



Reducing Greenhouse Gas Emissions from Energy Use in Buildings

2020 Value-for-Money Audit

Why We Did This Audit

- Under the *Environmental Bill of Rights, 1993*, our Office reports on the progress of activities in Ontario to reduce greenhouse gas emissions.
- There is significant public interest in reducing greenhouse gas emissions and making Ontario more resilient to the impacts of climate change.

Why It Matters

- Buildings are the third-largest source of emissions in Ontario, accounting for 24% of the total. In 2018, the government committed to reducing Ontario's emissions by 30% by 2030 (from 2005 levels).
- Emissions from the use of natural gas in buildings contribute to global climate change and local air pollution. Climate change affects Canadians through wildfires, extreme heat, flooding, and impacts to food systems and biodiversity.

What We Found

- Ontario has multiple programs to reduce energy use in buildings. They are administered by two ministries (Energy, Northern Development, and Mines; and Municipal Affairs and Housing) and one agency (Ontario Energy Board). These programs reduce building energy use by: (1) setting minimum energy efficiency standards for new buildings (Ontario Building Code) and appliances; (2) providing incentives for building owners and residents to reduce their natural gas consumption through conservation; and (3) requiring certain private- and public-sector building owners to measure and report their buildings' energy use.
- Although two years have passed since the November 2018 release of Ontario's climate change target and related Environment Plan, the ministries of Energy, Northern Development and Mines, and Municipal Affairs and Housing and the Ontario Energy Board do not yet focus on climate change or reducing greenhouse gas emissions in their decision-making. Given the significance of buildings to Ontario's total emissions, this reduces the likelihood of achieving the 2030 target in areas they can impact.
- The Energy and Mines Ministry does not have an integrated long-term energy plan that aligns natural gas and electricity use in buildings with Ontario's 2030 emission-reduction target. The Ministry has also made little to no progress on other Environment Plan initiatives, including expanding renewable natural gas and encouraging the disclosure of home energy use.
- The Ontario Energy Board needs an updated framework for natural gas conservation programs. Its current framework expires in 2020. This means conservation efforts are likely to remain at current levels, and opportunities for further emissions reductions may be missed. A better balance between immediate costs and long-term impacts can reduce long-term costs to natural gas ratepayers and greenhouse gas emissions. A greater focus on cost-effective natural gas conservation would align with the Environment Plan's expectation that increased natural gas conservation would achieve 3.2 Mt in emissions reductions by 2030.
- The Municipal Affairs Ministry did not adopt initial proposed changes to the Ontario Building Code that could have improved energy efficiency by 20%, and would have required renovations to meet the same standards as new buildings. The Ministry is now focused on harmonizing with the updated National Construction Codes.
- Neither Ministry assesses or enforces compliance with its building energy efficiency programs, despite risks of non-compliance.

Conclusions

- Reducing greenhouse gas emissions is not yet a cross-government priority, even though it is a commitment in the Environment Plan. This means the province risks not achieving its 2030 emission-reduction target.
- While the programs of the Ministry of Energy, Northern Development and Mines, Ministry of Municipal Affairs and Housing, and the Ontario Energy Board focus on energy efficiency and conservation, they do not specifically target reducing greenhouse gas emissions. This reduces the potential for programs to achieve significant emissions cuts; for example, by encouraging building owners to switch from natural gas to lower-carbon heating sources.
- The Ministry of Energy, Northern Development and Mines, Ministry of Municipal Affairs and Housing and the Ontario Energy Board also do not have sufficient systems and processes to effectively oversee, evaluate and improve the performance of programs to support and encourage reducing energy use in buildings.