

Singapore



Trilemma Rank

#43

Trilemma Score

71.2

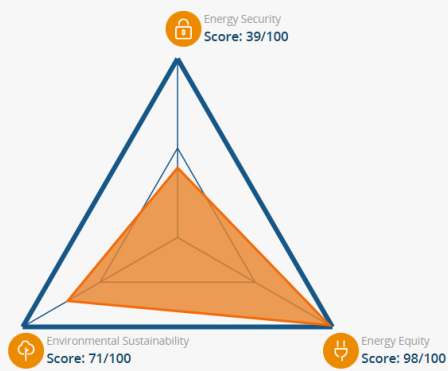
Balance Grade

DAB

Singapore ranks 43rd globally, but presents an unbalanced triangle across the three dimensions. Equity is the strongest dimension with universal quality access and well managed affordability indicators. Sustainability indices represent improvements in GHG emissions relative to growth. Per capita CO2 is high and the lack of renewables in the mix is a limitation to sustainability performance. Security is the weakest dimension due to high levels of import dependence, low stocks, and a lack of supply diversity. The balance grade is DAB.

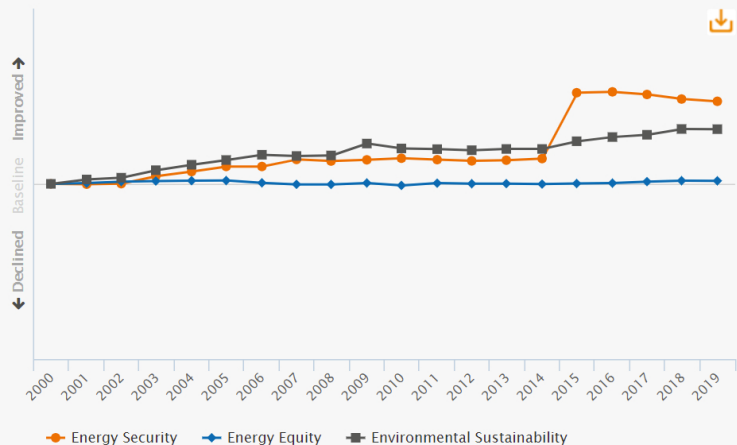
Population
5.6 (millions) **Land Area**
0.7 (thousand sq. km) **GDP Per Capita**
94,105 (PPP US\$) **Industrial Sector**
23.2 (% of GDP) **GDP Growth**
3.6 (annual %)

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



Highcharts.com

Trends and Outlook

Singapore is heavily dependent on imports of fossil fuels to meet its energy needs. Today, more than 90% of Singapore's electricity is produced from imported natural gas, impacting the country's energy security score. Nevertheless, solar energy in Singapore has accelerated over the past few years. The installed capacity of grid-connected solar photovoltaic systems has increased significantly from 25.5 MW in 2014 to 46.0 MW in 2015 and 156 MW by the end of the last quarter of 2018. Another significant change is the recent liberalisation of the Singapore electricity market. Since last year, households and businesses can choose to buy electricity from a retailer at a rate plan tailored to their needs, or continue to purchase electricity from the SP Group at the regulated rate.

The country has been investing heavily in R&D projects, particularly in the electricity grid infrastructure. The country has recently launched a Grid 2.0 initiative, that would consolidate the country's gas, solar and thermal energy into a single intelligent network. The government is committing about S\$1 billion (USD 0.724 billion) from the National Research Foundation into this initiative to address Singapore's future energy challenges.

Key metrics

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

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

