

Press release

To phase out fossil power plants by 2040, Indonesia needs at least 210 GW of renewable energy

JAKARTA, 26 November 2024 - President Prabowo Subianto's vision of reaching net zero by 2050 by stopping all fossil fuel power plants and building 75 gigawatts (GW) of renewable energy needs to be more ambitious. This is because the additional 75 GW is not enough to make up the difference required from the plan to stop fossil fuel power plants.

Katherine Hasan, Analyst at the Center for Research on Energy and Clean Air (CREA), said that as much as 62% of Indonesia's electricity supply - both connected to the PLN network (on grid) and independent (off grid) - comes from coal. Therefore, the plan to stop using fossil fuel power plants by 2040 is a major breakthrough.

For this reason, Indonesia should set more ambitious green energy targets. “The recently announced target of an additional 75 GW of renewable energy and 5 GW of nuclear by 2040 will only generate fossil-free electricity for about 35% of the projected national electricity demand. This means that the target must be more than doubled for President Prabowo's vision to become a reality,” Hasan said.

Considering the projected growth in electricity demand, the adoption of the 75 GW target also means that there is still room for additional fossil fuel-based power plants. CREA estimates that - if the target for additional renewable energy remains at 75 GW - the additional power generation coming from fossil-fueled power plants may actually increase by 145% from 2022 to 2040.

Subsequently, the 75 GW target is also much lower than what is stated in the Comprehensive Investment and Policy Plan (CIPP) document of the Just Energy Transition Partnership (JETP), which aims for an additional 210 GW of non-fossil power generation by 2040 and achieving 80% renewable energy share in the same period.

Lauri Myllyvirta, Lead Analyst at CREA, emphasised that the plan presented by President Prabowo should be aligned with the power plant investment roadmap contained in the JETP CIPP document. “We also ask that the government continue to work on removing the barriers that have heretofore stymied the take-off of low-cost clean power sources in Indonesia, in order to assure that the goals laid out in the plan are fully realised within the proposed timeframe,” Myllyvirta added.



The adjustment of renewable energy targets to align with the vision of phasing out fossil fuels by 2040 represents a major opportunity for Indonesia to attract investment. “Beyond the US\$235 billion investment planned by PLN for 100 GW of additional capacity, the increased ambition to meet the JETP CIPP clean energy target will generate nearly US\$200 billion of investment from an additional 130 GW of renewable energy capacity,” Hasan explained.

Furthermore, phasing out coal-fired power plants will bring huge health benefits. Currently, coal-fired power plants are responsible for 10,500 annual deaths and an economic burden of US\$7.4 billion in Indonesia. Truly fulfilling President Prabowo's vision of no more coal-fired power plants would not only be in line with the Paris Agreement's 1.5 degree target, but it would also help Indonesia avoid a cumulative total of 182,000 air pollution-related deaths and US\$130 billion in health costs from 2024 until the end-of-life for all coal powered power plants.

“President Prabowo's vision for a 2040 fossil power phase-out may indicate a turning point for Indonesia. As we enter this pivotal moment for energy transition, nationwide efforts and international support in line with this vision will bring tremendous benefits for all citizens - not only from sizable investments in clean energy development, but also immediate gains from air quality improvements. However, realising this goal will require strong leadership as well as for all stakeholders involved, particularly investors, to see the plan’s potential and grasp the vast economic opportunity at hand,” Hasan emphasised.

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Note to editors

The commentary is available [here](#).

About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions, to air pollution. CREA was founded in December 2019 in Helsinki and has staff in several Asian and European countries. The organisation’s work is funded through philanthropic grants and revenue from commissioned research. www.energyandcleanair.org