# Sierra Leone

GDP: **\$4.9bn** 

Five-year economic growth rate: 15%

Population: 6.1m

Total clean energy investments, 2006-2013: \$363.8m

Installed power capacity: **182.3MW** 

Renewable share: 31.1%

Total clean energy generation: **154.1GWh** 

Top energy authority: Ministry of Energy and Power

OVERALL RANKING

2014

**OVERALL SCORE** 

2014

0.76

PARAMETER	RANKING	SCORE
I. Enabling Framework	33	1.03
II. Clean Energy Investment & Climate Financing	26	0.58
III. Low-Carbon Business & Clean Energy Value Chains	42	0.91
IV. Greenhouse Gas Management Activities	52	0.27

#### **SUMMARY**

Sierra Leone finished 44th in *Climatescope* 2014, with a score of 0.76. The West African nation was strongest on Clean Energy Investment Parameter II, thanks largely to the financing of the Addax bioenergy project in 2011, but weak on Low Carbon Business Parameter III and Greenhouse Gas Management Activities Parameter IV.

At the end of 2013, it had total power capacity of 182MW, made up of small hydro and diesel power plants. Around half of this comprises captive thermal generation at the country's mines. In May 2014, the Addax biomass plant was commissioned, adding a further 15MW to the mix. Transmission and distribution infrastructure is very poor resulting in power losses of around 45%. A law passed in 2011 to start unbundling the power sector - currently the domain of the state-run national utility - has yet to be implemented.

The government set a target to achieve 35% access to electricity by 2015, but this will be missed given that the electrification rate stood at less than 10% in 2013. There are no policies encouraging investment in energy, clean or otherwise.

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

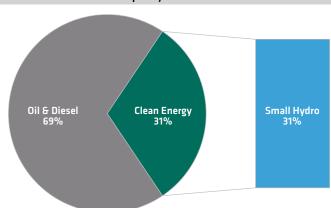
#### **PARAMETERS AT A GLANCE**

Sierra Leone's small power sector is owned and operated by the state-run, vertically integrated National Power Authority. Access to electricity is largely confined to the capital, Freetown, and the surrounding area. In 2011, the National Electricity Act mandated separate companies for generation and transmission, on the one hand, and distribution and supply, on the other. However, as of the second quarter of 2014, neither had yet been established. In the absence of a regulator, the Ministry of Energy has oversight of the sector.

Sierra Leone ranked 33<sup>rd</sup> on Enabling Framework Parameter I. Its score was negatively impacted by the lack of clean energy-related policies, but buoyed by the sector's high share of total energy capacity (the Bumbuna hydro project accounts for more than 30% of national capacity). The country also picked up points for its very low rate of electrification and high proportion (98%) of the population using solid fuels for cooking, both of which create considerable potential for clean energy solutions.

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

#### 182.3MW total installed capacity



Source: Bloomberg New Energy Finance, UNDP, Addax Bioenergy

Sierra Leone placed 26<sup>th</sup> on Clean Energy Investment Parameter II, a high score that largely reflects the financing in 2011 of the Addax bioenergy project. This accounts for 96% of the \$364m invested in clean energy since 2006, with the remainder going to small hydro projects. The flagship Bumbuna small hydro project refinancing is not included in the investment figures because the transaction happened in 2004.

#### **KEY POLICIES**

Energy Target

Goal to reach 35% electrification rate by 2015.

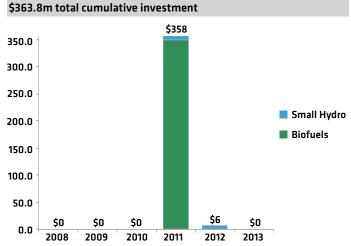
Source: Bloomberg New Energy Finance Policy Library

On Clean Energy Value Chains Parameter III it took 42<sup>nd</sup> place, below all other African nations, reflecting the scarcity of manufacturers and service providers involved in clean energy activities. Nevertheless, it does have certain limited capabilities in the small hydro, biofuel and biomass sectors, as well as some importers and retailers of off-grid energy products.

Sierra Leone ranks fourth from bottom of the global index for its Greenhouse Gas Management Activities Parameter IV, reflecting the presence of just one CDM project. Though small, this sector has not experienced any project failures to date.

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

## 2008-2013 (Şm)



Source: Bloomberg New Energy Finance

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