

Singapore

Trilemma Rank  
# 40

Trilemma Score  
70.5

Balance Grade  
DAB

Singapore ranks in the top 10 in Energy Equity globally due to universal quality energy access and affordability. Sustainability indices reflect overall improvements in the decoupling of greenhouse gas emissions relative to GDP growth. Although Singapore is an energy trading and bunkering hub, it does not score so highly on Energy Security due to its dependence on imports, low storage capacity and lack of diversity of fuel sources. Singapore gets a balance grade of DAB and its global rank is 40.

Population  
5.6 (millions)

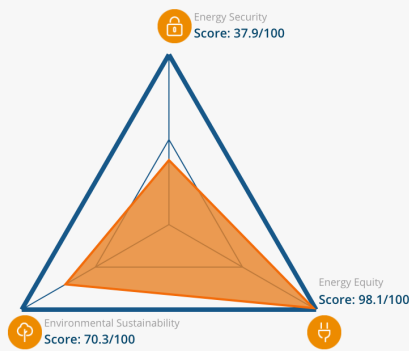
Land Area  
0.7 (thousand sq. km)

GDP Per Capita  
64,582 (PPP US\$)

Industrial Sector  
25.2 (% of GDP)

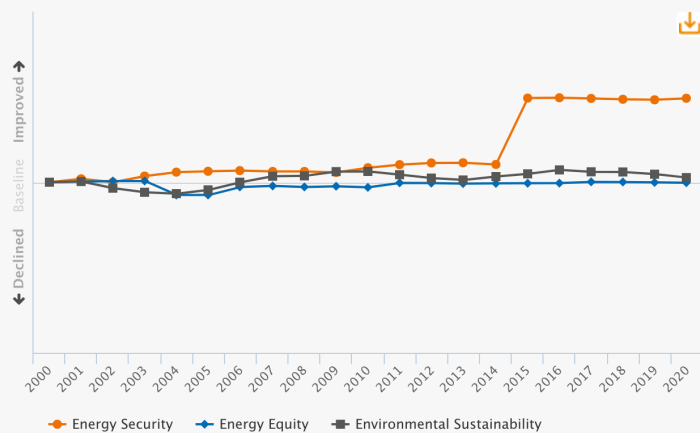
GDP Growth  
3.1 (annual %)

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

Singapore aims to provide clean, affordable and reliable energy to power the economy and meet the needs of its people. The energy sector had undergone rapid transformation in the last twenty years through market reforms which promoted competition and the adoption of more efficient combined-cycle power plants that use natural gas as the main fuel to generate electricity. Today, about 95% of Singapore's electricity is generated using natural gas, which is expected to remain the dominant fuel in the future.

Singapore had also pushed ahead with renewable energy projects, mainly solar, as part of a diversification strategy. This has led to the steady growth in the deployment of rooftop solar panels for commercial buildings and industrial plants. The government plans to have installed solar capacity of 2GWp by 2030, equivalent to 10% of the city's peak demand. It is also looking into energy storage systems to counter the intermittency of renewable energy sources.

Singapore had also adopted various measures to reduce its carbon footprint. It implemented a carbon tax regime in 2019 whereby an industrial facility that emits direct GHG above 25,000 tCO<sub>2</sub>e is subject to a carbon tax of S\$5 per tonne of GHG emission.

Various energy grants have also been provided by the government to help the industry become more energy efficient. Singapore is also exploring ways to tap into regional power grids to access energy that is cost-competitive. It is also looking into emerging low-carbon solutions (e.g. carbon capture, utilisation and storage technologies as well as hydrogen) that have the potential to help reduce Singapore's carbon footprint.

Key metrics

Metrics are determined relative to other countries, with a full bar representing a score of 100.

