Aloe Energy

COUNTRY BRIEF · NOVEMBER 2026

Burundi: grid and electricity access

Eastern Africa Power Pool

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

99%
of them live within 15 km of a power line

480
km of high-voltage lines, 66 kV and above

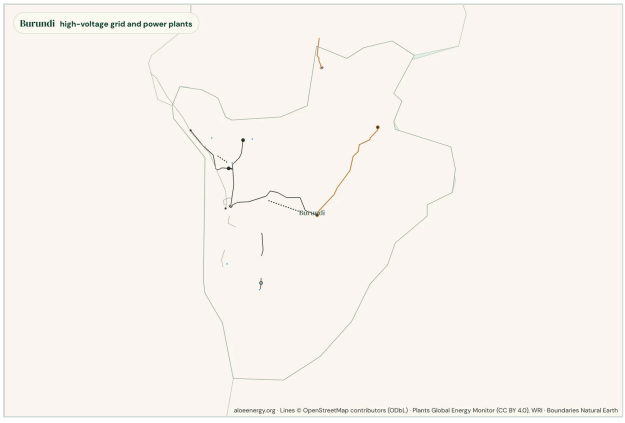
224
MW of operating power plants, 10 MW and above

3
power plants and transmission lines planned or under construction

About 10 million people in Burundi live where satellites see no electric light at night, and 99% of them live within 15 km of a power line. This page brings together what our open atlases show for Burundi: about 480 km of high-voltage lines, 224 MW of power plants and the projects still to come.

WHAT THIS MEANS

To reach 70% electricity access by 2030, Burundi needs to add about 9 percentage points a year from 2025: from 26% today.



Map: Aloe Energy EAPP grid atlas. Lines © OpenStreetMap contributors (ODbL).

NEAR THE GRID, NOT ON IT

About 10 million people in Burundi, roughly 72% of the population, live where satellites see no electric light at night. Of them, 99% live within 15 km of a mapped or predicted power line: 3.3 million within 2 km, 6.6 million 2 to 15 km away, and 148,000 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. At its 2016-2023 pace, about 0.3 percentage points a year (World Bank), Burundi would reach the 70% access target in its Mission 300 compact after 2050, not 2030; the target needs about 8.3 points a year.



Within 2 km of a line: **3.3 million** (33%)
2 to 15 km: **6.6 million** (66%)
More than 15 km: **148,000** (1%)

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

THE GRID TODAY

Burundi's mapped high-voltage network runs to about 480 km of lines at 66 kV and above, with 9 substations. The highest voltage on the map is 220 kV, and 22% of the line length runs at 220 kV or more. Installed capacity was about 166 MW (2025). The latest international tracking report puts access to electricity at 20% of people.

Mapped line length

Voltage	km
220 kV	100
110 kV	195
66 kV	113
Voltage not recorded	39
Gap-fill from older public maps	33
Total	**480**

PLANTS AND PIPELINE

Eight operating power plants of 10 MW and above add up to about 224 MW, 51% of it hydro. The largest is Mamba Hakan (Peatpower Plant) (80 MW, other).

Operating capacity by type



Hydro: **114 MW** (51%) Other: **80 MW** (36%)
Gas: **30 MW** (13%)

Promised and now expected dates

Project	Type	MW	First promised	Now expected
Rwanda–Burundi 220 kV (Kigoma–Butare–Ngozi–Gitega)	Line	-	2016	2027
Burundi–DR Congo 220 kV (Kamanyola–Bujumbura)	Line	-	not set	2028
Ruzizi III 220 kV evacuation	Line	-	construction from Dec 2025	2030

MISSION 300 COMPACT

Burundi's Mission 300 energy compact commits to raising electricity access from 26% to 70% by 2030. New access is planned as 60% grid, 13% mini-grids and 27% standalone solar.

Electricity access



Now: **26%** (2025) Target: **70%** (2030)

Mission 300 energy compact

Commitment	Value
Planned split of new access	grid 60%, mini-grids 13%, standalone solar 27%
Clean cooking target	40% by 2030
Private investment sought	US$1.54 billion
Rules for mini-grids when the grid arrives	Yes
E-waste commitment	Yes

SECOND LIFE

Between 2026 and 2040, about 1,200 tonnes of solar equipment and stationary batteries are expected to retire in Burundi, most of it off-grid solar kits and mini-grids. That is 0.3% of the total for the 18 countries in our second-life atlas.

Solar and batteries retiring each year (tonnes)



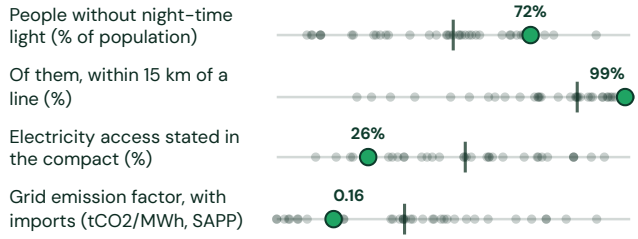
EMISSIONS

In 2024, each megawatt-hour used in Burundi came with about 0.16 tonnes of CO2, including imports. The table also gives the combined margin used for carton projects.

Grid emission factor, 2024 (tCO2/MWh)

Measure	tCO2/MWh
Generated in country	0.187
Electricity used, with imports	0.161
Combined margin (for carbon projects)	0.209

HOW IT COMPARES



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

Sources: Grid lines: OpenStreetMap contributors (ODbL), gap-fill from the World Bank Africa grid (2017); power plants: Global Energy Monitor (September 2026), WRI and public project sources; capacity and access: regulators, utilities and Tracking SDG7 2026; people and distance to the grid: WorldPop 2020 and gridfinder (CC BY 4.0); second life: Aloe second-life model (central case); emission factor: Aloe grid emission factors (Ember); compact: the national Mission 300 energy compact.

Aloe Energy

The full page, with the interactive atlas, is at aloeenergy.org/countries/burundi. 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.

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