TransformTO

Collaboration

Co-benefits

Future Modelling
Community & Stakeholder Engagement
FIGURE 1  Ontario’s GHG emissions trajectory “wedges”28

- Transportation
- Fuel Efficiency Regulations
- The Big Move + GGH Growth Plan
- Other Transportation Initiatives
- Agriculture and Waste non-energy
- Buildings
- Industry
- Electricity Generation
- Focus of New Initiatives

Without Policy Measures

Projected Emission Reductions With Current Policy Measures

Remaining Gap to 2050 Target; Focus of New Initiatives

Coal Phase-out

Recession

Mt CO₂e

Historical
Target 2014 (6% below 1990)
Target 2020 (15% below 1990)
Target 2050 (80% below 1990)
SECTION TWO

TransformTO Findings
TORONTO’S EMISSIONS SOURCES

- Buildings: 53%
- Transportation: 35%
- Waste: 11%
- Fugitive: 1%
Measured and projected GHG emissions (Mt of eCO$_2$)

- Measured GHG emissions
- Business as planned projected GHG emissions

Targets:
- Target 2012
- Target 2020
Measured and projected GHG emissions (Mt of eCO₂)

- Measured GHG emissions
- Business as planned projected GHG emissions

Target 2012: 14.1 Mt
Target 2020: 8.7 Mt
Low-Carbon Target 2050: 5.4 Mt
TransformTO Community Engagement Findings

- Better Transit
  - Solar panels
  - Green building standards
  - District energy
  - Energy efficient buildings & retrofits
  - Financial support for energy retrofits

- Transportation
  - Electric vehicles and charging stations
  - Less cars
  - Pedestrian infrastructure
  - Complete, dense and walkable communities
  - Community local hubs

- Local community infrastructure
  - Community input into local design
  - Diverse, equitable and caring communities

- Green space and conservation
  - More green space
  - Green roofs
  - Naturalized space & conservation

- Urban agriculture and farming

- Education on sustainability and climate change
  - Sharing economy
  - Food is sourced locally
  - Strong local economy

- Behaviour change, economy and education
  - Zero waste
  - Waste minimization

- Healthy city
  - Health
SECTION THREE

TransformTO
Short-term Strategies
TransformTO Short-term Strategies

1. Support energy efficiency in buildings
2. Raise the bar for new construction & community energy solutions
3. Advance sustainable transportation
4. Lead by example
5. Engage and collaborate with stakeholders
Cumulative GHG emissions reduction potential of short-term strategies (tonnes of CO2e)

Leading by example
Advancing sustainable transportation
Raising the bar for new construction & low carbon community energy planning
Supporting energy efficiency in buildings
GHG emissions reduction potential of short-term strategies (high) (Mt of CO2e)

- Business as planned projected GHG emissions
- Projected GHG emissions reductions of Short-term Strategies

860,000 tonnes

Target 2020

2016 2017 2018 2019 2020

Year

GHG emissions in megatonnes of carbon dioxide equivalents (Mt of CO2e)
SECTION THREE

TransformTO 2050 Roadmap Building Blocks
Potential for Transformation

BUILDINGS AND ENERGY

- Building Energy Efficiency
  - Aggressive Retrofits of existing buildings
  - TGS Update
- Community Energy
  - Net-Zero Community Energy Plans (CEP)
  - Low-Carbon Thermal Networks

TRANS-PORTATION

- Transit Supportive Development
- Transit Network Plan Update
- Active Transportation
- Fuel Switching – Electric Vehicles (EVs)

WASTE

- Long-Term Waste Strategy
Example Emission Reduction Scenario

Recommended Scenario emissions reductions by strategy

Figure 19: Effects of Recommended Scenario actions on GHG emissions reductions

* Sample scenario from UBC campus
Climate Action

Local Economy

Social Equity

Public Health
“... the decisions made by mayors within the next five years will determine whether or not the world is set on a high or low carbon pathway.”

—ARUP, 2015

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