Iceland

**Trilemma Rank**
# 22

**Trilemma Score**
76.4

**Balance Grade**
CAB

Iceland performs particularly well on Energy Equity, mainly due to the high rate of access to modern and affordable energy. Although Energy Security has improved since 2000, the country's score is affected negatively because of the lack of long-term (90 days) oil stock capacity. Iceland has had to rely increasingly on energy imports to meet rising demand from the tourism and aviation industries. The Sustainability dimension has experienced a dip since 2015 but scores remain relatively high, benefiting from 100% renewable electricity generation. Iceland's balance grade is CAB and its global ranking is 22.

**Population**
0.4 (millions)

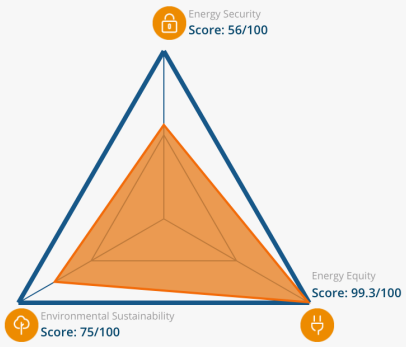
**Land Area**
100.3 (thousand sq. km)

**GDP Per Capita**
73,191 (PPP US$)

**Industrial Sector**
19.6 (% of GDP)

**GDP Growth**
4.6 (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

Iceland's electricity system relies almost entirely on renewables, dominated by hydropower which generates 70% of the country's electricity, followed by geothermal power with a 30% share. Although rich in renewable resources, Iceland does not have fossil fuel resources, which explains the lower Energy Security score. State-owned Landsvirkjun is by far the largest energy company, responsible for approximately 75% of the electricity produced. Landsvirkjun holds over 95% of the hydropower capacity and operates seasonal storage reservoirs with a capacity equal to 25% of annual electricity demand, the operation of which is vital for the security of supply.

Due to a few market players and its isolation, Iceland does not currently have a spot market for electricity and prices are fixed under long-term power purchase agreements. Around 80% of electricity generated by Landsvirkjun is sold to energy-intensive industries, making Iceland the most electricity-intensive country per capita in the world. The remaining 20% is purchased by retail energy providers, public utilities, and the Icelandic transmission system operator.

Among the measures introduced to lessen dependence on imported oil, the government has put in place an action plan intending to increase the share of renewable energy inland and maritime transportation to 40% and 10%, respectively, by 2030. This has already led to some positive changes in the sector and the share of electric cars (full and hybrid) of new vehicle sales in 2019 reached a historic high of 28%, putting Iceland second globally behind Norway. The government has also initiated a task force to create holistic long term energy expected to be unveiled in 2020/2021. Various parties have expressed their interest in installing wind farms of 50-100 MW capacity. The introduction of wind farms as well as other variable power production facilities around the country will make it necessary to plug weaknesses of the national transmission grid, which would improve the security of the national electricity system.

## Key metrics

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