ACEEE'S 2025 INTERNATIONAL ENERGY EFFICIENCY SCORECARD

INDIA

RANK 15/25

POINTS 42.25/100

Notable Strengths

- Offers tax credits and loans to support electric vehicles and energy efficiency in buildings
- Low energy intensity from the agricultural sector
- Lowest vehicle miles traveled per capita
- National Urban Transport Policy includes strategies to encourage walking and cycling

Actions To Take

- Reduce high transmission and distribution losses from electric power generation
- Make building energy codes mandatory for residential and commercial buildings
- Reduce energy intensity from the industrial sector
- Enact fuel economy/emissions standards for heavy-duty vehicles

National Efforts

India offers both tax incentives and loan programs that cover machinery, electric vehicles, and building efficiency upgrades. However, India also faces 17.7% transmission and distribution losses from electric power. Although the country does have a greenhouse gas reduction goal, it has not yet established an energy savings goal. India only had data available for 87% of the metrics studied across the scorecard, so it should work to make more of this data available. Although India has a national goal to reduce greenhouse gas emissions, it should also pass a national goal to reduce energy consumption. Furthermore, the country should implement programs to promote low-income energy efficiency and reduce energy poverty.

Buildings

India has notable room for improvement in making buildings more energy efficient. Eco Niwas Samitha is India's energy conservation and sustainable building code for residential buildings, but it is voluntary. India's commercial codes cover multiple requirements related to building shell and systems, but they have not been adopted by all states and territories. Making both types of codes mandatory nationwide would be a strong step toward improving building energy efficiency. In addition to making Eco Niwas Samitha a mandatory code, India should also amend it to require efficiency upgrades for building renovations.

Industry

India has voluntary agreements with manufacturers, incentives for manufacturers, a mandate for energy managers, and mandatory energy audits. India reported high industrial energy intensity, with a value of roughly 27.8 kBtus per 2023 U.S. dollar. However, it also reported low agricultural energy intensity (0.041 kilogram of oil equivalent per U.S. dollar). While the country has a national commitment to industrial decarbonization, it could further build on its efforts by implementing an electrification target to support a long-term transition away from fossil fuels.

Transportation

India has established a goal of limiting passenger vehicle emissions to 111 grams of carbon dioxide per kilometer by 2030 but does not have relevant standards for limiting reduction of carbon dioxide emissions for heavy-duty tractor-trucks. India reported the lowest number of vehicle miles traveled per capita, at 180 miles (289 km) in 2023. It also has a National Urban Transport Policy that includes strategies to promote walking and cycling in the country. India is working toward freight sustainability with a strategy called e-FAST India.