

SOUTHEAST ASIA

Indonesia

GDP: **\$868.3bn**

Five-year economic growth rate: **10%**

Population: **250m**

Total clean energy investments, 2006-2013: **\$5.7bn**

Installed power capacity: **46.8GW**

Renewable share: **6.6%**

Total clean energy generation: **9,779GWh**

Top energy authority:

Ministry of Energy and Mineral Resources

OVERALL RANKING
2014

OVERALL SCORE
2014

9

1.52

PARAMETER	RANKING	SCORE
I. Enabling Framework	26	1.20
II. Clean Energy Investment & Climate Financing	34	0.44
III. Low-Carbon Business & Clean Energy Value Chains	08	3.64
IV. Greenhouse Gas Management Activities	11	2.41

SUMMARY

Indonesia scored 1.52 to finish 9th among all *Climatescope* 2014 nations. It scored highly on the Low Carbon Business and Clean Energy Value Chains, and Greenhouse Gas Management Activities parameters due to its generally effective tax-based policies. However, Indonesia lagged behind on the Clean Energy Investment parameter.

Indonesia has a tightly-controlled, highly-subsidized power sector. In 2013, coal provided 48.5% of Indonesia's total 196.4TWh of generation. Renewables, primarily geothermal, contributed 5%.

State-run utility Perusahaan Listrik Negara (PLN) dominates Indonesia's power sector, and has several subsidiaries that

operate as independent power producers. Non-PLN IPPs account for a very small market share in Indonesia. Geothermal power production is dominated by government-owned oil and gas company PT Pertamina.

Indonesia has a number of initiatives supporting renewable energy deployment. In 2013, the Ministry of Energy and Mineral Resources (MEMR) agreed to purchase electricity via a solar auction program, adopting transparency on the pricing structure for renewable energy power projects. Efforts are underway to improve transmission and distribution and to extend electrification to of Indonesia's thousands of disconnected islands.

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

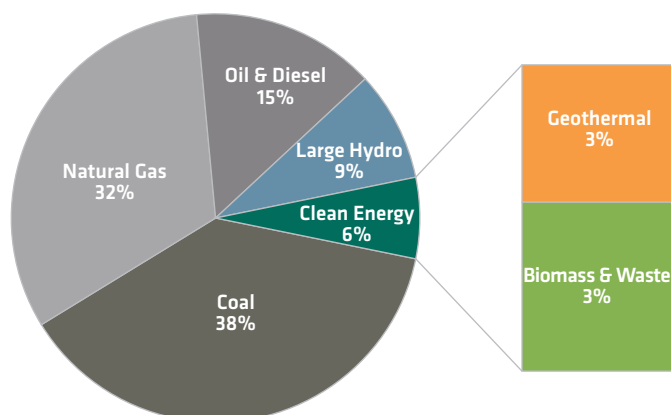
PARAMETERS AT A GLANCE

Introduced in 2005, Indonesia's national Fast Track Program aimed to contribute up to 10GW additional capacity, mostly through coal by 2013; this first phase is roughly two-thirds complete. Its second phase, to run 2013-2015, seeks to develop another 18GW of power, with less reliance on coal and more on clean energy resources.

Indonesia scored well on Enabling Framework Parameter I thanks to its tax-based policies and infrastructure funding of renewable energy. Coal and natural gas accounted for 70% of Indonesia's 46.9GW capacity, and biomass & waste accounted

INSTALLED POWER CAPACITY BY SOURCE, 2012 (%)

46.8W 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: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

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	There is a target to generate 5% of electricity from geothermal, 5% of transport energy from biofuels, and 20% from other renewables by 2025.
Feed-in-Tariffs	Electricity produced by biomass and waste-to-energy power plants attracts feed-in tariffs of \$0.1-0.18/kWh, while small hydro power gets \$0.07-0.1/kWh.
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

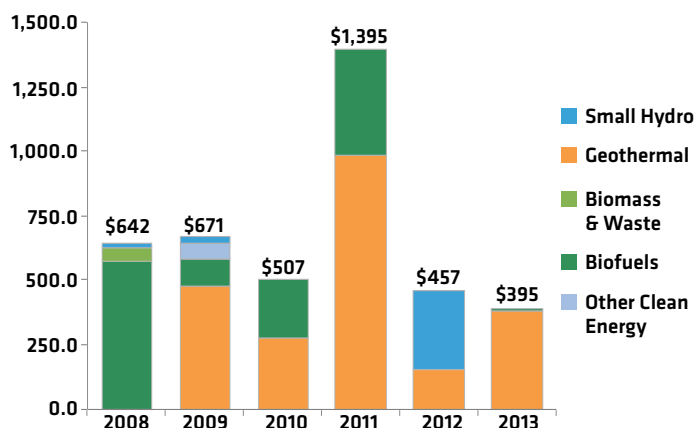
for 3.5% in 2013. Geothermal energy contributed 9.42TWh of the annual electricity generation of 196.4TWh for 2013.

Electricity tariffs in Indonesia are regulated by MEMR, but fluctuate based on the level of subsidies budgeted yearly. From 2006-2013, tariffs rose to their highest levels due to a domestic energy shortfall beginning in 2010.

Indonesia scored less well on Clean Energy Investment and Climate Financing Parameter II. Despite being the fourth largest nation on earth as measured by population, it attracted just \$5.7bn in clean energy investment from 2006-2013. The

ANNUAL INVESTMENT IN CLEAN ENERGY, 2008-2013 (\$m)

\$4.1bn total cumulative investment



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

country also has a relatively low penetration of green micro-finance institutions.

Indonesia's value chains for wind, geothermal, and small hydropower boosted its Low Carbon Business and Clean Energy Value Chains Parameter III score. It has various clean energy service providers, predominantly in the financial & legal services sector.

Indonesia scored well on Greenhouse Gas Management Activities Parameter IV through GHG emission reduction policies and the establishment of a National Council on Climate Change. Indonesia's Nusantara Carbon Scheme – a voluntary emissions crediting mechanism – was introduced alongside plans for a GHG country registry as part of its National Action Plan. Furthermore, the National Energy Policy has a target to increase the proportion of clean energy production in the overall energy mix of up to 15% from renewables by 2025.