

NOTABLE STRENGTHS

- Has policies for whole-building retrofits and offers financial incentives to encourage retrofits
- Has mandatory, comprehensive building codes for residential and commercial buildings
- 3rd lowest energy intensity from the industrial sector
- Invests more in rail transit than road infrastructure

ACTIONS TO TAKE

- Invest more in energy efficiency research and development
- Pass a national law to encourage water efficiency
- Reduce energy intensity from residential buildings
- Reduce vehicle miles traveled



NATIONAL EFFORTS

Italy ranked 8th in the national efforts category. The country ranked highly for per capita energy efficiency spending, but it could invest more in energy efficiency research and development. Italy also has a national low-income energy efficiency program called the Social Climate Fund, an EU program. The country reported 6.7% transmission and distribution losses from electric power, 44.2% of which is from renewable sources. Italy abides by the EU Unified Water Label but should also implement a national law to further support water efficiency.



BUILDINGS

In the buildings chapter, Italy tied for second place with France and Spain. Italy is one of four countries that have robust policies for whole-building retrofits and offer financial incentives to encourage building retrofits. The country’s retrofit policy bans the rental or sale of buildings that do not meet a minimum energy performance standard. Italy also has mandatory, comprehensive national building codes for both residential and commercial buildings. Italy ranked in the bottom half of countries for residential buildings’ energy intensity with a value of 17.89 MMBtus per capita.



INDUSTRY

Italy ranked as one of the top five countries in the industry chapter. Italy reported significantly low industrial energy intensity, with a value of roughly 5.6 kBtus per 2023 U.S. dollar. The country has voluntary agreements with manufacturers, incentives for manufacturers, a mandate for energy managers, and mandatory energy audits. Italy also has a national commitment to industrial decarbonization and an electrification target. The country ranked in the top half of the countries for industrial research and development, having invested 6.11% of its industrial spending in R&D in 2024.



TRANSPORTATION

Italy ranked 4th in the transportation chapter. Italy had the highest ratio of rail investment compared to road spending in 2022 (\$1.74 on rail for each \$1 of road spending). However, only 19% of travel occurs by public transit, so the country should encourage greater use of public transportation. In addition, Italy reported the 5th highest amount of vehicle miles traveled per capita. Italy ranked in 13th place for its cumulative 2024 EV score, which included metrics for passenger EV sales share (7.90%), commercial van EV market sales share (2.20%), commercial truck EV market sales (0.58%), and bus EV market sales share (18%).