

China



Trilemma Rank
55

China ranks 55th globally and gets a balance grade of BBD.

Trilemma Score
67.0

Balance Grade
BBD

Population
1,386.4 (millions)

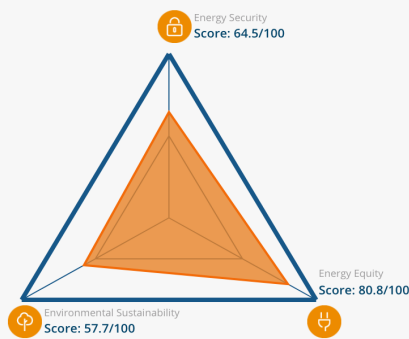
Land Area
9,388.2 (thousand sq. km)

GDP Per Capita
9,771 (PPP US\$)

Industrial Sector
40.7 (% of GDP)

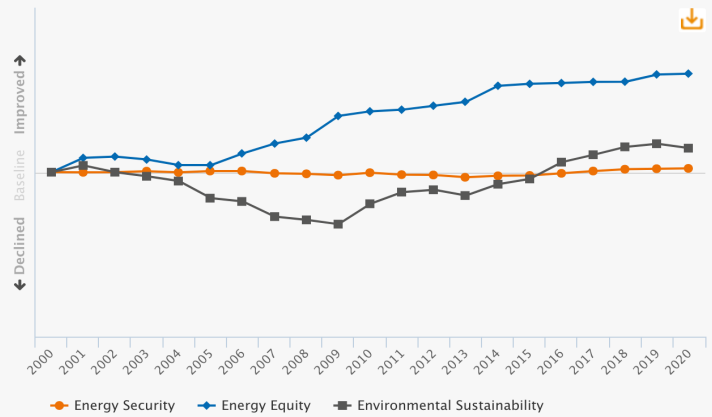
GDP Growth
6.6 (annual %)

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



Trends and Outlook

As the world's largest energy consumer and biggest emitter of greenhouse gases, China faces the challenge to continue its economic growth while reducing pollution from coal and containing its greenhouse gas emissions. The share of coal in the primary energy mix was of 62% in 2017 (compared to 74% in the mid-2000s). In addition, ongoing industrialisation and urbanisation have led to significantly increased demand, making energy security a major concern. In 2017 China's energy self-sufficiency dropped to about 80%, with external dependency on oil and gas reaching 70% and 35% respectively. China is seeking to address energy security issues through comprehensive measures including conservation, efficiency, technological solutions and energy system reform.

China is now the largest producer of renewable electricity in the world. In 2017, their share reached 26.4% in electricity production. The country has the largest global hydropower capacity, as symbolised by the giant Three Gored dam on the Yangtze River. Since the 2000s, China has been developing its solar and wind capabilities while also developing its industrial advantage as the country accounts for more than a third of global solar panel production and is one of the largest wind turbine manufacturers in the world. A vast UHV-transmission-based distribution grid has helped bring electricity from the west of China, where its renewable power sources are based, to the demand-heavy east. In 2017, China's carbon intensity decreased by over 40% compared with the 2005 level, which means it reached its original goal of 40%-45% by 2020, three years ahead of schedule.

China's considerable investment capacity and the strength of its new photovoltaic, wind, hydro and nuclear industries make the country an increasingly competitive player in global markets. With its Belt and Road Initiative, China aims to invest heavily in transport and trade infrastructure around the world; China's influence in Africa, Asia, Latin America is growing.

Key metrics

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

	2020 Performance	Trend 2010-20
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	██████████	▲