

Green and Carbon Neutrality Trend In Indonesia



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Regulatory Aspects (To Understand Where We Headed)

Law No. 16 of 2016 on the Ratification of the Paris Agreement to the UNFCCC

Nationally Determined Contribution (NDC) for Indonesia: 29% CO₂ unconditional dan 41% CO₂ conditional.

Law No. 7 of 2021 on Harmonization of Taxation

Starting 1 April 2022 for coal power plant with cap and tax scheme. Value minimum set at Rp 30/Kg CO₂ (USD 2.01/Ton CO₂)

Presidential Decree No. 98 of 2021 on the implementation of Economic Carbon value to Achieve NDC

Regulate about carbon trade, incentives/payment based on performance, carbon tax, others

Summary Regulatory Aspects:

Law No. 7 of 2021 and Presidential Decree No. 98 of 2021 give the assurance that green economic practices are supported and regulated by Government.

Additional regulations are also coming

Green Movement Strategies by Indonesia's Government (Energy transition, Decarbonisation, Green Economic)

There are 2 main strategies of green movement:

1. Forestry and Land-use (FOLU):
forestation, mangrove
revitalization, forest fire
prevention
 2. Energy & transportation: CCUS,
retirement coal plant, biofuel and
green refineries, solar/wind/
geothermal, electric vehicles, etc
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Big Market Trends (Example)

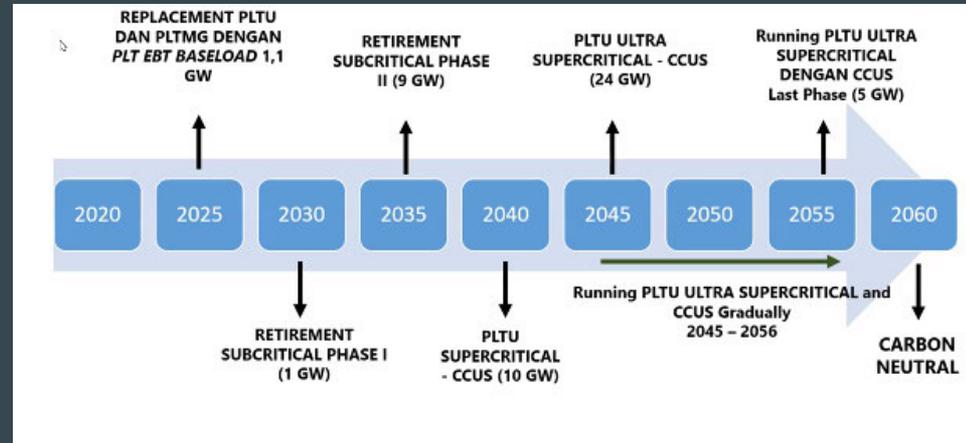
Pertamina – NOC

Geothermal, hydrogen, EV Battery and energy storage, CCS/CCUS and CO2 diversification, gasification, green refinery, biofuel, circular economy and renewables: Solar PV, wind dan micro-hydro

Government – Retirement Coal Plant

Coal plants produced 62% power. To retire coal plants by regulation, Government need financial plan to retire coal plants early

PLN – National Electricity Company



CCUS price still considered expensive, almost the same with invest on new coal plants (US\$6 cent per kwh). PLN planned to utilize CCUS after coal plants fully depreciated

CCS/CCUS Movement (Sample)

On going projects

- Gundih fields. Pertamina is working with JANUS, JGC Corporation, J-Power, and the Bandung Institute of Technology (ITB) through a Joint Study Agreement. Commissioning plan 2025 and Sukowati fields by Pertamina EP (CCUS Study Supported by Japex & CoE CCS/CCUS LEMIGAS). Commissioning plan 2030. Potential reducing CO₂ in total 17,2 million ton CO₂ (Gundih-3 million tonCO₂ in 10 years and sukowati 14,2 million tonCO₂ in 15 years)
- Repsol Sakakemang, 2027
- Proyek Vorwata CCUS Tangguh BP, 2027