**CENTRAL AMERICA** 

Guatemala

GDP: **\$58.7bn** 

Five-year economic growth rate: 7.3%

Population: 15.9m

Total clean energy investments, 2009-2014: \$1.4bn

Installed power capacity: 3.2GW

Renewable share: 26.1%

Total clean energy generation: **1.7TWh** 

Top energy authority: Ministry of Energy and Mines

**OVERALL RANKING** 

2015

**OVERALL SCORE** 

2015

**29 18 1.40** 

PARAMETER	RANKING	SCORE
I. Enabling Framework	19	1.34
II. Clean Energy Investment & Climate Financing	04	1.56
III. Low-Carbon Business & Clean Energy Value Chains	35	1.22
IV. Greenhouse Gas Management Activities	23	1.45

## SCORE SUMMARY

Guatemala's 1.40 overall score in Climatescope 2015 elevated it to 18th place, 11 levels above its 2014 ranking. Its 2014 overall score was 1.10.

The country's ranking change was propelled in major part by improvement on its Growth Rate of Clean Energy Investments Indicator of Clean Energy Investment and Climate Financing Parameter II.

On Enabling Framework Parameter I, Guatemala finished 19th in 2015, a two-place improvement from 2014. Its 2015 and 2014 Parameter I scores were 1.34 and 1.28, respectively.

On Clean Energy Investment and Climate Financing Parameter II, Guatemala vaulted to fourth place in 2015 from 25th in 2014. Its 2015 Parameter II score of 1.56 compares with 0.61 recorded for 2014.

Guatemala City

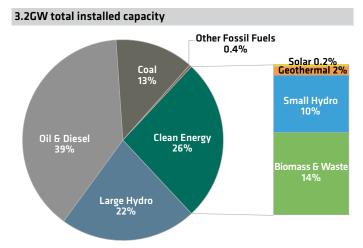
On Low-Carbon Business & Clean Energy Value Chains Parameter III, Guatemala in 2015 matched its 2014 score of 1.22. Its Parameter III rankings were 35th in 2015 and 34th in 2014.

On Greenhouse Gas Management Activities Parameter IV, Guatemala registered a score of 1.45 in both 2015 and 2014, ranking 23rd in 2015 and 21st in 2014.

#### **OVERVIEW**

Guatemala is the second largest Central American power market, with a total generating capacity of 3.2GW. In 2014, it generated 9.8TWh of electricity, with 48% coming from fossil-based generation. Large hydro is the next most important source, representing 36% of total power produced. Other renewables (small hydro, biomass and geothermal) amount to 16% of generation.

# **INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)**



Source: Bloomberg New Energy Finance, Administrador del Mercado Mayorista

The power market in Guatemala is unbundled, with state and private players acting in generation, transmission, energy trading and distribution segments. Guatemala is connected via the Central American Electrical Integration System (SIEPAC) to Honduras and El Salvador. In 2014, the country exported 986 GWh to Central America, which represents a 106% increase compared to 2013 (478GWh). This increase can be attributed to the higher demand of neighbor countries and excess generation from biomass plants in Guatemala. Additionally, northern Guatemala is also interconnected to Mexico's transmission system.

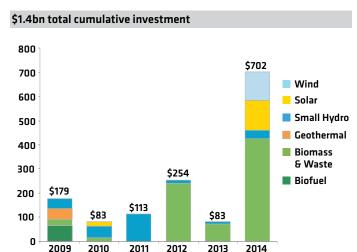
## **KEY POLICIES**

Auction	Comisión Nacional de Energía Eléctrica held the country's first auction, contracting 393MW from small hydro, wind, solar and biomass sources. A second auction will contract 250MW from conventional and renewable sources.
Tax Incentives	Import duty exemption for clean energy equipment and machinery; and VAT, income tax and industrial tax exemptions for renewable generators.

Source: Bloomberg New Energy Finance Policy Library

Since 2012, CNEE organizes tenders to contract power capacity where renewables may compete with all other sources. Distribution companies are the final offtakers. The first tender awarded a total of 393MW to small hydro (221MW), wind (101MW), solar (55MW) and biomass (16MW) plants, out of 623MW contracted for 15-year power purchase agreements. A second tender, in 2014, was set up to initially contract 250MW, open to all technologies. The auction contracted more than expected, a total of 322MW. This time, wind projects did not secure any contracts, as projects were not competitive enough, but other renewables (solar, biomass and small hydro) were awarded 116MW out of 322MW contracted.

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



Source: Bloomberg New Energy Finance

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

In 2015, the first auctioned projects started to come online. The country's first wind farm, a 53MW plant, was commissioned in the Guatemala department. Additionally, two large-scale PV plants (30MW and 50MW) were also commissioned in the Santa Rosa department, increasing Guatemala's renewable share. The addition of new renewable capacity and future pipeline of projects should have a positive impact on reducing electricity prices, decreasing them in the long term.