers for the Protection of the Environment (INSAPROMA), Kiko Network, POLEN Transiciones Justas, Policy Research Institute for Equitable Development (PRIED), Razom We Stand, Reclaim Finance, Solutions for Our Climate (SFOC), Trend Asia, and Waterkeepers Bangladesh (WKB).

About the Global Coal Plant Tracker

The Global Coal Plant Tracker provides information on coal-fired power units from around the world generating 30 megawatts and above. It catalogs every operating coal-fired generating unit, every new unit proposed since 2010, and every unit retired since 2000. The map and underlying data is updated bi-annually, around January and July. Around April and October, partial supplemental releases also cover updates to proposed coal units outside of China.

About Global Energy Monitor

Global Energy Monitor (GEM) develops and shares information in support of the worldwide movement for clean energy. By studying the evolving international energy landscape, creating databases, reports, and interactive tools that enhance understanding, GEM seeks to build an open guide to the world's energy system.

GEM data serves as a vital international reference point that is being used by agencies including: Intergovernmental Panel on Climate Change (IPCC), International Energy Agency (IEA), United Nations Environment Programme (UNEP), U.S. Treasury Department, and the World Bank. Furthermore, industry data providers such as Bloomberg Terminals and the Economist, and academic institutions like University of Oxford and Harvard University draw on this data.

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