

SOUTHEAST ASIA

Indonesia

GDP: **\$888.5bn**

Five-year economic growth rate: **3.3%**

Population: **252.8m**

Total clean energy investments, 2009-2014: **\$5.2bn**

Installed power capacity: **54.8GW**

Renewable share: **6.2%**

Total clean energy generation: **20.6TWh**

Top energy authority:

Ministry of Energy and Mineral Resources

OVERALL RANKING

2014

2015

OVERALL SCORE

2015

9

11

1.61

PARAMETER	RANKING	SCORE
I. Enabling Framework	37	1.05
II. Clean Energy Investment & Climate Financing	10	0.88
III. Low-Carbon Business & Clean Energy Value Chains	08	3.77
IV. Greenhouse Gas Management Activities	10	2.43

SCORE SUMMARY

Indonesia scored 1.614 overall in *Climatescope* 2015, placing it 11th on the list of countries. The country's ranking slipped two places from 2014, largely due to a lower score on Parameter I Enabling Framework. A delayed implementation of geothermal and solar policies dragged down its performance on that indicator.

Indonesia's score on Parameter I Enabling Framework fell 11 places in 2015, with a score of 1.05. The value of loans, grants and grant programs in the country fell from 2014, while the cost of debt increased.

Indonesia's score on Parameter II Clean Energy Investment & Climate Financing, 0.88, improved significantly from last year's 0.44. Total clean energy investment surged from \$0.4bn in 2013

to \$1.9bn in 2014, largely due to a consortium's investment of \$1.2bn in the Sarulla geothermal project.

The country in 2015 matched its 8th-place 2014 ranking on Parameter III Low-Carbon Business & Clean Energy Value Chains. Its 2015 score was 3.77 versus 3.64 in 2014. The gain was due to a slight increase in the number of service providers entering the renewable energy sector.

Indonesia scored 2.43 in Parameter IV Greenhouse Gas Management Activities, which was good for a 10th-place ranking. Its 2014 metrics were 2.41 and 11th position. The government updated its national energy policy with a more ambitious renewable energy target for 2025.

For further information, access www.global-climatescope.org/en/country/indonesia

OVERVIEW

Indonesia has ambitious renewable energy and rural electrification targets. It aims to boost renewables' share of the total primary energy mix to 23% by 2025, compared to 15% previously. The government also plans to encourage distributed renewable energy with an eye toward achieving 100% electrification by 2020 (up from 84.5% today).

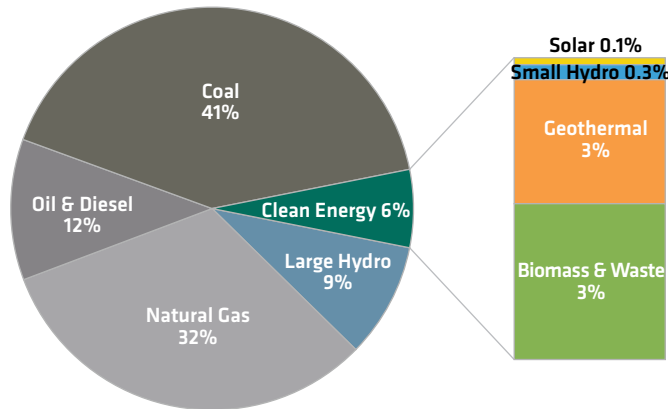
To date, Indonesia has been relatively ambitious in introducing clean energy-friendly policies. It has conducted reverse auction programs for power contracts with geothermal and solar projects. Meanwhile, biomass & waste and small hydro projects

have been offered feed-in tariffs. The country also has biofuel consumption mandates for the transport, commercial and power generation sectors.

Furthermore, the government makes available a broad range of tax incentives, including income tax rebates, accelerated depreciation and exemptions on import VAT. The government has offered still other supporting mechanisms, including business viability guarantees to back power purchase obligations between the state utility and private generators and a geothermal fund supporting early-stage resource exploration activities.

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

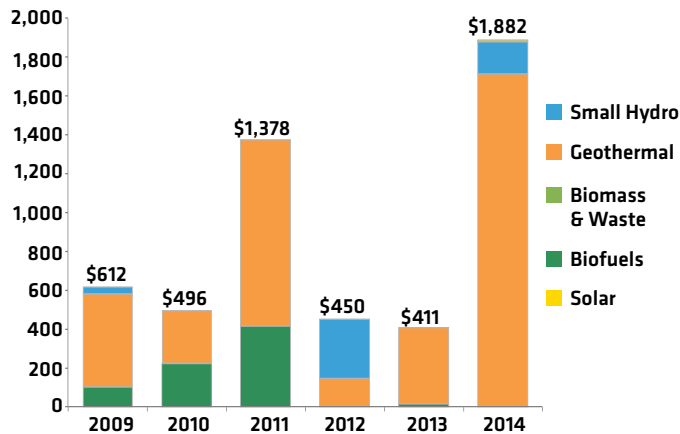
54.8GW total installed capacity



Source: Bloomberg New Energy Finance, Ministry of Energy and Mineral Resources, Perusahaan Listrik Negara, Directorate General of New & Renewable Energy and Energy Conservation, National Council on Climate Change of Indonesia, National Development Planning Agency
Note: Negligible values for wind cannot be graphically represented due to scale, see source data for the complete numbers.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2009-2014 (\$m)

\$5.2bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investment includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

KEY POLICIES

Auctions	There is a solar auction program with a ceiling price set at \$0.25/kWh. For projects using at least 40% locally-manufactured equipment, the tariff is \$0.30/kWh.
Biofuel Blending Mandate	A national target of 25-30% biodiesel consumption and 20% bioethanol consumption for transport, power, industrial and commercial sectors by 2025.
Debt-Equity Incentives	Incentives include the Geothermal Fund Facility, the Indonesia Infrastructure Guarantee Fund and Biofuels Development Credits for the agricultural sector.
Energy Targets	Indonesia updated its national energy policy in 2014 with a more ambitious renewable energy target for 2025 - renewable energy's share in the total primary energy mix was raised to 23% from 15% previously. It also introduced a new target of 31% by 2050
Feed-in-Tariffs	Electricity produced by biomass and waste-to-energy power plants receive feed-in tariffs of \$0.1-0.18/kWh. Small hydro power tariffs range \$0.05-0.14/kWh depending on the project location, grid-connected voltage and project phase.
Tax Incentives	Incentives include: 5% tax deduction per year for 6 years, accelerated depreciation of capital and fixed assets, import duty exemption for renewable energy equipment.

Source: Bloomberg New Energy Finance Policy Library

All of this would suggest a regulatory climate highly conducive to clean energy development. However, project development has been slower than expected largely because these policies have not delivered. The reverse auctions have not been conducted successfully, and the feed-in tariff rates were not sufficiently high to generate excitement among private developers.

Furthermore, regulatory barriers have significantly slowed the rate of project approval, and financing difficulties have caused a halt in project development. In 2014 only 100MW of renewable capacity was built with \$200m invested in renewable projects.

Still, some policy milestones achieved in 2014 are expected to improve the situation in the coming years.

A geothermal law was enacted in August 2014 to enable exploration drilling in protected forest areas and provide expedited permitting. Fossil-fuel subsidies were mostly removed to make renewable energy cost-competitive. The small-hydro feed-in tariff was increased.