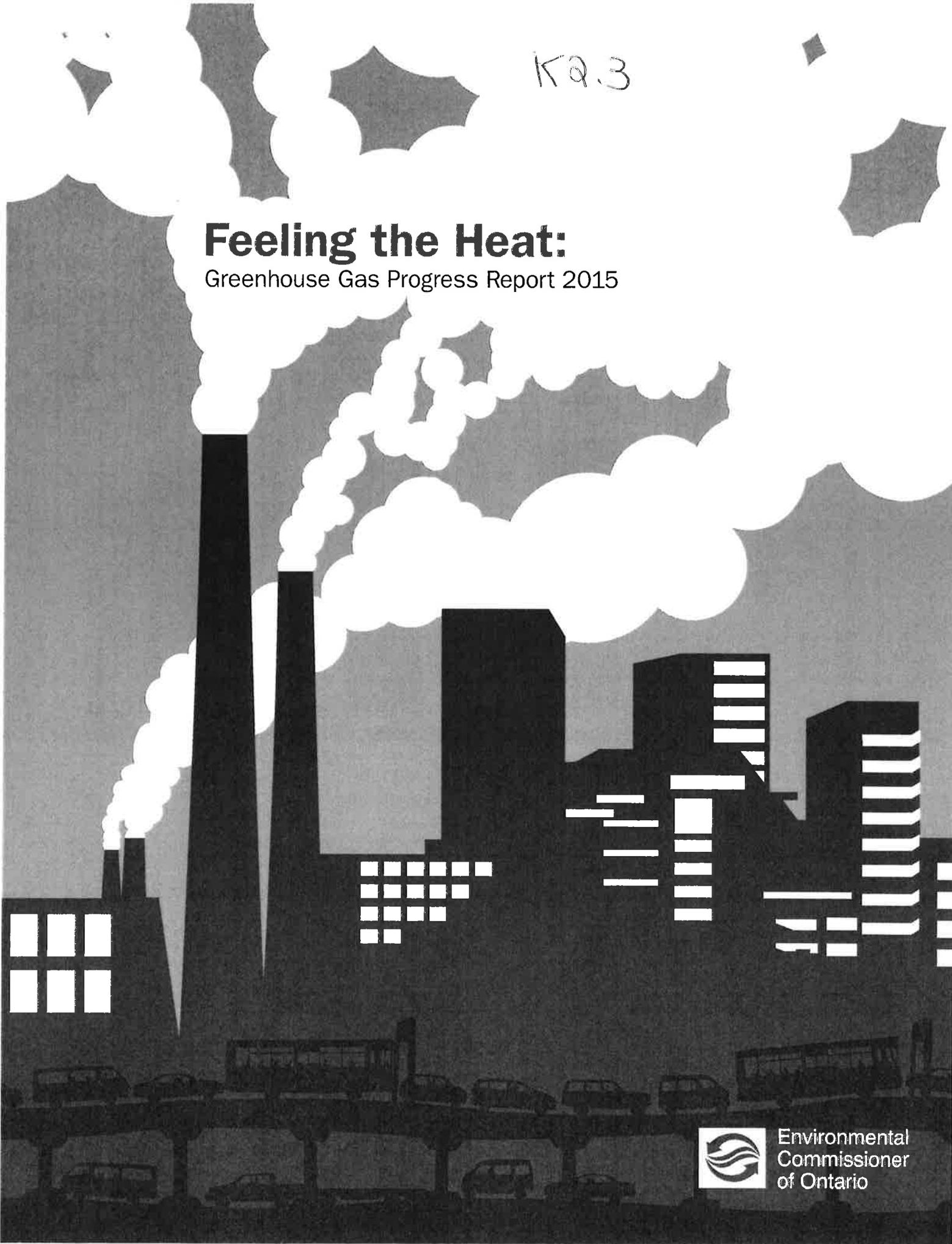


KQ.3

# Feeling the Heat:

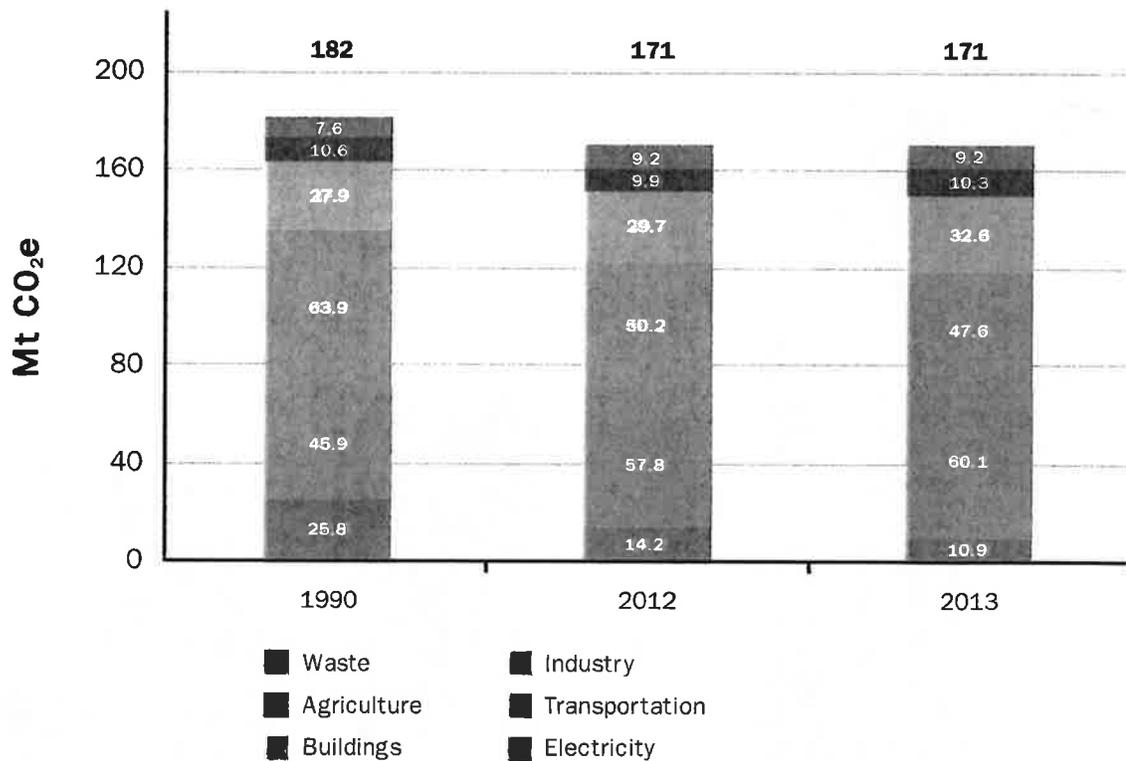
Greenhouse Gas Progress Report 2015



Environmental  
Commissioner  
of Ontario

## 2.2 Sector-Specific Emissions

**Figure 2** shows Ontario's GHG emissions from each sector and how they have changed from 1990 to 2013. The electricity sector alone has seen a 58 per cent reduction in emissions over this time period, with the industrial sector contributing a further 26 per cent reduction, mostly due to reduced industrial production in the province.<sup>46</sup> The closure of the coal plants will not be fully reflected in Ontario's emissions profile until the 2015 emissions data becomes available.



**Figure 2.** Ontario greenhouse gas emissions by sector for 1990, 2012 and 2013. (Source: Environment Canada. National Inventory Report – Greenhouse Gas Sources and Sinks in Canada 1990-2013 (2015)).

Since 1990, emissions reductions in the electricity and industry sectors have been partially offset by the 31 per cent increase in emissions from the transportation sector. Emissions in the buildings and waste sectors have also risen (17 per cent and 20 per cent, respectively). The transportation sector remains the largest contributor to the overall provincial inventory, with emissions rising 4 per cent from 2012 to 2013. Although emissions intensities have fallen in many sectors, in some sectors these gains are at least partially offset by economic and population growth.<sup>47</sup>

A more detailed breakdown of sector emissions is provided in **Table 1**.

**Table 1.** Ontario's Greenhouse Gas Emissions 1990–2013 (Source: Environment Canada. National Inventory Report – Greenhouse Gas Sources and Sinks in Canada 1990-2013 (2015)).

Sources	Emissions (Mt CO <sub>2</sub> e)		Change from 1990 - 2013		Percentage each sector contributes to 2013 total
	1990	2013	Mt CO <sub>2</sub> e	%Δ	
<b>Electricity</b>	<b>25.8</b>	<b>10.9</b>	<b>-14.9</b>	<b>-58</b>	<b>6</b>
Transportation	45.9	60.1	+14.2	+31	35
Road (passenger)	27.3	32.7	+5.4	+19.8	
Road (freight)	8	13.4	+5.4	+67.5	
Off-road (gasoline and diesel)	5.6	9.2	+3.6	+64.3	
Domestic Aviation	2.2	2.3	+0.1	+4.5	
Domestic Marine	1.0	1.2	+0.2	+20	
Rail	1.8	1.3	-0.5	-27.8	
<b>Industry</b>	<b>63.9</b>	<b>47.6</b>	<b>-16.3</b>	<b>-25.5</b>	<b>28</b>
Fossil fuel refining	6.1	6.1	0	0	
Manufacturing	22	16.1	-5.9	-26.8	
Mineral Production (cement, lime, mineral products)	4.1	3.6	-0.5	-12.2	
Chemical Industry	10	0	-10	-100	
Metal Production (iron and steel)	10.9	7.7	-3.2	-29.4	
Fugitive Sources	1.6	1.3	-0.3	-18.8	
Other <sup>iv</sup>	9.3	12.8	+3.5	+37.6	
<b>Buildings</b>	<b>27.9</b>	<b>32.6</b>	<b>+4.7</b>	<b>+17</b>	<b>19</b>
Commercial and Institutional	9.1	11.9	+2.8	+30.8	
Residential	18.8	20.7	+1.9	+10.1	
<b>Agriculture</b>	<b>10.6</b>	<b>10.3</b>	<b>-0.3</b>	<b>-3</b>	<b>4</b>
Enteric Fermentation	4.4	3.6	-0.8	-18.2	
Manure Management	2.1	1.9	-0.2	-9.5	
Agricultural Soils	3.9	4.6	+0.7	+17.9	
<b>Waste</b>	<b>7.6</b>	<b>9</b>	<b>+1.4</b>	<b>+19</b>	<b>5</b>
Solid Waste Disposal on Land	7.1	8.4	+1.3	+18.3	
Wastewater Handling	.2	.3	+0.1	+50	
Waste Incineration	.3	.3	0	0	
<b>TOTAL</b>	<b>182</b>	<b>171</b>	<b>-11</b>	<b>-6</b>	<b>100</b>

<sup>iv</sup>The "other" category includes emissions from stationary combustion in mining, construction, agriculture and forestry; emissions from pipelines; emissions associated with the production and consumption of halocarbons; and emissions from the use of petroleum fuels as feedstock for petrochemical products. Subsector figures do not exactly match sector totals due to rounding errors and the fact that this table does not list all minor subsectors. The ECO adds up the emissions subcategories to calculate the sector totals so they may not exactly match the rounded numbers presented in the NIR.

