ACEEE'S 2025 INTERNATIONAL ENERGY EFFICIENCY SCORECARD

GERMANY

RANK
2/25

POINTS
82/100

Notable Strengths

- 2nd highest per capita spending on energy efficiency
- Climate and Transformation Fund financially supports low-income energy efficiency
- Building Energy Act requires retrofits for buildings that are at least 30 years old
- 2nd lowest energy intensity from the industrial sector

Actions To Take

- Pass a national law to promote water efficiency
- Reduce energy intensity from residential buildings
- Invest more in rail transit
- Encourage greater use of public transit

National Efforts

Germany took first place in the national efforts chapter. It received high scores for energy efficiency spending, low-income energy efficiency, and electric power generation metrics. In addition, Germany has both an energy consumption reduction goal and a greenhouse gas reduction goal, illustrating the country's commitment to curbing emissions. Germany offers the EU Unified Water Label program, but the country should take a further step toward water efficiency by implementing a water efficiency law.

Buildings

Like the national efforts chapter, Germany took first place in the buildings category, earning 23 out of 25 points. The country is one of six that mandates both residential and commercial building codes that fully address all elements needed to maximize energy savings. Germany's Building Energy Act mandates upgrades to insulation and replacement of oil and gas heating systems that are more than 30 years old and more than 250 square meters. Germany has made considerable strides in commercial building performance. However, there is still potential for the country to improve residential energy intensity, as it currently ranks in the middle for this metric with 17.83 MMBtus per capita.

Industry

Germany took second place in the industry chapter. The country reported the second-lowest industrial energy intensity with a cumulative value of roughly 5.28 kBtus per 2023 U.S. dollar. Germany invests a significant amount in industrial R&D—the country dedicated 11.57% of its industrial spending to R&D in 2024, the sixth-greatest percentage among the 25 countries studied. While Germany offers incentives for manufacturers to participate in energy efficiency improvements, it should consider implementing voluntary agreements in which manufacturers commit to energy efficiency process improvements beyond regulatory requirements.

Transportation

Germany ranked fifth in the transportation chapter. Alongside the other European Union countries of Poland, France, Spain, and Italy, Germany has a goal of limiting passenger vehicle emissions to 43 grams of carbon dioxide per kilometer by 2030. The same countries aim to reduce carbon emissions from trucks by 43% by 2030. Germany spends more money on road infrastructure than it does on rail, and only 15% of its passenger-kilometer travel was from public transit. Germany could invest further in rail infrastructure to bolster public transport use.