Botswana

Trilemma Rank
#96

Trilemma Score
57.7

Balance Grade
DCC

Botswana shows over 40% growth in the Energy Equity index since 2000, mostly as a result of increasing access to energy. This has been couples with improved grid stability since 2010, but overall the Security index is falling due to import dependence and a lack of generation diversity. Some sustainability indicators are growing, including air quality and managed energy intensity, and contextually Botswana's macroeconomic environment contributes to a balance grade of DCC, and a global ranking of 96.

Population
2.3 (millions)

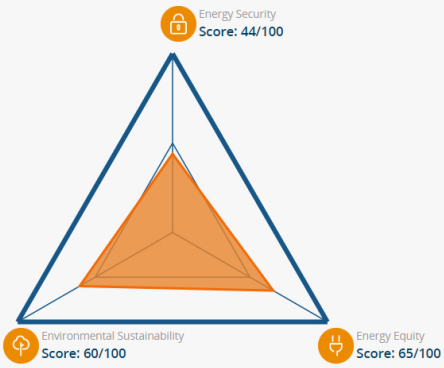
Land Area
566.7 (thousand sq. km)

GDP Per Capita
17,024 (PPP US$)

Industrial Sector
30.3 (% of GDP)

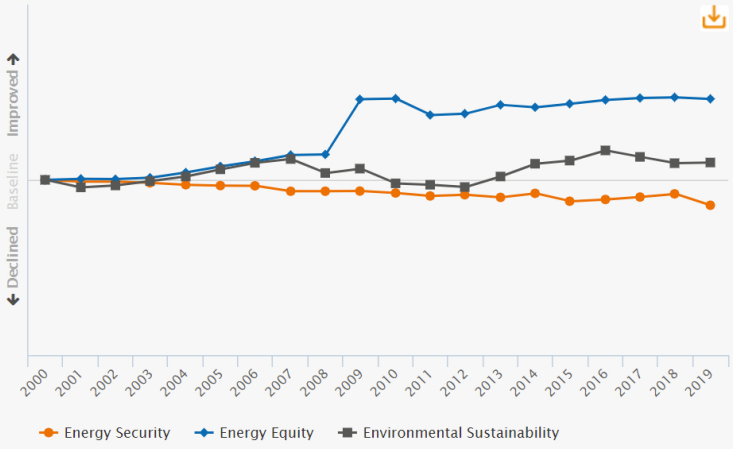
GDP Growth
2.4 (annual %)

Balance



Historical Trilemma Scores

Trend lines track the country's performance in each dimension, beginning with a baseline of 100 in the year of 2000



Trends and Outlook

Botswana's energy strategy is focused on diversifying its energy mix, shifting from coal-fired energy to renewables, and away from its reliance on energy imports from South Africa and other neighbouring countries. Botswana has tremendous potential for solar energy utilisation, with an annual Direct Normal Irradiation equivalent of 3,000 kWh/m /year in most parts of the country. Earlier this year, the GOB (Government of Botswana) partnered with the World Bank to develop a renewable energy strategy to unlock the country's solar energy potential.

With 212 billion tons of coal, coal-fired plants remain the foundation of the GOB's energy framework and current peak demand of approximately 650 MW. The GOB is investing in national and regional grid infrastructure to facilitate the export of electricity to neighbouring countries. In addition, the government has awarded contracts to increase the Morupule B coal-fired plant's production to 1,200 MW. Private companies are seeking to expand coal-fired production with projects exceeding 3,000 MW for export.

Key metrics

Metrics are determined relative to other countries, with the top performer receiving a full bar.

	2019 Performance	Trend 2010-19
Energy security		
Import dependence		▼
Diversity of electricity generation		▶
Energy storage		▼
Energy equity		
Access to electricity		▲
Electricity prices		▼
Gasoline and diesel prices		▶
Environmental sustainability		
Final energy intensity		▲
Low carbon electricity generation		▲
CO2 emissions per capita		▼
Country context		
Macroeconomic stability		▲
Effectiveness of government		▼
Innovation capability		▲