



CITY OF PORTLAND
OFFICE OF SUSTAINABLE DEVELOPMENT
A BETTER FUTURE. A BETTER NOW.

Reducing the impacts of diesel fuel

City of Portland strengthens multifaceted approach

IMPACTS OF DIESEL EMISSIONS

A number of recent City of Portland efforts have focused on reducing the impacts of **diesel fuel use** on the citizens and natural systems of the city and region. Areas impacted by diesel fuel use include:

- **Public health:** Diesel particulate matter (PM) increases the incidence of asthma and bronchitis, and increases the risk of cancer. Children are at particular risk.
- **Climate change:** Diesel emissions, including particulate matter and carbon dioxide (CO₂), contribute to global warming. The Climate Impacts Group at the University of Washington (<http://www.cses.washington.edu/cig/>) expects that climate change will impact the Pacific Northwest with decreased snowpack, increased winter flooding, decreased summer water supply and changes in sea level.
- **Foreign Oil dependence:** Rising domestic and global demand for oil to unpredictability in supply and price as well as other significant political and economic consequences.
- **Economic development:** Renewable fuels and related technology offer Oregon farmers and technology development companies economic opportunity.

RELATED CITY INITIATIVES

- **Biodiesel use required for all residential garbage and recycling haulers**
Beginning in March 2007, all residential garbage and recycling haulers in the City of Portland will use B20 (20% biodiesel blend fuel) and ULSD.
 - Residential haulers drive approximately 2 million miles/year, using 620,000 gallons of fuel.
 - The use of B20 will total 124,000 gallons of biodiesel a year, creating a 17% reduction in carbon dioxide emissions and a 12% reduction in particulate matter.
 - The use of B20 will reduce carbon dioxide emissions by 1,200 metric tons per year, equivalent to taking 240 cars off the road.
 - Portland is the first city in Oregon to adopt the B20 standard for haulers
- **City uses biodiesel in all diesel fleet vehicles**
The City has used a B20 blend of biodiesel in *all* centrally fueled City diesel vehicles since July 2004. As of September 2006, the Water Bureau fleet uses only B99 in diesel vehicles.
 - The City currently purchases 480,000 gallons of petrol diesel fuel and 120,000 gallons of B100 to create a 20% B20 blend.

- The use of B20 has reduced carbon dioxide emissions by 1,000 metric tons per year, equivalent to taking 200 cars off the road.
 - Eight-four vehicles in the Water Bureau Fleet recently converted to B99, making it the largest fleet in the nation using B99 fuel. The use of B99 will reduce carbon dioxide emissions by 74% and will reduce particulate matter emissions by 47%
 - CityFleet is pursuing other emission reduction technologies that include exhaust after-treatment devices for diesel engines, expanded use of flex-fuel (E85) vehicles, hybrid and electric powered vehicles.
- **Portland is the nation's first City to create a renewable fuels standard**
In July 2006 Portland City Council approved a citywide renewable fuels standard (RFS), which requires a minimum 5% blend of biodiesel for all vehicle diesel fuel sold in the city limits. Gasoline is required to contain at least 10% ethanol. The standard is effective July 1, 2007.
- Portland will create reliable demand for over four million gallons of pure biodiesel and 16 million gallons of ethanol; helping to spur market development of large-scale Oregon based biofuel production facilities to meet that demand.
 - The four million gallons of biodiesel will reduce carbon dioxide emissions by 41,000 metric tons per year, equivalent to taking 8,200 cars off the road.
- **Preparing for an uncertain future**
A Peak Oil Task Force was created by Portland City Council in May 2006 to develop recommendations on appropriate responses to uncertainties in the supply and affordability of oil. The Task Force is expected to report back to City Council in early 2007 with recommendations on steps the City can take to reduce the dependence of businesses and residents on fossil fuels.

For more information visit www.sustainableportland.org, or contact Research Specialist Jennifer Porter in the Office of Sustainable Development at 503-823-6110.