**EAST AFRICA** 



GDP: **\$46.9bn** 

Five-year economic growth rate: 8%

Population: 94.1m

Total clean energy investments, 2006-2013: \$1.4m

Installed power capacity: 2.1GW

Renewable share: 10.2%

Total clean energy generation: 985.2GWh

Top energy authority:

Ministry of Water, Irrigation and Energy

OVERALL RANKING
2014

4

19

OVERALL SCORE

1.25

PARAMETER	RANKING	SCORE
I. Enabling Framework	19	1.30
II. Clean Energy Investment & Climate Financing	24	0.63
III. Low-Carbon Business & Clean Energy Value Chains	17	2.63
IV. Greenhouse Gas Management Activities	32	0.97

#### **SUMMARY**

Ethiopia placed 19<sup>th</sup> in *Climatescope* 2014, with a score of 1.25. It ranked highest for its clean energy value chain, reflecting the regional significance of its fast growing economy.

Despite plans to develop its wind, geothermal, solar and large hydro resources, the country was awarded mediocre scores for its enabling framework and clean energy investment parameters. This reflects the absence of policies to encourage private investment, its unliberalized power market and, given the size of the national economy, a relatively moderate level of (non-large hydro) investment since 2006.

The country has generating capacity of a little over 2GW, almost all of it large hydro, and there are ambitious plans to expand this. The

government's Growth and Transformation Plan 2010-15 is targeting 10GW of hydro power by 2015, largely through the enormous 6GW Grand Ethiopian Renaissance Dam Project.

Addis Ababa

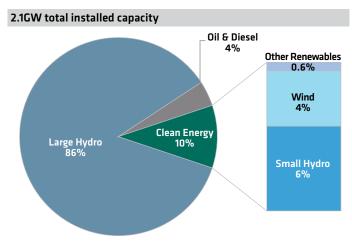
Ethiopia has seen a surge of activity in its energy sector in recent years. It has commissioned more than 1GW of large hydro and 80MW of wind capacity since 2009, and contracted several more such projects. At the end of 2013, the government signed early-stage contracts for 300MW of solar and up to 1GW of geothermal power, the latter with the country's first independent power producer (IPP).

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

#### PARAMETERS AT A GLANCE

Ethiopia's power sector remains under the control of the stateowned utility, the Ethiopian Electric Power Corporation. In late 2013, it was split into two, with the aim of improving service (rather than liberalization) by forming a separate distribution company. The country has ambitions to become a major regional exporter of power based on its clean energy resources.

## **INSTALLED POWER CAPACITY BY SOURCE, 2013 (%)**



Source: Bloomberg New Energy Finance, Ethiopian Electric Power Corporation, Ministry of Water, Irrigation & Energy, Ethiopian Sugar Corporation
Note: Other renewables refers to solar and geothermal plants.

Ethiopia placed 19<sup>th</sup> on Enabling Framework Parameter I. Its score in this area was negatively impacted by the country's state-controlled power sector, very low power prices and the absence of specific mechanisms to encourage clean energy investment, despite having ambitious targets for renewable energy expansion. This may improve as the new regulator, the Ethiopian Energy Authority, assumes additional powers to permit IPPs and recommend tariffs. However, IPPs have been allowed to operate in the country since 1997 and there does not seem to be appetite to introduce a more predict-

#### **KEY POLICIES**

Energy Target	To expand large hydro capacity to 10GW by 2015 under the Growth and Transformation Plan, and overall capacity to 24.1GW by 2030 and 37GW by 2037 under separate ministry and utility plans.
Biofuels	A mandate to blend 10% ethanol with gasoline in Addis Ababa and the surrounding area.
Debt/Equity Incentives	The government has a Rural Electrification Fund, biogas digester program and a new energy efficiency fund.
Tax Incentives	Investors are eligible for a range of tax reductions and import duty exemptions.

Source: Bloomberg New Energy Finance Policy Library

able process. Furthermore, the government did start working on a feed-in tariff in 2009, but it was never implemented and according to ministry officials has been abandoned.

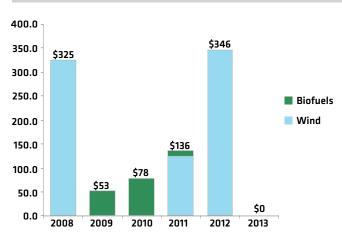
The country fared marginally worse on Clean Energy Investment Parameter II, finishing 24th. More than half of the \$1.5bn invested since 2006 was in the Ashegoda and Adama wind projects, with the rest predominantly in ethanol plants (that incorporate an element of biomass power generation) at several of the country's sugar refineries. In 2013, the government agreed provisional terms with the country's first IPP, Reykjavik Geothermal, for projects that could amount to \$4bn of investment.

Ethiopia gained 17<sup>th</sup> place for Parameter III Low-Carbon Business and Clean Energy Value Chain Parameter II, its highest Climatescope ranking. This reflects the presence of project developers and service providers in onshore wind, small hydro, geothermal, biomass, biofuel and solar; and the scarcity of component manufacturers.

The country's lowest placing, 32<sup>nd</sup> position for Greenhouse Gas Management Activities Parameter IV, reflects the low level of CDM activity. However, it does score points for the training and other services offered by the Ethiopia Climate Innovation Center.

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

## \$1.4m total cumulative investment



Source: Bloomberg New Energy Finance

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