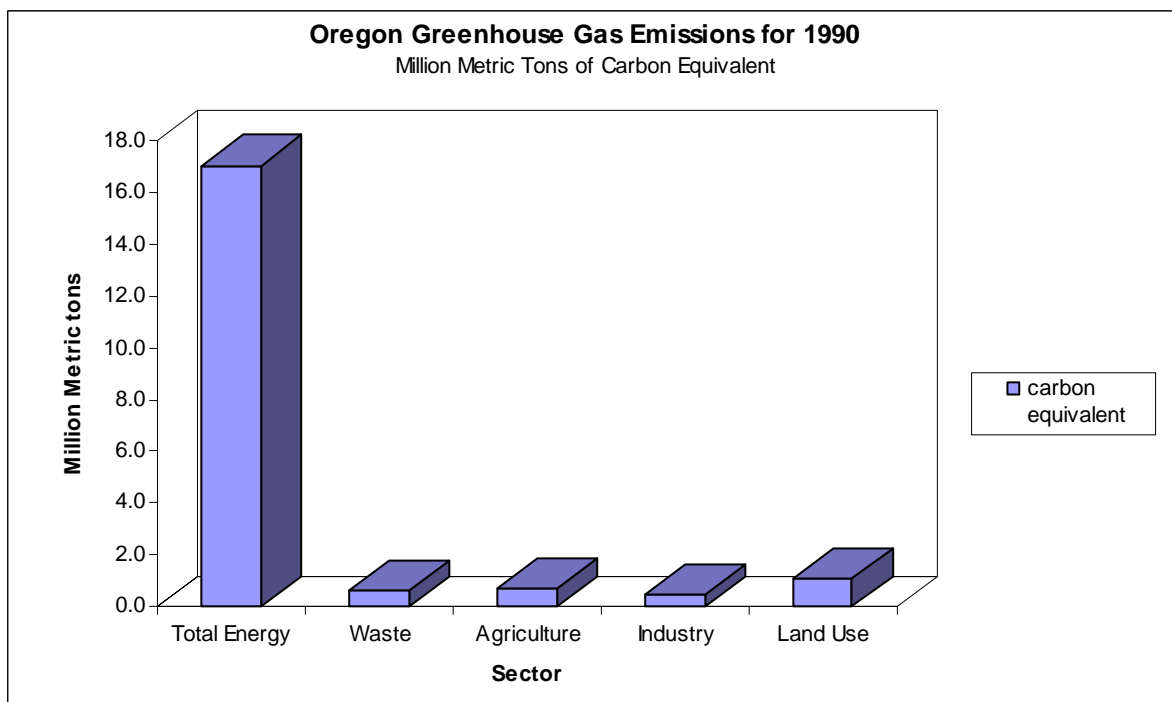


OREGON GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report “*Report on Reducing Oregon’s Greenhouse Gas Emissions*” provides a detailed inventory of greenhouse gas emissions and sinks for Oregon in 1990. The majority of emissions were estimated using methods from EPA’s 1992 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Oregon emitted 19.9 million metric tons of carbon equivalent (MMTCE). Oregon estimated emissions of less than 0.1 MMTCE from other sources not included in the workbook. Emissions from these sources are not included in the reported total or the table below.¹

The principal greenhouse gas was carbon dioxide, comprising 66.9 million metric tons (18.2 MMTCE). Other emissions included 0.2 million metric tons of methane (1.3 MMTCE), 700 metric tons of nitrous oxide (0.1 MMTCE), and approximately 100 metric tons of perfluorocarbons (PFCs) (0.2 MMTCE).

¹ Note that the state of the art emission inventory method has advanced since Oregon completed its inventory; therefore, we have made the following adjustments to Oregon’s emission estimates. First, we excluded emission estimates for sources not covered by the most recent inventory guidance (<http://www.epa.gov/ttnchie1/eiip/techrep.htm#green>). These emissions include methane from electric utilities and carbon dioxide from calcium hydrate manufacturing. Second, we used updated carbon coefficients for some fuel types. Third, we used updated values for global warming potentials.

Oregon Greenhouse Gas Emissions for 1990

BY SECTOR	CO2 (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	HFCs, PFCs, and SF6 (MMTCE)	Total GHG Emissions (MMTCE)
Energy - Residential	0.3	*	*	*	0.3
Energy - Commercial	0.3	*	*	*	0.3
Energy - Industrial	0.9	*	*	*	0.9
Energy - Transport	5.6	*	*	*	5.6
Energy - Utility	4.4	*	*	*	4.4
Energy - Exported Electricity	4.4	*	*	*	4.4
Energy - Other	1.0	0.1	*	*	1.1
Total Energy	17.0	0.1	*	*	17.0
Waste	*	0.6	*	*	0.6
Agriculture	*	0.6	0.1	*	0.7
Industry	0.2	*	*	0.2	0.4
Land Use	1.1	*	*	*	1.1
Total	18.2	1.3	0.1	0.2	19.9

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the energy – other figures.

The major source of carbon dioxide emissions was fossil fuel combustion (93%), with minor emissions from deforestation (6%), aluminum production (<1%), cement production (<1%), and lime production (<1%). Contributors to methane emissions were landfills (47%), domesticated animals (38%), manure management (9%), natural gas production (6%), and burning of agricultural waste (<1%). Nitrous oxide emissions were accounted for by fertilizer use, and perfluorocarbon emissions were accounted for by aluminum production.

Oregon's emissions in 1990 were 7.0 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.