

Bulgaria



Trilemma Rank  
# 27

Trilemma Score  
75.2

Balance Grade  
ABB

Bulgaria's Trilemma performance improved as a result of a steady improvement of Energy Security indicators in the second half of the decade. It also performs well on Energy Equity though it loses points on electricity affordability. The Environmental Sustainability index was stable, having improved over the past decade through the introduction of a more diversified mix of renewables into its energy mix, improved energy efficiency measures and lower CO2 emissions. Bulgaria's balance grade is ABB and its global ranking is 27.

Population  
7.1 (millions)

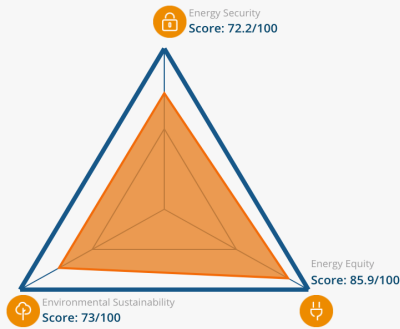
Land Area  
108.6 (thousand sq. km)

GDP Per Capita  
9,273 (PPP US\$)

Industrial Sector  
23.8 (% of GDP)

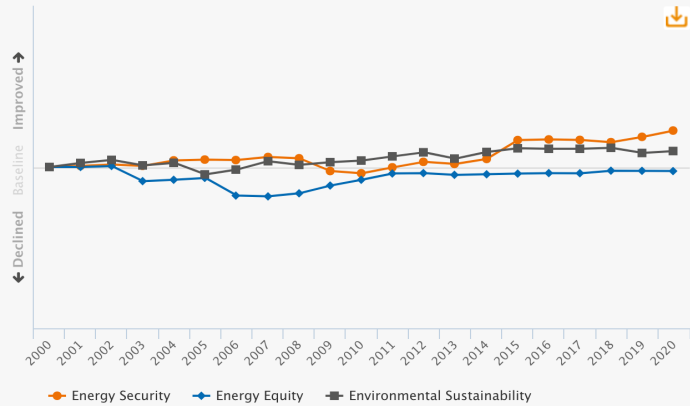
GDP Growth  
3.1 (annual %)

### 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

Bulgaria relies on domestic coal and nuclear power to meet its energy demand, which ensures a high level of energy security. The country has made significant progress in deploying renewable energy sources into its energy mix and is ahead of schedule in attaining its 2020 RES target of 16%. In 2018, it reported that the share of RES in final energy consumption had reached 20.5%. The recently published National Energy and Climate Plan (NECP) for the period 2021-2030 has set an RES target of 27%, which is expected to be achieved from hydropower expansion and solar PV deployment. Coal currently accounts for around half of total energy consumption and will continue to play an important role until 2025, after which its share is set to decrease substantially. Although phasing out coal is a priority if Bulgaria is to comply with EU energy directives under the Green Deal, there is still no clear policy as to how this will be achieved.

Bulgaria relies on Russia for more than 80% of its natural gas needs and managed to negotiate a 40% price cut earlier this year, which should help improve its balance of payments position.

The share of nuclear power is expected to remain steady until 2030, after which the government plans to increase capacity with construction of a second facility at Belene. Initial plans for a 2,000MW nuclear power plant at Belene were stalled earlier this decade but appear to be going ahead after new investors stepped in. A consortium of three companies and two potential investors have confirmed their intentions to submit binding offers and participate in the process of selecting a strategic investor for the PPP project.

Bulgaria is expected to exceed its 15% interconnectivity target by 2030 when it completes its electricity interconnection projects. Further plans include the implementation of key infrastructure projects which will change the main direction and routes of natural gas flows, the establishment of a regional natural gas hub as well as local generation, and construction of a new gas storage facility.

The disruption caused by COVID-19 may result in some delays to the realisation of major energy projects.

### Key metrics

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

|                                     | 2020 Performance     | Trend 2010-20 |
|-------------------------------------|----------------------|---------------|
| <b>Energy security</b>              |                      |               |
| Import dependence                   | ████████████████████ | ▲             |
| Diversity of electricity generation | ████████████████████ | ▲             |
| Energy storage                      | ████████████████████ | ▲             |
| <b>Energy equity</b>                |                      |               |
| Access to electricity               | ████████████████████ | ▶             |
| Electricity prices                  | ████████████████████ | ▼             |
| Gasoline and diesel prices          | ████████████████████ | ▲             |
| <b>Environmental sustainability</b> |                      |               |
| Final energy intensity              | ████████████████████ | ▼             |
| Low carbon electricity generation   | ████████████████████ | ▲             |
| CO2 emissions per capita            | ████████████████████ | ▼             |
| <b>Country context</b>              |                      |               |
| Macroeconomic stability             | ████████████████████ | ▲             |
| Effectiveness of government         | ████████████████████ | ▲             |
| Innovation capability               | ████████████████████ | ▲             |