

TransformTO Net Zero Strategy

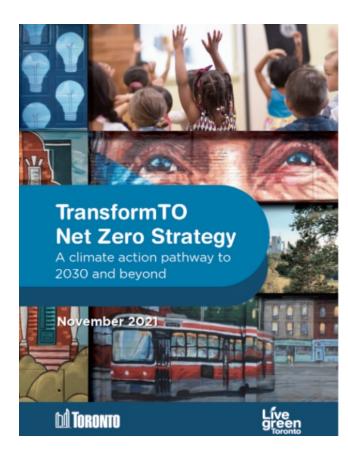








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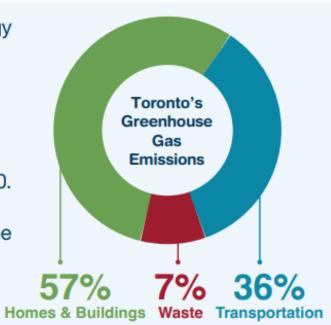


GETTING TO NET ZERO BY 2040

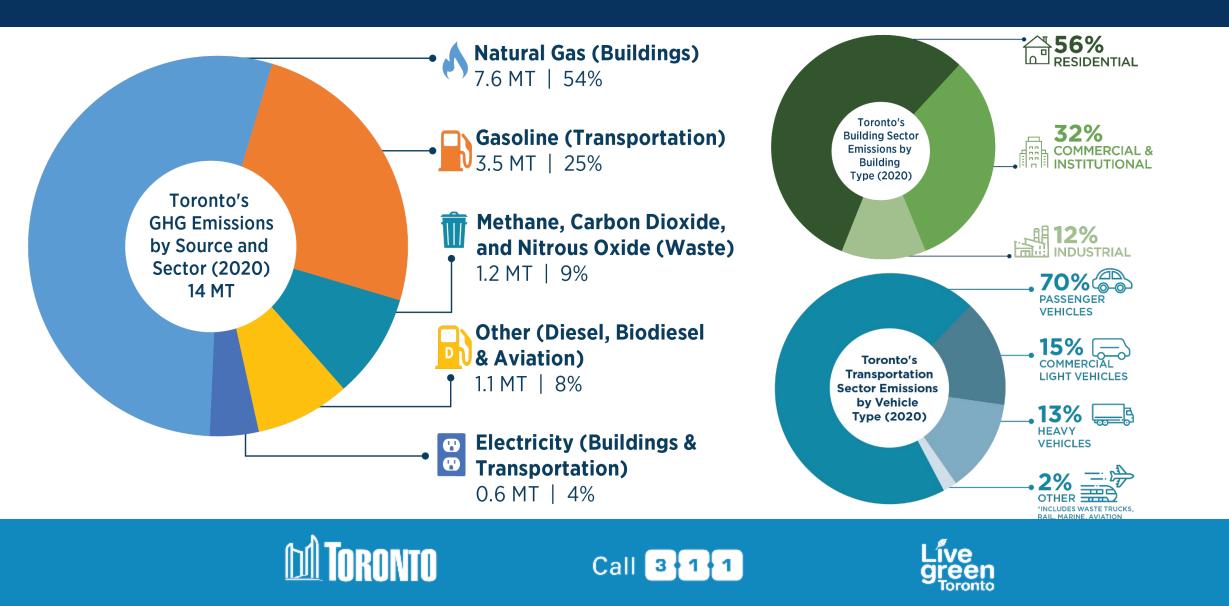
The City's TransformTO Net Zero Strategy has set Toronto on a path to reduce community-wide greenhouse gas emissions to net zero by 2040.

To meet that target, we must cut community-wide emissions in half by 2030.

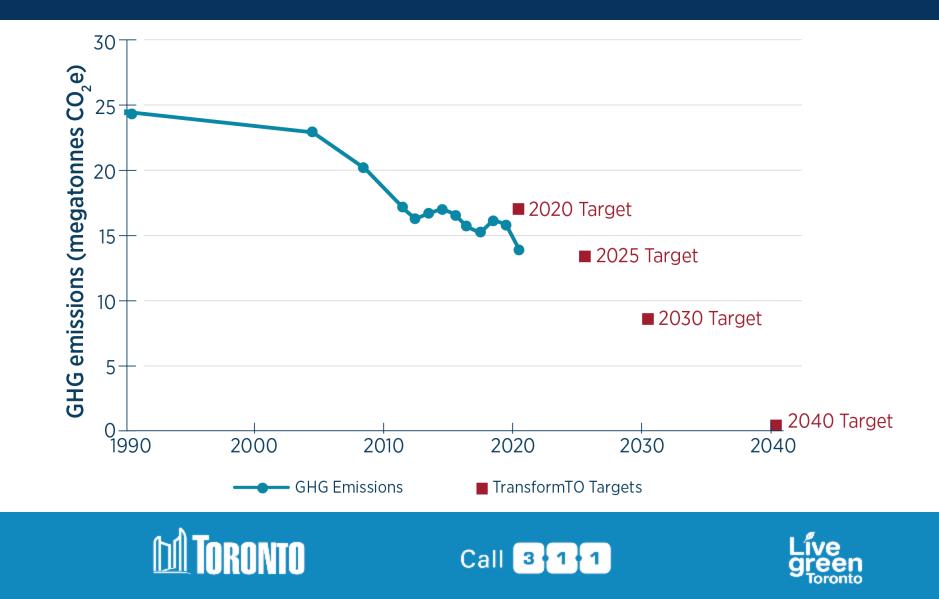
Homes and buildings and vehicles are the largest sources of emissions in Toronto today, generated primarily from the burning of fossil fuels.



Where Toronto's Emissions Come From



Toronto's GHG Emissions, Targets & Net Zero Pathway



Five Critical Steps







Accelerate significant reduction of natural gas



Establish building performance targets



Increase low carbon transportation options



Increase local renewable energy & storage







TransformTO 2030 Goals

100% 通知 of new buildings are designed to net zero GHG emissions



decrease in emissions from existing buildings (from 2008 levels)



of energy comes from renewable or low-carbon sources



of commercial/industrial floor area uses low-carbon thermal energy



of registered vehicles in Toronto are electric



of school/work trips under 5km are walked, biked or by transit



of City of Toronto residential waste is diverted







Dependencies

ACTION MUST BEGIN NOW AND MUST FOCUS ON EQUITY

A focus on equity in design and delivery will maximize participation of all Toronto residents so that benefits can be realized sooner and last longer.



ACTIONS AND ALIGNMENT NEEDED FROM ALL LEVELS OF GOVERNMENT

Provincial and federal policy and resources are required to enable Toronto's ability to realize a net zero future. Aligned action will also amplify local efforts so that financial returns are realized sooner and GHG emissions reductions start earlier.



CARBON FREE ELECTRICITY SYSTEM

The emissions intensity of Ontario's electricity grid is projected to increase. For Toronto to get to net zero, the grid needs to carbon free.



LABOUR MARKET MUST SHIFT AND SUPPLY CHAINS MUST BE DEVELOPED

The skills mix and capacity of the labour force will need to scale up and new robust supply chains for new technologies will need to be in place in order to deliver the actions required



INNOVATIVE AND ADAPTIVE DELIVERY MECHANISMS NEEDED TO SCALE UP

Conventional delivery mechanisms are likely too slow and costly to deliver the rapid transformation envisioned to achieve 2030 targets.



IMPACTS ON MATERIAL & LAND RESOURCES TO BE ACCOUNTED FOR

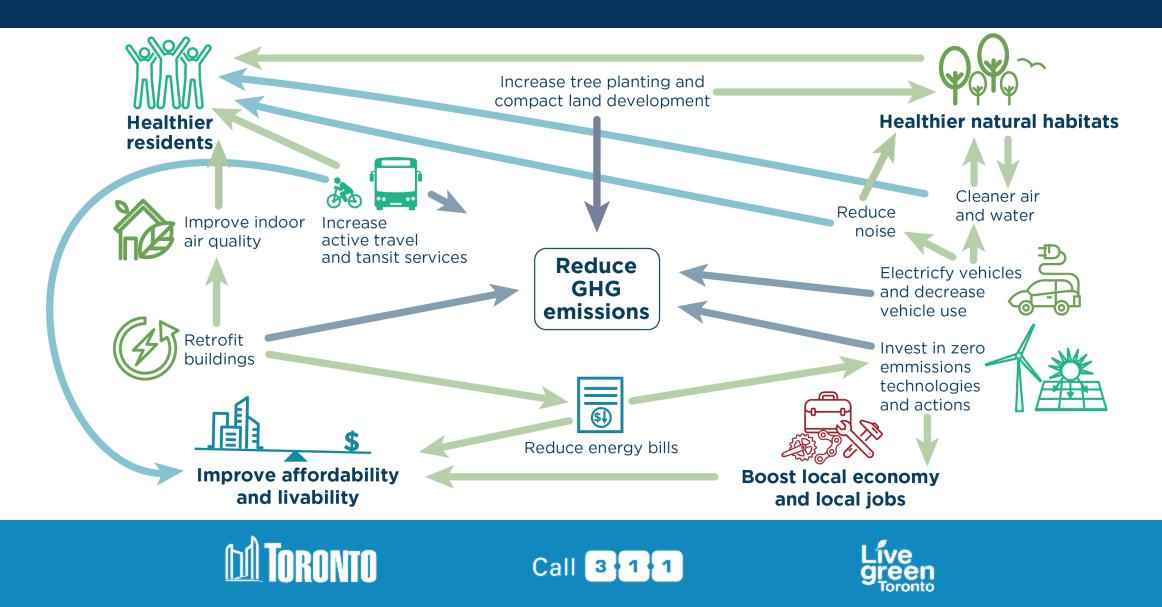
The environmental, social, and economic implications of resources required for transformation will need to be carefully considered to ensure this does not result in additional GHG emissions and negative impacts to the environment.





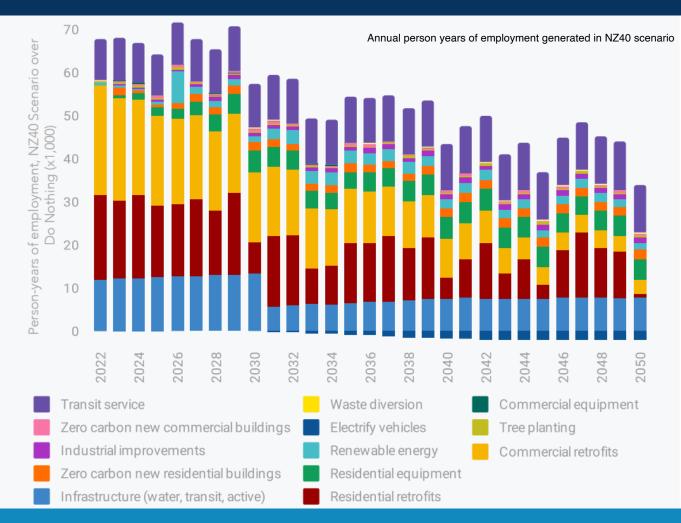


Opportunities



Opportunities – Employment & Economy

- 1.5 million added person-years of employment 2020-2050 = 40,000-60,000 jobs annually, mostly in retrofits and infrastructure
- Full investment \$145 billion 2020-2050
- Transition to low- or zero-carbon economy expected to impact on labour markets:
 - additional jobs will be created in emerging sectors
 - employment will be shifted (e.g., from fossil fuels to renewables)
 - certain jobs will be reduced or eliminated (e.g., combustion engine vehicle mechanics)
 - existing jobs will be transformed and redefined











TORONTO



City of Toronto Corporate Goals

65% in corporate GHG emissions, from 2008 levels











1.5 MGJ Renewable energy projects generate and utilize 1.5 Million Gigajoules of energy from biogas





