

NOTABLE STRENGTHS

- Invested the greatest amount in energy efficiency research and development per capita
- Generates more than two-thirds (67.4%) of its electricity from renewable sources
- Offers multiple financial incentives to encourage building retrofits
- The National Active Transportation Strategy 2021-2026 encourages walking and cycling

ACTIONS TO TAKE

- Set a goal to reduce national energy consumption
- Reduce overall energy intensity in the industrial sector
- Mandate energy audits and onsite energy managers for large industrial facilities
- Update heavy-duty vehicle fuel economy/emissions standards past model year 2027

**NATIONAL EFFORTS**

Canada ranked fourth in the national efforts chapter. The country offers both tax incentives and loan programs that cover home upgrades and zero-emission vehicles to encourage private sector investment in energy efficiency. Canada also spent the greatest amount on total energy efficiency R&D at roughly \$615.4 million U.S. dollars. The country only faces 5.1% transmission and distribution losses from electric power, which is a strong indicator of energy efficiency. Furthermore, 67.4% of Canada's electricity comes from renewables. While Canada has an energy productivity reduction goal related to energy savings, it should also pass a goal to reduce national energy consumption.

**BUILDINGS**

Canada has state or provincial building energy codes that cover two-thirds of the population and apply to new construction and renovations of residential and commercial buildings. Canada also has federal incentives encouraging building retrofits. Canada currently has voluntary building rating and disclosure policies that only apply to some building types. Mandatory rating and disclosure policies for more building types would be a strong next step toward providing clear information on building energy performance and associated costs.

**INDUSTRY**

Canada ranked in the bottom half of countries in the industrial category. The country reported the highest level of total energy intensity of industry, at roughly 30.1 kBtus per 2023 U.S. dollar, illustrating a need for more efficient industrial practices. Canada currently has voluntary agreements and incentives with manufacturers, but a further step could be the implementation of a mandate for energy managers or energy audits.

**TRANSPORTATION**

Canada scored 9 out of 25 possible points in the transportation chapter, which was identical to its score in 2022. While Canada has not updated standards for heavy-duty vehicle model years after 2027 or emissions standards for passenger vehicles past 2026, its National Active Transportation Strategy 2021-2026 encourages walking and cycling. Canada also has a mandatory national zero-emissions vehicle sales target of 100% for cars by 2035.