

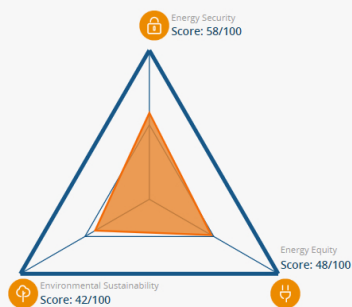
India

Trilemma Rank  
# 109Trilemma Score  
50.3Balance Grade  
BDD

India is rank 109th globally, with high scores in Security. Security has dipped almost every year since 2000 due to the reduction in energy storage, and diversity of primary energy supply as well as an increase in import dependency. Even though Security has dipped it still remains relatively high. Equity and Sustainability are low but are improving each year due to a reduction in energy prices and improvements in efficiency. India has a balance score of BDD.

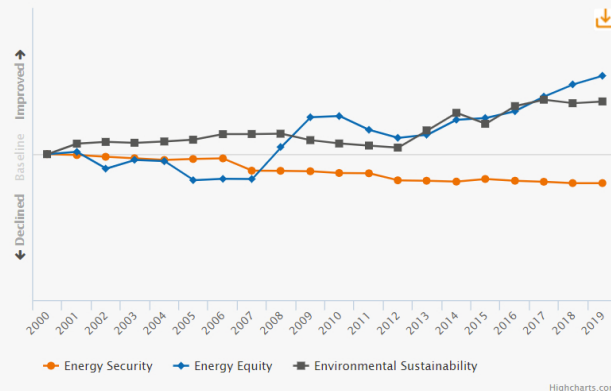
 Population  
1,339.2 (millions) Land Area  
2,973.2 (thousand sq. km) GDP Per Capita  
7,166 (PPP US\$) Industrial Sector  
26.5 (% of GDP) GDP Growth  
7.2 (Annual %)

## 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

India's Nationally Determined Contribution to the 2015 Paris agreement, aiming to achieve a 33% decrease in GHG intensity of GDP compared to 2005 and 40% renewable installed capacity by 2030, influence energy policy in India.

Energy Diversity: The target is to achieve 175 GW renewable energy capacity by 2022 and aspiration to achieve 500 GW by 2030, while increasing the share of gas in the energy mix. Steps include continued expansion of RE installed capacity, Gas grid, City Gas Distribution and plans for an LNG trading hub; policy encourages the implementation of energy storage for large solar plants, domestic PV manufacturing and RE hybrid systems.

Energy access: Electricity access provided to almost 100 % Households and aims to realize '24x7 Power for all', other measures include scheme for solarisation of irrigation pumpsets, use of barren land for Solar plants by farmers. Continued expansion of LPG connections and subsidies for LPG delivered via Direct Benefit Transfer

Energy security and environmental sustainability: Ongoing implementation of the common Hydrocarbon Exploration Licensing Policy (HELP) to boost domestic production and national policy on biofuels. Policy thrust through National Mission on Transformative Mobility and Battery Storage which includes phased manufacturing program, implementation of second phase of scheme Faster Adoption and Manufacturing of Electric vehicles in India (FAME II) with focus on Shared and Public transport. A time bound national level comprehensive strategy for pan India implementation to tackle air pollution in the form of National Clean Air Programme (NCAP). Energy efficiency measures include demand-side management through the speedy implementation of Smart Meter Programme and industrial energy efficiency through Perform, Achieve and Trade (PAT) scheme.

Key challenges include: 1) Improving the financial performance of electricity distribution companies; 2) mitigating import dependence of Oil and Gas; 3) enhancing domestic manufacture 4) integrating large variable renewable energy capacity and optimum flexible operation of conventional generation.

## Key metrics

Metrics are determined relative to other countries, with the top performer receiving a full bar.

