Aloe Energy

COUNTRY BRIEF · NOVEMBER 2026

Sierra Leone: grid and electricity access

Mission 300 compact country

5.3 M
people live without night-time light, a proxy for no power

67%
of them live within 15 km of a power line

2,700
km of mapped and predicted power lines, all voltages

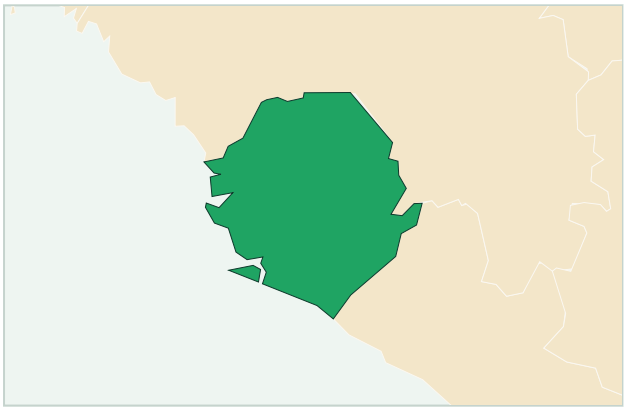
36%
electricity access, as stated in the compact (2025)

78%
access target in the Mission 300 compact (2030)

About 5.3 million people in Sierra Leone live where satellites see no electric light at night, and 67% of them live within 15 km of a power line. This page brings together what our grid-edge screening and Sierra Leone's Mission 300 energy compact say about who still needs power, how close the grid is and what the country has committed to.

WHAT THIS MEANS

To reach 78% electricity access by 2030, Sierra Leone needs to add about 8 percentage points a year from 2025: from 36% today.



NEAR THE GRID, NOT ON IT

About 5.3 million people in Sierra Leone, roughly 74% of the population, live where satellites see no electric light at night. Of them, 67% live within 15 km of a mapped or predicted power line: 1.2 million within 2 km, 2.3 million 2 to 15 km away, and 1.8 million farther out. The largest group lives 2 to 15 km out: close enough to plan for the grid, too far for a quick connection. That is where mini-grids built to join the grid later can do the most good.



Within 2 km of a line: **1.2 million** (23%)
2 to 15 km: **2.3 million** (43%)
More than 15 km: **1.8 million** (33%)

"Without night-time light" is a satellite proxy, not a measured access rate.

THE GRID TODAY

Gridfinder, which combines OpenStreetMap lines with medium-voltage lines predicted from night-time lights, maps about 2,747 km of existing and likely power lines in Sierra Leone. That includes lower-voltage distribution lines, so it is not comparable with the high-voltage totals on our grid-atlas country pages. We have not yet built a detailed grid atlas for this country.

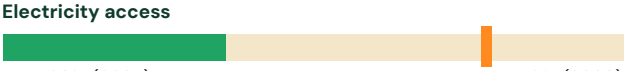
People without night-time light, by distance to a line

Distance	Million people	Share
Within 2 km of a line	1.22	23%
2 to 15 km	2.29	43%
More than 15 km	1.76	33%
Total	**5.27**	**100%**

MISSION 300 COMPACT

Sierra Leone's Mission 300 energy compact commits to raising electricity access from 36% to 78% by 2030. New access is planned as 22% grid, 22% mini-grids and 56% standalone solar.

Electricity access

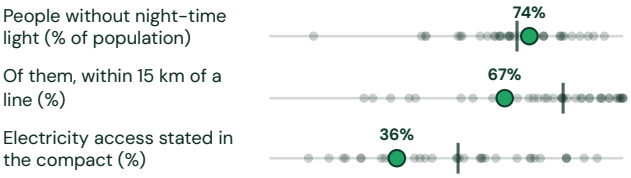


Now: **36%** (2025) Target: **78%** (2030)

Mission 300 energy compact

Commitment	Value
Planned split of new access	grid 22%, mini-grids 22%, standalone solar 56%
Clean cooking target	from 2% to 25% by 2030
Private investment sought	US$1.4 billion
Rules for mini-grids when the grid arrives	Yes
E-waste commitment	No

HOW IT COMPARES



Each dot is one country with a page on aloeenergy.org; the line marks the median. Positions only, no ranking.

Sources: People and distance to the grid: WorldPop 2020 and gridfinder (CC BY 4.0); compact: the national Mission 300 energy compact.

Aloe Energy

The full page, with the interactive atlas, is at aloeenergy.org/countries/sierra-leone. The maps are free to view; the data behind them is available on request: brandon@aloeenergy.org. Aloe Energy is a not-for-profit initiative working at the grid edge in Sub-Saharan Africa.

Scan for the live page and map

Cite as: Aloe Energy (2026). Sierra Leone country brief, November 2026. aloeenergy.org/countries/sierra-leone. Free to share under CC BY 4.0.