

Spain



Trilemma Rank

#18

Trilemma Score

77.0

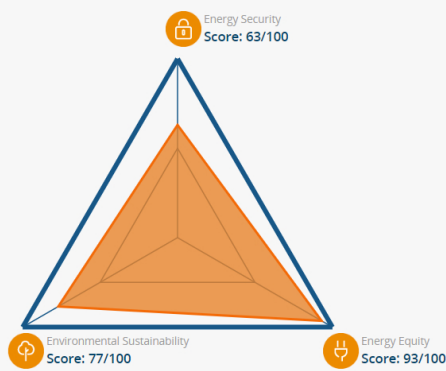
Balance Grade

BAA

Spain is one of the strongest Trilemma performers, ranking 18th globally. Equity and Sustainability are the strongest dimensions, with a slightly lower score in Security. Although Spain received one of the highest scores for Equity, dips in affordability of electricity to all sectors of the population slightly reduce the overall dimension score. Improvements in the sustainability index levelled out about five years ago: strong steps in further low carbon diversity will help this dimension further. The overall grade is strong at BAA.

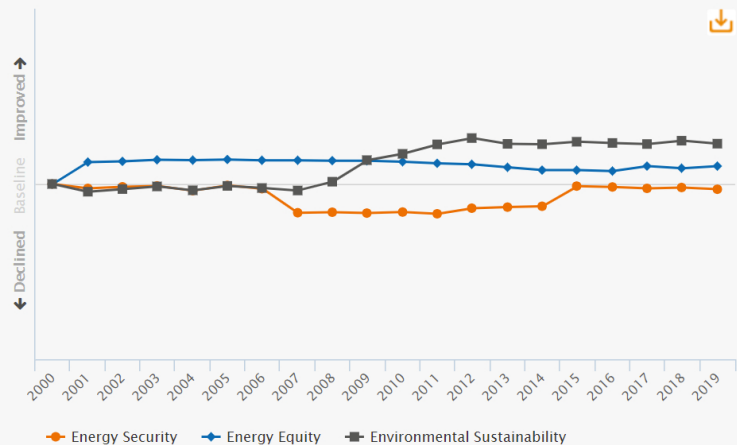
Population
46.6 (millions) **Land Area**
499.6 (thousand sq. km) **GDP Per Capita**
39,037 (PPP US\$) **Industrial Sector**
21.9 (% of GDP) **GDP Growth**
3.0 (annual %)

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

Spain has set a target of a 20% share of renewable energy in gross final energy consumption by 2020. 17.5% was achieved in 2017, and the goal is expected to be met. In 2018, renewables share in electricity generation increased to 38.1% (34% in 2017) mainly due to hydroelectric generation. Primarily due to the reduction of emissions in the electricity generation, national GHG emissions decreased by 2.2% vs 2017 and are 24.5% lower than in 2005.

In February 2019, the Spanish Council of Ministers presented the Strategic Energy and Climate Framework. This includes the National Integrated Energy and Climate Plan 2021-2030 (submitted to the European Commission), the Draft Bill on Climate Change and Energy Transition and the Just Transition Strategy, all of them with the further target of a 100% renewable energy in the power sector and a reduction of 90% GHG in 2050.

The proposals present several elements that may help Spain improve its performance in the different trilemma dimensions and include for 2030. These include reducing 20% GHG emissions compared to 1990, a growth of renewable energy production aiming at reaching 42% of the final energy use and 74% of the power production, the increase in energy storage, up to 6GW of pumped capacity and batteries, the improvement of energy efficiency of at least 32.5%, but aiming to reach 39.6%, focused on households energy rehabilitation in particular, and Sustainability of transport and mobility (5 million EVs in 2030).

The commission has recognised the ambitious Spanish plan as one of the few member states that have proposed a sufficient level of contributions for 2030.

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	<div><div></div></div>	▲
Diversity of electricity generation	<div><div></div></div>	▲
Energy storage	<div><div></div></div>	▼
Energy equity ⓘ		
Access to electricity	<div><div></div></div>	▶
Electricity prices	<div><div></div></div>	▼
Gasoline and diesel prices	<div><div></div></div>	▶
Environmental sustainability ⓘ		
Final energy intensity	<div><div></div></div>	▲
Low carbon electricity generation	<div><div></div></div>	▲
CO2 emissions per capita	<div><div></div></div>	▲
Country context ⓘ		
Macroeconomic stability	<div><div></div></div>	▲
Effectiveness of government	<div><div></div></div>	▲
Innovation capability	<div><div></div></div>	▲