



CASE
for Southeast Asia

On behalf of



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

of the Federal Republic of Germany

Energy Transition Status in Indonesia

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Energy Transition is more than just building renewables



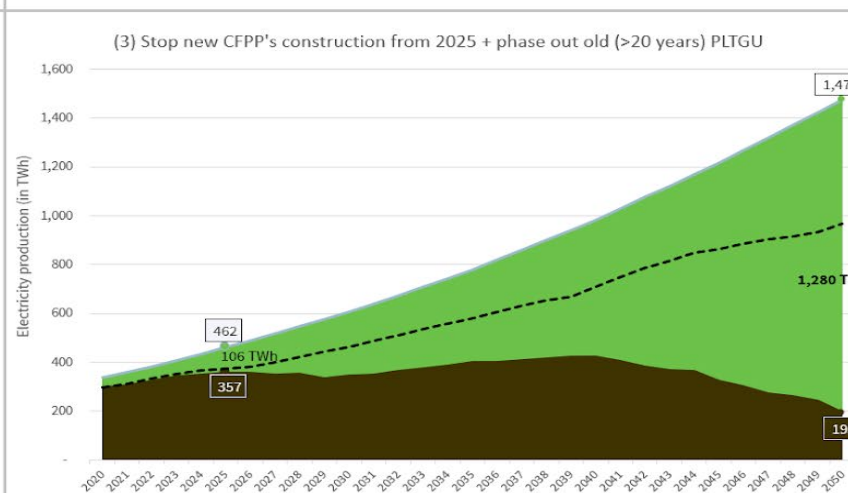
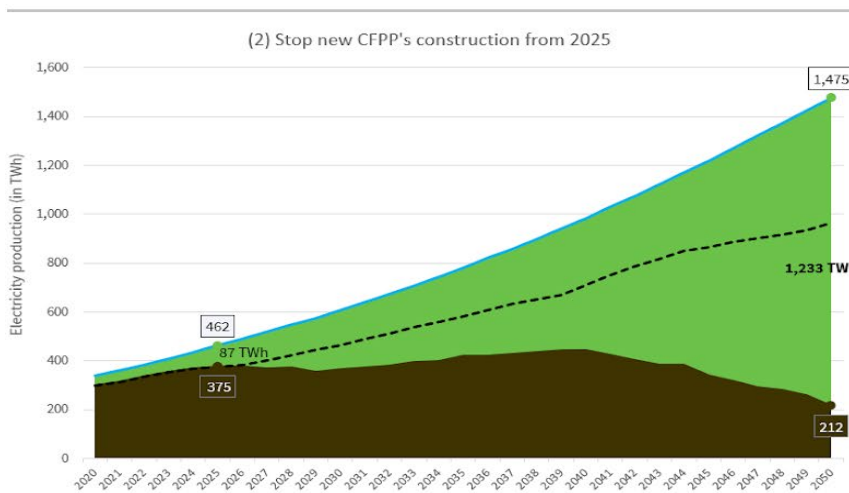
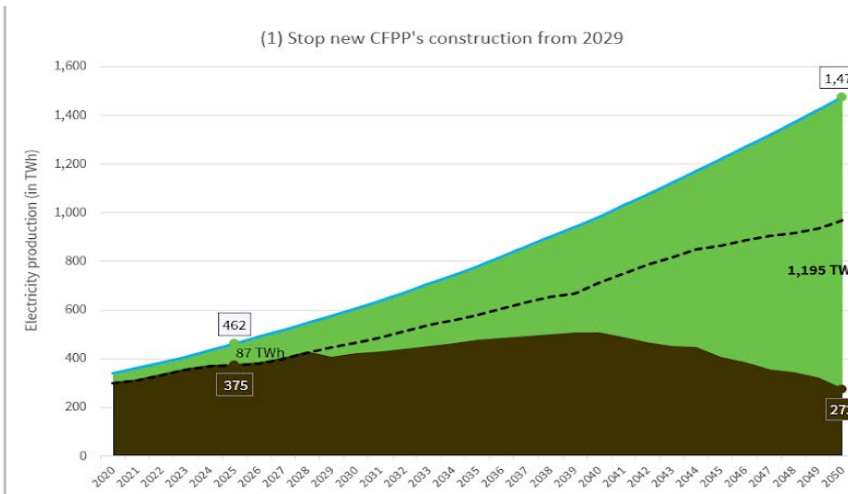
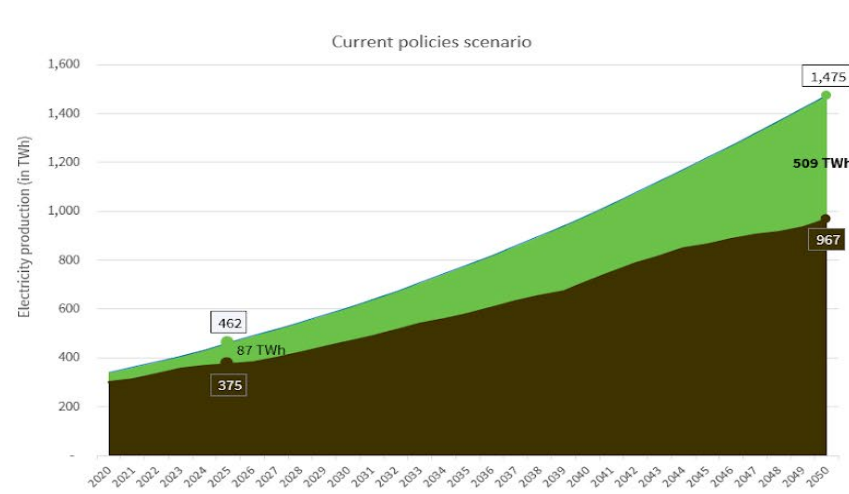
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Fossil power plant's generation
 Renewables power plant's generation
 Fossil in Current Policies Scenario

- Under IESR's energy transition scenario¹, renewable energy mix and installed capacity will increase significantly from the time period when there is no new coal-fired power plant (CFPP) is built and all CFPPs older than 30 years are phased-out.
- Renewable energy contribution to the electricity generation will gradually increase with the reduction of fossil fuels installed capacity, with renewable energy generation reaching 1,280 TWh (out of a total of 1,475 TWh) in the third sub-scenario in this energy transition scenario.

¹ IESR (2020). RUEN Report.

Renewables installed capacity only grew 187.5 MW in 2020



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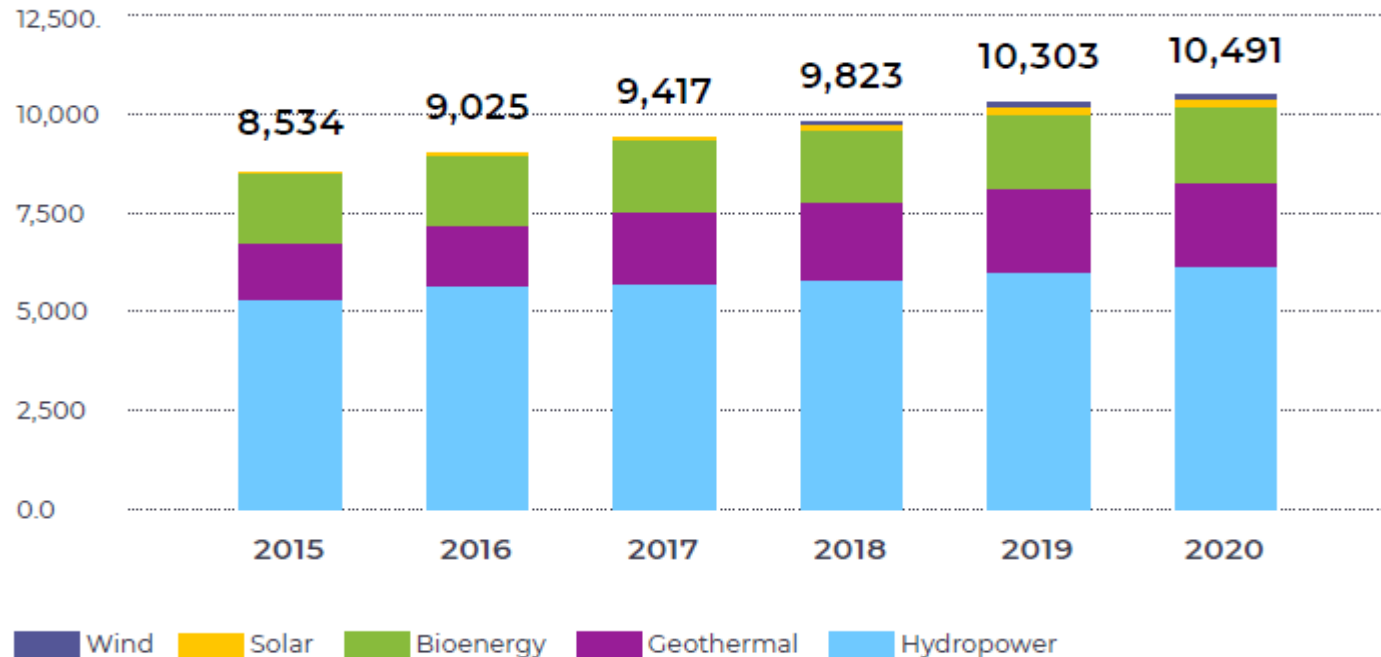


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Installed renewables capacity 2015-2020

Installed capacity, MW



Notes: Q4 2020, except solar PV (Q3 2020)
Source: 2015-2020 data from MEMR, except for solar PV
Solar PV: 2015-2019 data from DGNREEC, 2020 data from (DGNREEC and IESR analysis)

- Renewable installed capacity grew modestly in 2020, mostly from hydropower, followed by solar at 28.8 MW.
- Solar capacity installation comes mainly from rooftop solar installation and 2017's IPP projects that came online last year.
- Total renewable installed capacity in Indonesia by 2020 reached 10,491 MW, a 1.8% increase yoy.

Renewables electricity generation until first Semester 2020 increased by 2.9%



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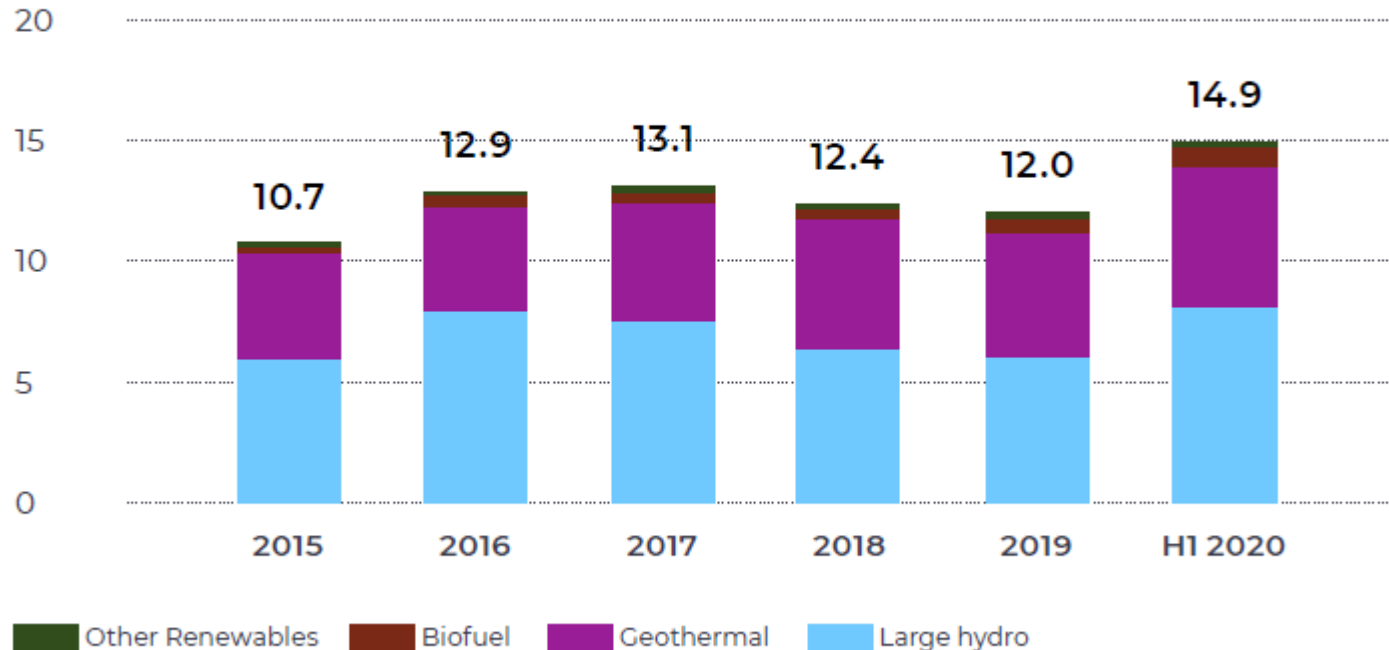


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Renewables share in electricity generation, 2015-2020

Share (%)



Source: MEMR (DGE and DGNREEC); IESR Analysis

- The share of renewable energy in electricity mix increased to 14.9% by semester I 2020, driven by mainly the increased generation from hydropower, and less significantly geothermal.
- Despite increase in renewables share, Indonesian electricity generation is still dominated by fossil fuels. Until first Semester 2020, coal-fired power plants share was 64.3%, followed by gas at 17.8% and diesel at 3%.

Source: IESR (2021). IETO.

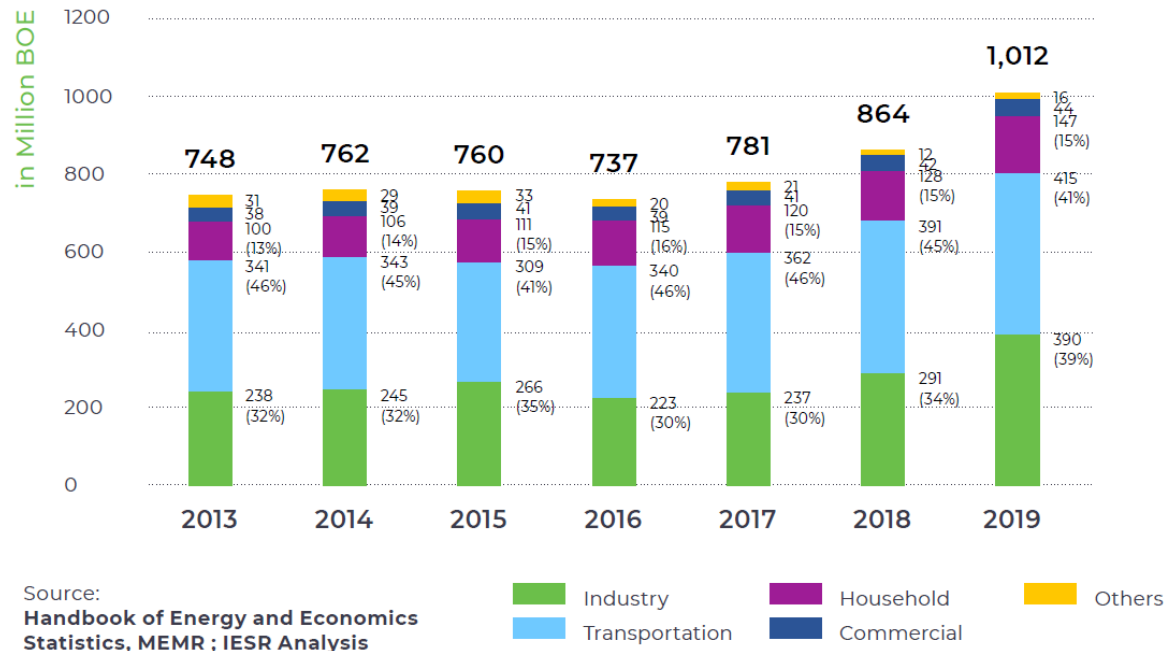
Energy efficiency sector's homework : From reducing transportation sector consumption, updating and introducing MEPS to tapping green building potential.



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- Indonesia energy intensity increased from 2017-2019, largely due to the increase in the transportation sector.
- Despite increase in renewables share, Since 2018, MEMR started the extensive discussions to increase Minimum Energy Performance Standards (MEPS) for Air Conditioners and introduce MEPS for other appliances. Nevertheless, there were no further updates until the end of December 2020.
- Huge potential of achieving energy efficiency target through green building concept is wasted, primarily due to funding shortfall and lack of monitoring and implementation.



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