Residents and businesses in the Portland metropolitan region are responsible for an estimated 31 million metric tons of greenhouse gas (GHG) emissions annually. In 2010 Metro completed a greenhouse gas inventory for the region. The emissions inventory was intended to establish a snapshot of the carbon footprint of the region in order to focus planning efforts to achieve long-term greenhouse gas emissions reductions.

**Major sources of metropolitan area greenhouse gas emissions**

- **27%** Energy
- **48%** Materials (goods and food)
- **25%** Transportation

This analysis of greenhouse gases groups major emission sources by systems that represent multiple parts of the economy that work together to fulfill a particular need. Various economic sectors interact to meet our demand for transportation, energy, goods and food. Each of these systems presents opportunities for prevention and strategies to reduce GHG emissions.

**ENERGY: Consumption of electricity and natural gas**

Energy used in buildings is the source of 27 percent of the region’s greenhouse gas emissions. **Appliance and device use** includes emissions resulting from the electricity and fuel used by washing clothes, cooking, refrigeration and the use of office equipment, computers and other appliances, as well as the industrial emissions associated with extracting and processing the associated fossil fuels. **Building HVAC and lighting** includes the emissions resulting from heating, cooling, ventilation and lighting residential and commercial buildings, as well as industrial emissions associated with extracting and processing the associated fossil fuels.

**Metropolitan area greenhouse gas emissions with energy split**
TRANSPORTATION: Passenger transport and local freight

Transportation is responsible for about 25 percent of the region’s greenhouse gas emissions. These emissions come mainly from on-road vehicles and air travel, with small shares from rail, marine and transit sources.

Local freight represents emissions from in-region movement of vehicles weighing more than 10,000 pounds.

Other passenger transport represents long-distance passenger travel, including emissions from aircraft, inter-city rail, inter-city buses, cars and light trucks making long-distance trips crossing the urban growth boundary.

Transit refers to emissions from electricity consumption for the operation of light rail, and diesel and biodiesel consumption for the operation of buses.

Local passenger transport includes emissions from all travel of cars and light trucks throughout the region.

MATERIALS: Consumption of goods and food

Nearly 48 percent of our region’s greenhouse gas emissions are estimated to come from the consumption of goods and food by residents and businesses in the Portland metropolitan area.

The materials section of the pie chart represents regional emissions related to resource extraction (e.g., mining, forestry and agriculture), manufacture, distribution and disposal of goods and food for final use and consumption by homes and businesses.

Metropolitan area greenhouse gas emissions with transportation split

Provision of goods represents emissions associated with production and processing of the goods and services we use on a daily basis.

Provision of food represents emissions associated with production and processing of the food we consume on a daily basis.

Infrastructure represents the manufacture, distribution and installation of materials into the built environment.

Long distance freight represents the movement of goods and food from remote production sites to the metropolitan area.

Solid waste represents the disposal of goods and food, including the collection and landfill process.