

WEST AFRICA



Liberia

GDP: **\$2bn**

Five-year economic growth rate: **11%**

Population: **4.3m**

Total clean energy investments, 2006-2013: **\$296m**

Installed power capacity: **26.6MW**

Renewable share: **15%**

Total clean energy generation: **12.3GWh**

Top energy authority:

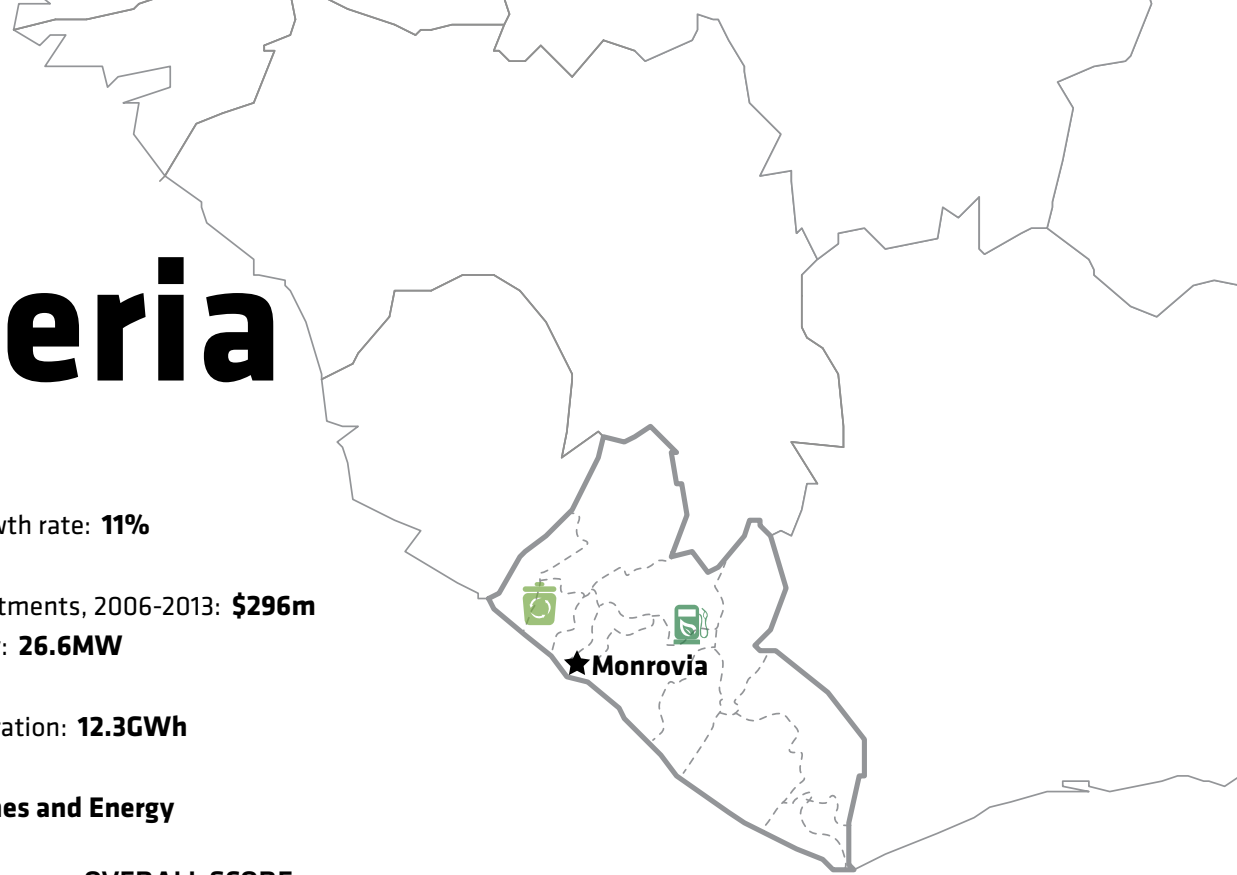
Ministry of Lands, Mines and Energy

OVERALL RANKING
2014

35

OVERALL SCORE
2014

0.91



PARAMETER	RANKING	SCORE
I. Enabling Framework	08	1.44
II. Clean Energy Investment & Climate Financing	29	0.52
III. Low-Carbon Business & Clean Energy Value Chains	38	1.03
IV. Greenhouse Gas Management Activities	53	0.18

SUMMARY

Liberia ranked 35th in *Climatescope* 2014, scoring 0.91 overall. It fared best on Enabling Framework Parameter I, mainly due to its extremely high power prices, very low electrification rate and high dependency on expensive fossil fuels. All suggest opportunities for alternative sources of generation and distributed energy.

When civil war took hold of the country in 1989, the Liberia Electricity Corporation (LEC) had an installed capacity of 191MW, comprising the 64MW Mount Coffee large-hydro plant and an assortment of heavy fuel oil and diesel generators. When peace resumed in 2003, this capacity had been almost entirely destroyed. As the country now seeks to rebuild, its

national grid consists nearly entirely of 22.6MW of oil and diesel capacity, with retail power prices upwards of \$0.53 per kWh.

In 2009, the government adopted a National Energy Policy establishing targets, a new institutional framework, and a Rural and Renewable Energy Agency. However, Liberia has yet to adopt new legislation liberalizing the power sector.

Liberia's key power project today is the rehabilitation of large-hydro project Mount Coffee, which once operating should allow the country to quadruple current capacity. The ebola epidemic poses a new challenge of as yet unknown scale and impact.

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

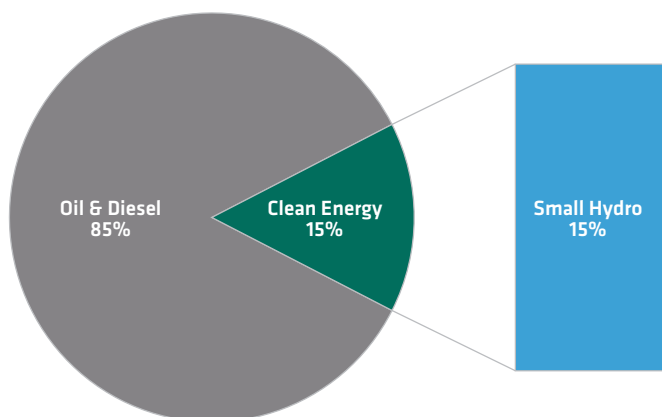
PARAMETERS AT A GLANCE

Liberia scored its highest on Enabling Framework Parameter I by having the highest retail electricity prices and lowest electrification rate – just 1.6% in 2013 – in the index.

It scores less well on the policy and power sector structure aspects of the Enabling Framework. National utility LEC has a de facto monopoly on generation, transmission and distribution under the law that created it in 1973. New legislation to allow for privatization and unbundling is under development – but has yet to be agreed, with the establishment of an independent regulator being particularly controversial. Meanwhile, the country's 2009 National Energy Policy has the stated goal of hitting 30% renewables by 2015 and cutting CO2 emissions by 10% but contains no tools to drive investment aside from a Rural Energy Fund that is not yet operational.

INSTALLED POWER CAPACITY BY SOURCE, 2013 (%)

26.6MW total installed capacity



Source: Bloomberg New Energy Finance, Liberia Electricity Corporation, Norplan, Firestone

Liberia's only operating clean energy project is the 4MW small hydro project at the Firestone rubber plantation. Development financing has also overseen the rehabilitation of the 60kW Yandohun micro hydro plant and several distributed solar systems and pilot distributed renewable energy projects of negligible capacity. A sizeable biomass plant slated for development at Buchanan has been abandoned.

KEY POLICIES

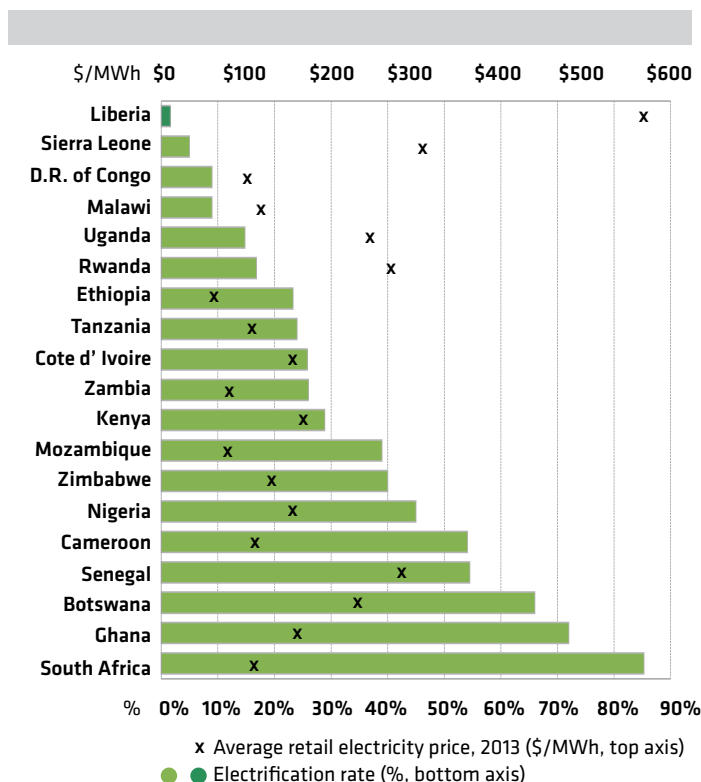
Energy Target	Renewable energy to comprise 30% of electricity production and 10% of overall energy consumption by 2015 under the 2009 National Energy Policy.
Tax Incentives	Renewable projects are eligible for a range of tax reductions and import duty exemptions.

Source: Bloomberg New Energy Finance Policy Library

Liberia finishes 29th and scores best under Clean Energy Investment Parameter II in terms of grants and loans relative to the size of its economy. This is likely to expand further as development finance under the Climate Investment Funds' (CIF) Scaling Up Renewable Energy Program (SREP) moves beyond its preparatory phase. With few projects, investment has been minimal, and the green microfinance sector has yet to get going.

With its post-war economy still under rehabilitation, Liberia has a very limited value chain – though importers of solar panels complain they are hindered by import duties – and almost no carbon market-related activity, and thus does not score well on Parameters III and IV.

ELECTRIFICATION RATES (%) VS AVERAGE RETAIL ELECTRICITY PRICES, 2013 (\$/MWh)



Source: Bloomberg New Energy Finance