



Ontario Freight GHG Emissions and Policies

Growing the Hydrogen Ecosystem, June 13, 2018

Jason M. Luk, Senior Policy Advisor

Environmental Commissioner of Ontario

Environmental Commissioner of Ontario: Independent guardian of the Environmental Bill of Rights

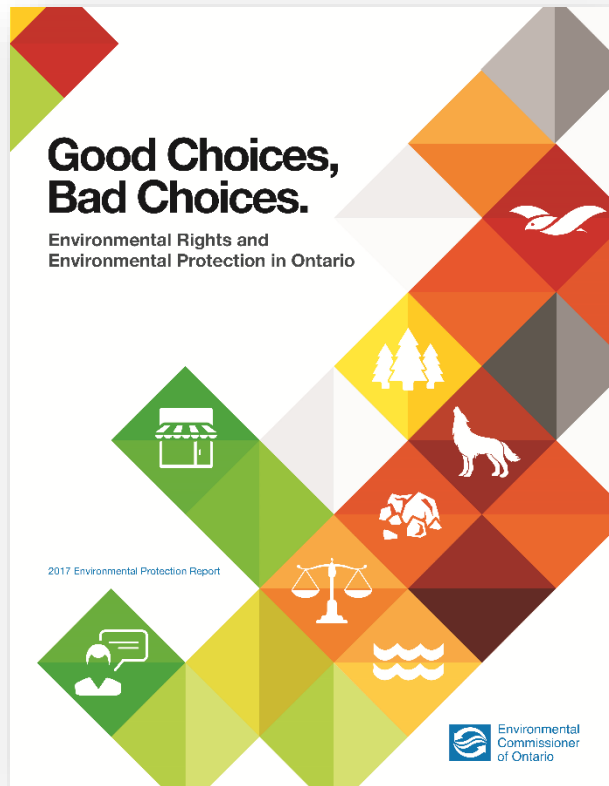


Dr. Dianne Saxe

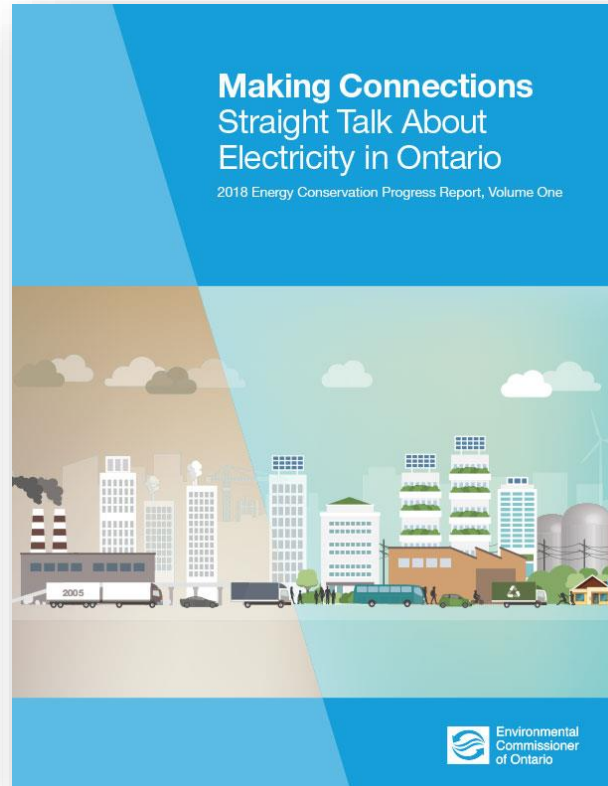
- Environment too important to be left only to government
- You have the right to:
 - Comment on environmentally significant government proposals;
 - Ask a ministry to review an existing law, or the need for a new one;
 - Ask a ministry to investigate harm to the environment;
 - Seek permission to appeal a ministry decision on permit, approval or other instrument;
 - Use courts or tribunals to protect the environment; and
 - Get whistleblower protection.

Environmental Commissioner of Ontario: Watchdog over environmental, energy and climate performance

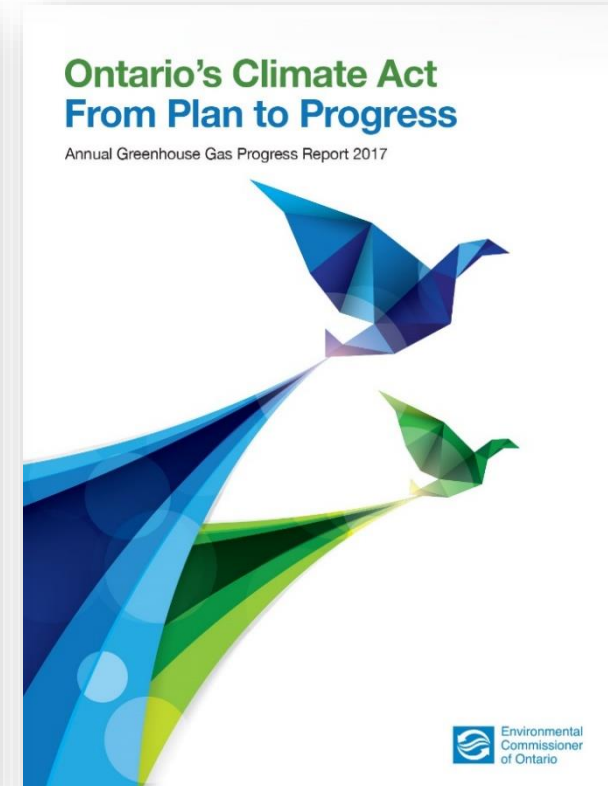
ENVIRONMENTAL PROTECTION



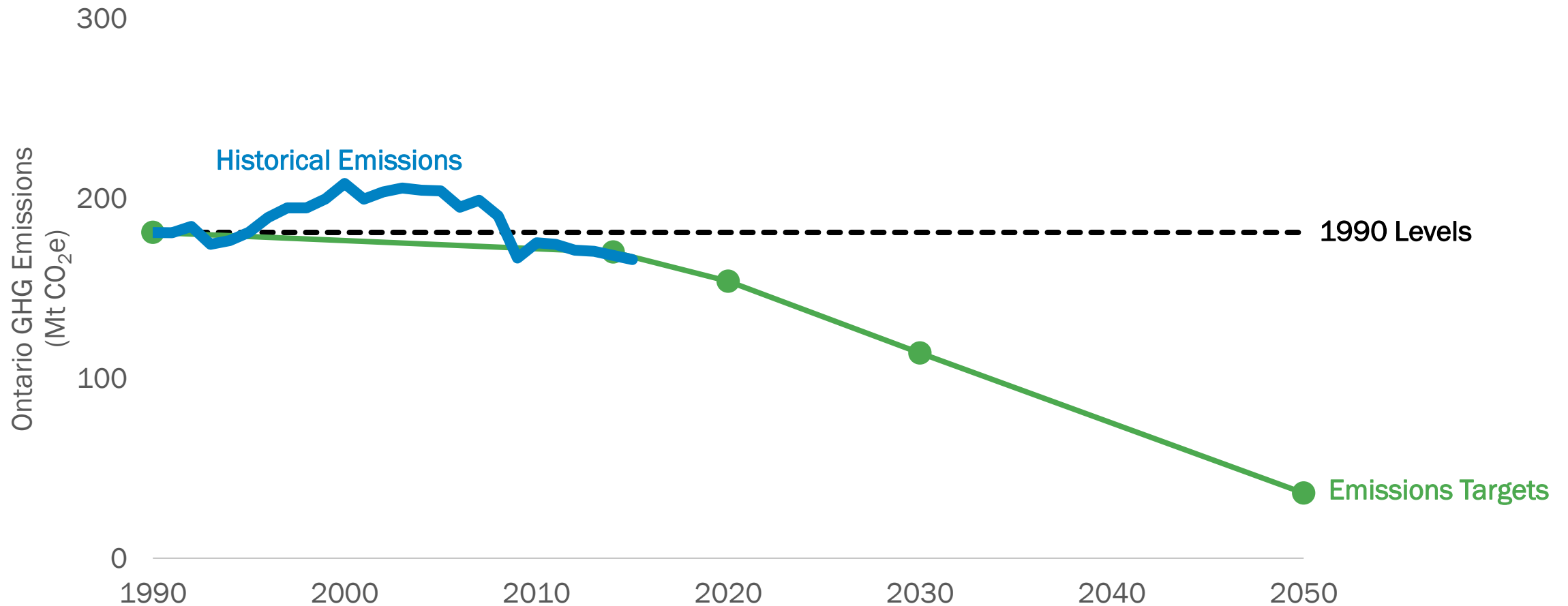
ENERGY CONSERVATION



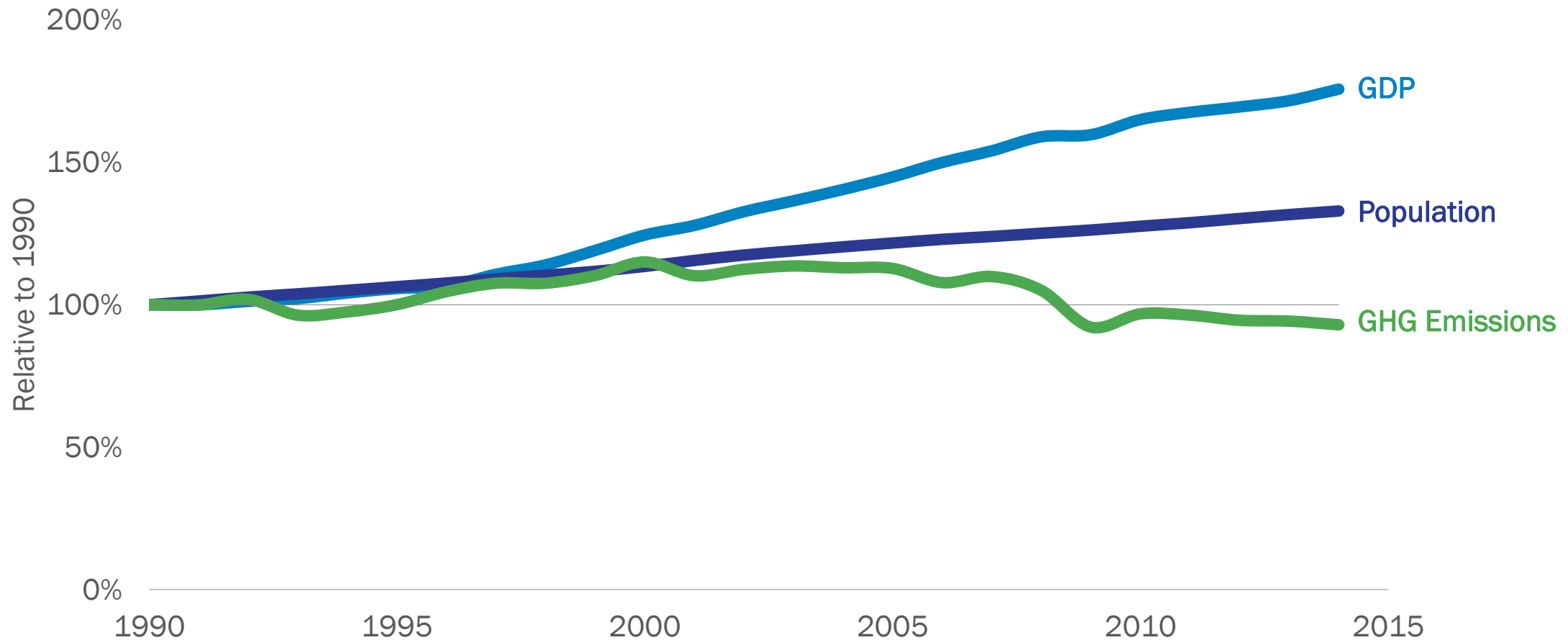
GREENHOUSE GAS EMISSIONS



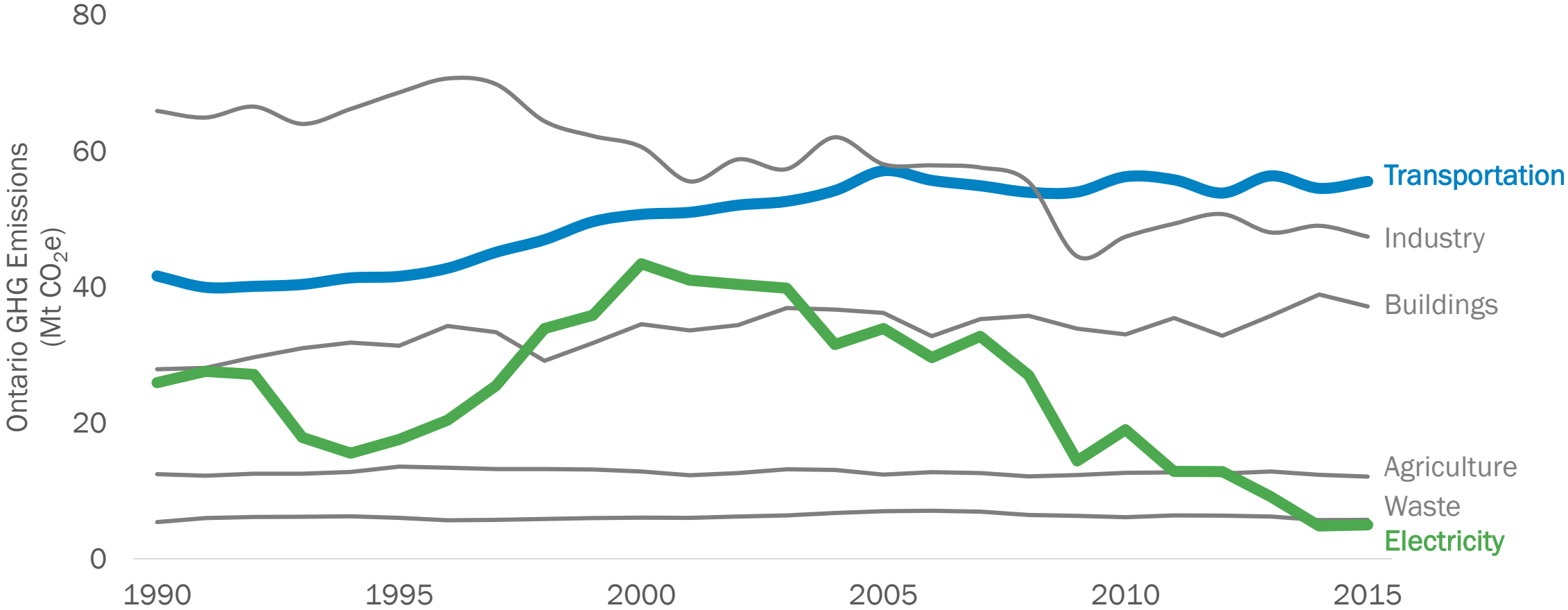
Ontario achieved first of four increasingly stringent greenhouse gas (GHG) emission targets in 2014



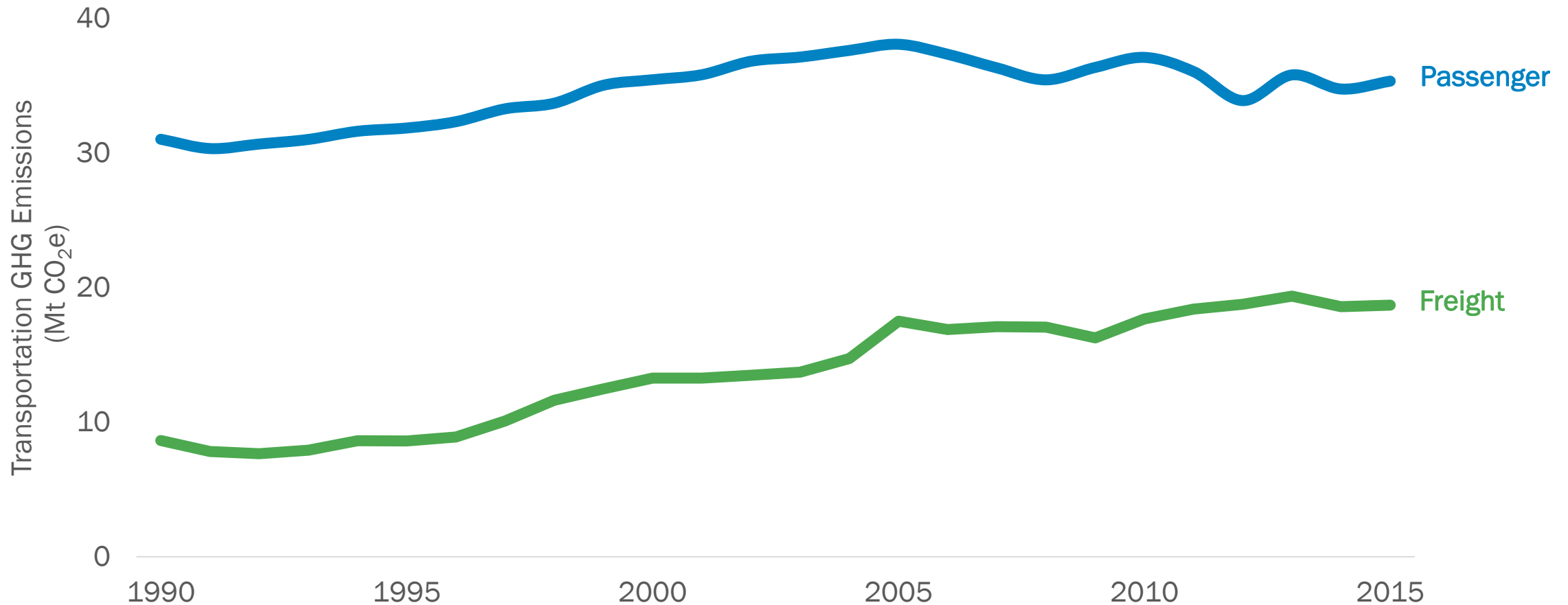
GHGs reduced while economy and population grew



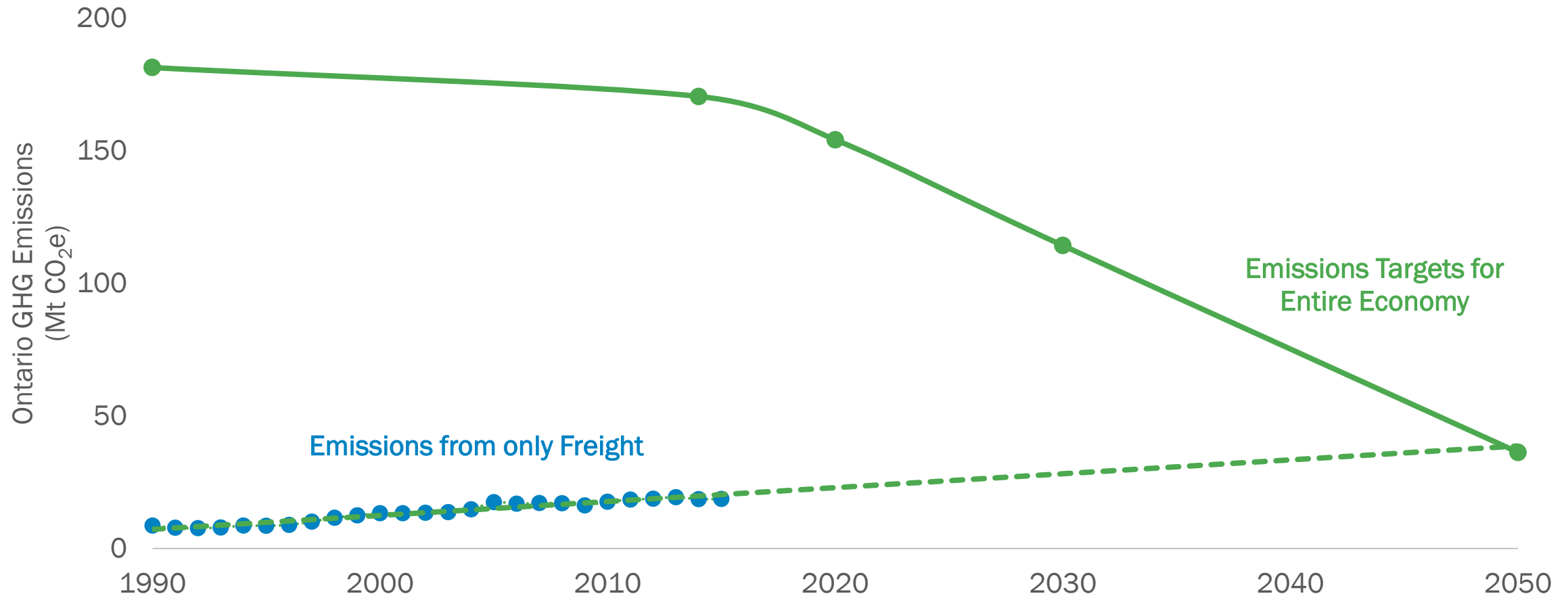
GHGs down primarily due to electricity, despite transportation



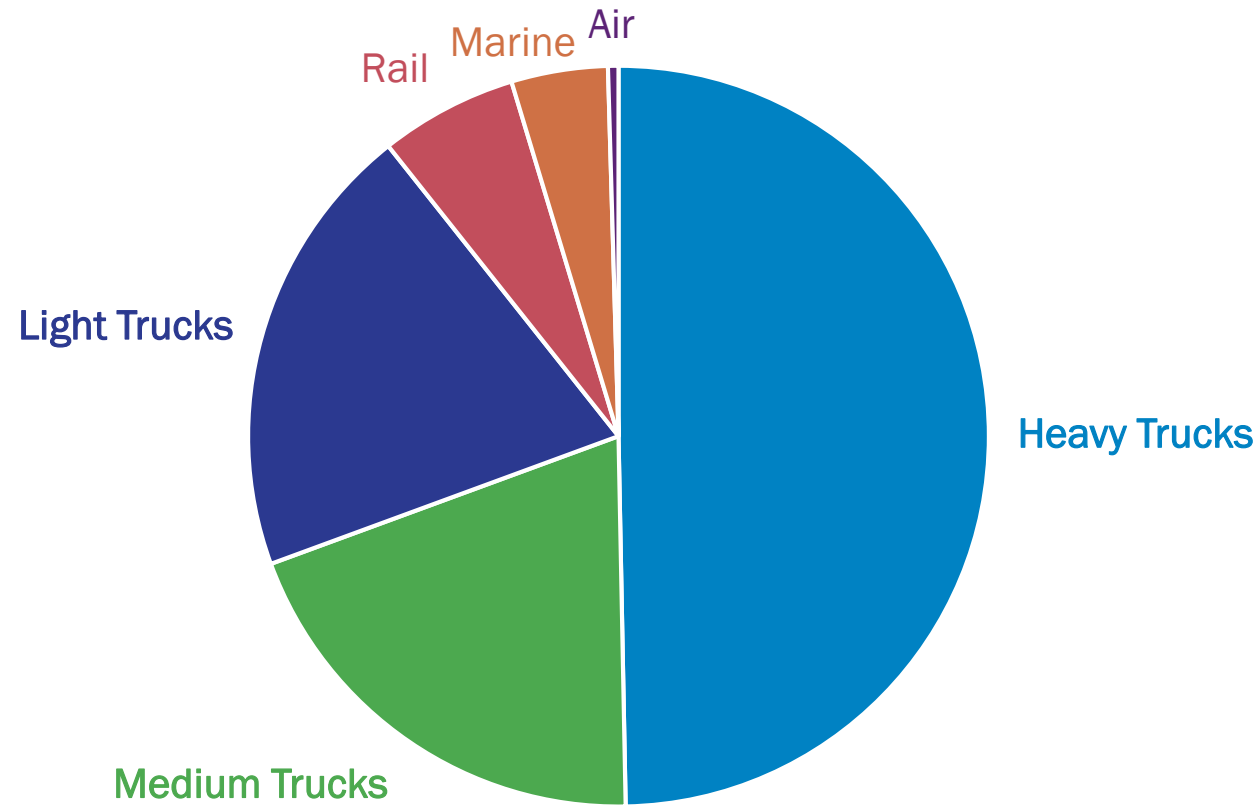
Transportation GHGs mostly from passengers, but growing because of freight



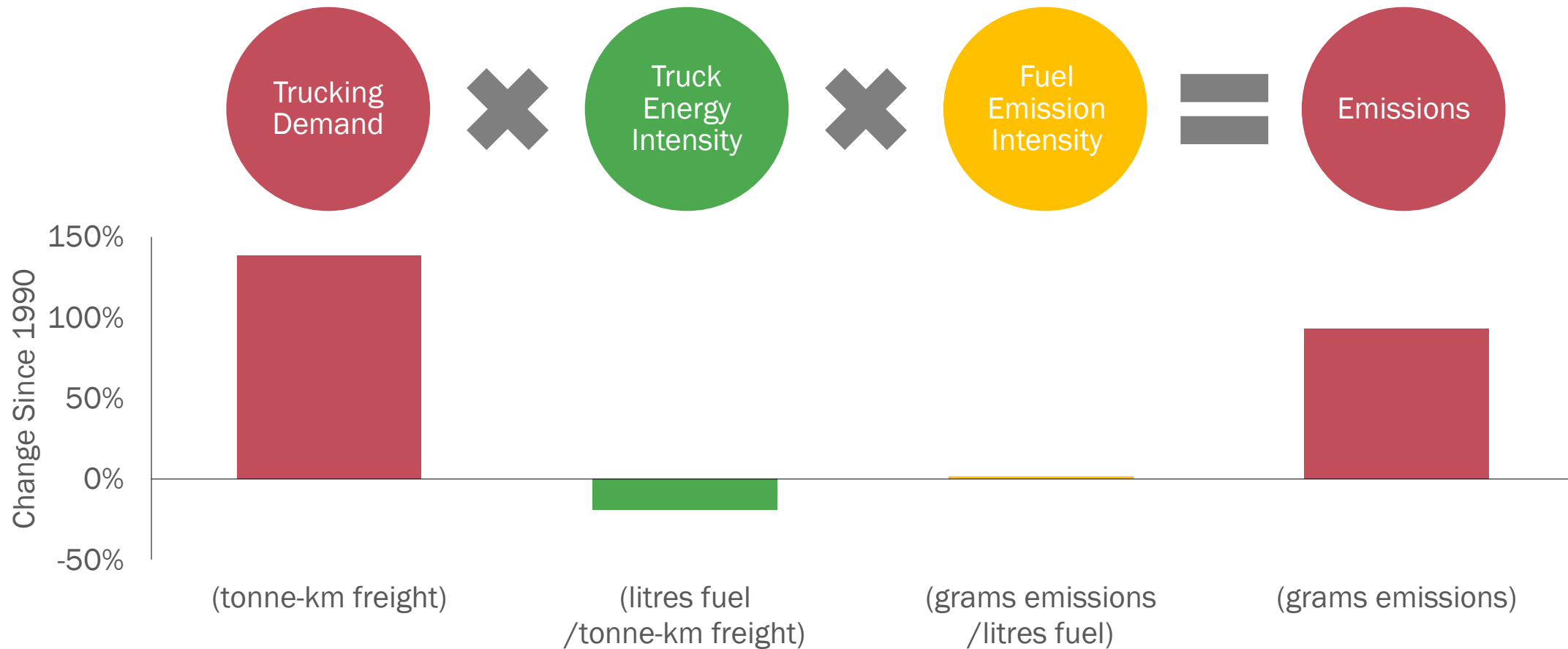
Freight GHGs increasing at rate to exceed 2050 GHG target for entire economy



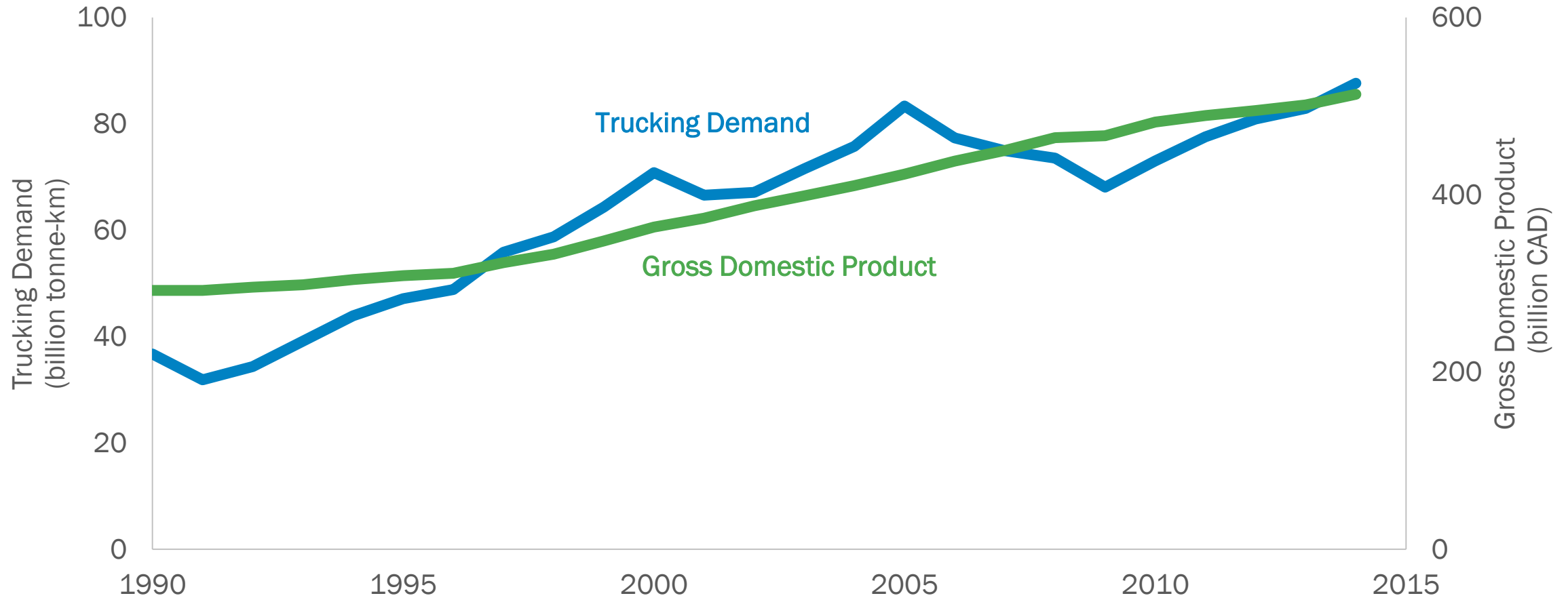
Freight GHGs dominated by trucks



GHGs increasing with trucking demand and despite efficiency improvements

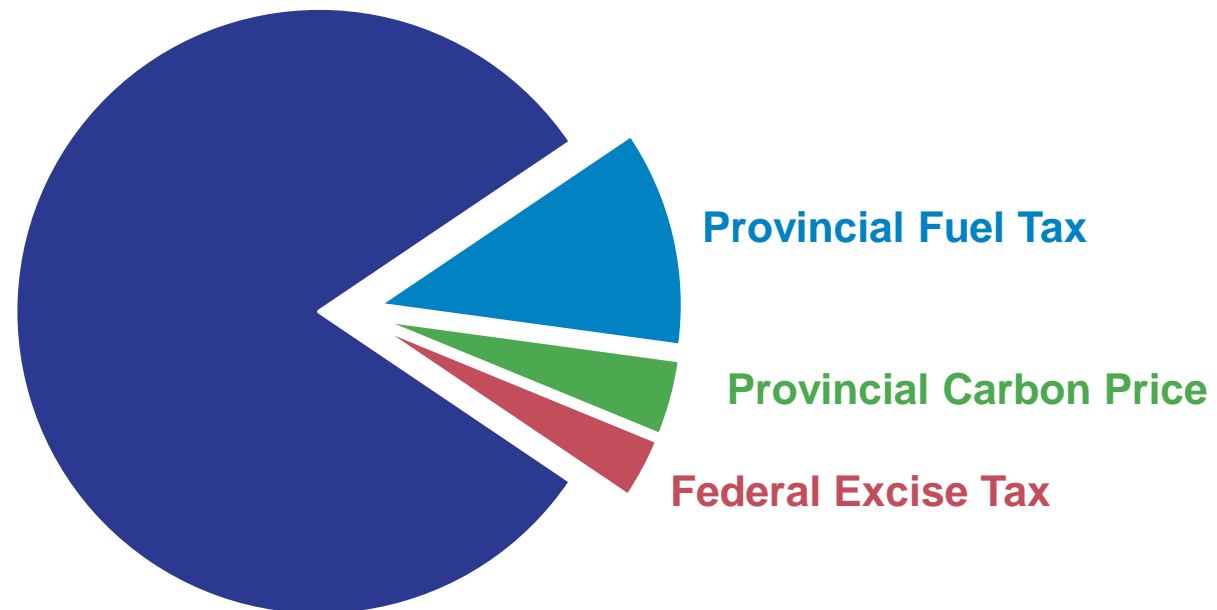


Economic growth linked to moving freight, so zero emission trucks likely needed to meet GHG targets



Carbon price too low to spur fuel switching on its own

April 2018 Diesel Price in Toronto



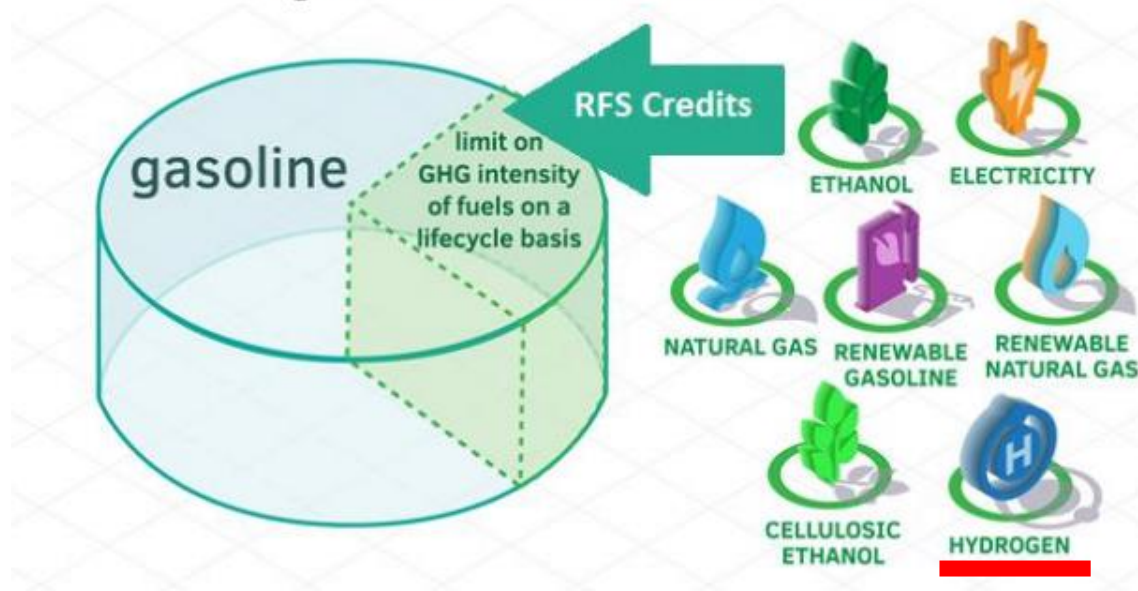
Carbon price revenues subsidize fuel switching via Green Commercial Vehicle Program

Alternative Fuel Commercial Motor Vehicle	Incentive (After March 31, 2018)
New <u>Electric</u>	50% of the incremental purchase cost compared to an equivalent conventional fuel vehicle, up to a cap of <u>\$75,000</u> per vehicle
New <u>Natural Gas</u> (Class 6-8 only)	30% of the incremental purchase cost compared to an equivalent conventional fuel vehicle, up to a cap of <u>\$30,000</u> per vehicle

Modern Renewable Fuel Standard limited to ethanol after consultations

Before consultation

Figure 5: How a modern RFS could work



After consultation

Based on consultation
feedback received from key stakeholders... the Ministry is [amending] existing renewable fuel regulations to increase ethanol blending requirements

Ministry of the Environment and Climate Change

Take away messages

- Freight GHG emissions is Ontario's fastest growing subsector
 - Growth due to increasing demand and despite efficiency improvements
 - Zero emission trucks are almost certainly needed to meet GHG targets while allowing economy to continue to grow
- New Government = new policies = new opportunities to use Environmental Bill of Rights
 - Public feedback has shaped government policies
 - Sign up to get alerts with keywords, including “hydrogen,” at eco.on.ca

Thank you

