



Department of Environmental Quality

## Low Carbon Fuel Advisory Committee November 3, 2009

# Climate Change Efforts in Oregon and the Low Carbon Fuel Standard

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Department of Environmental Quality

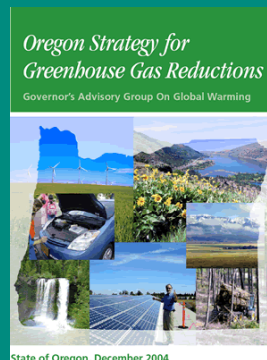
## Fighting Climate Change in Oregon: A Brief History

### Landmark GHG Reduction Measures:

- 1997: CO2 emission standard offsets
- 2005: Clean tailpipe standards

### Governor's Task Force Reports:

- 2004: "Oregon Strategy for Greenhouse Gas Reductions"
- 2008: "Framework for Addressing Rapid Climate Change"



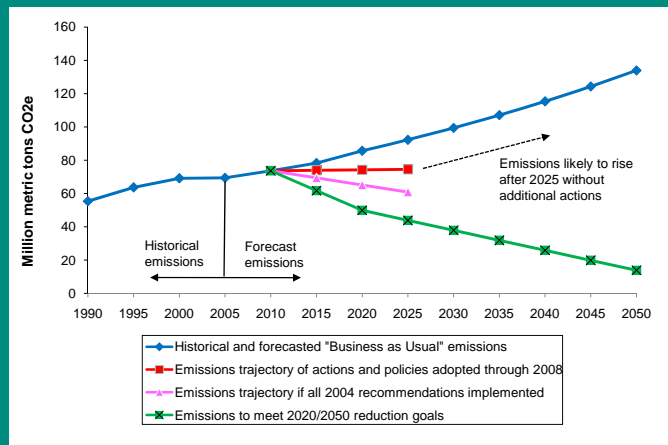


## 2007 Oregon GHG Legislation

- Renewable Portfolio Standard
- Renewable Fuels Standards
- Biomass & biofuels tax credit
- Energy efficiency tax credits expanded
- State Global Warming Commission
- State GHG Reduction Goals



## Oregon's Progress Toward GHG Goals





## Greenhouse Gases Covered by Oregon's Emissions Goals & Reporting

- Carbon dioxide (CO<sub>2</sub>)
- Methane (CH<sub>4</sub>)
- Nitrous oxide (N<sub>2</sub>O)
- Hydrofluorocarbons (HFC)
- Perfluorocarbons (PFC)
- Sulfur hexafluoride (SF<sub>6</sub>)

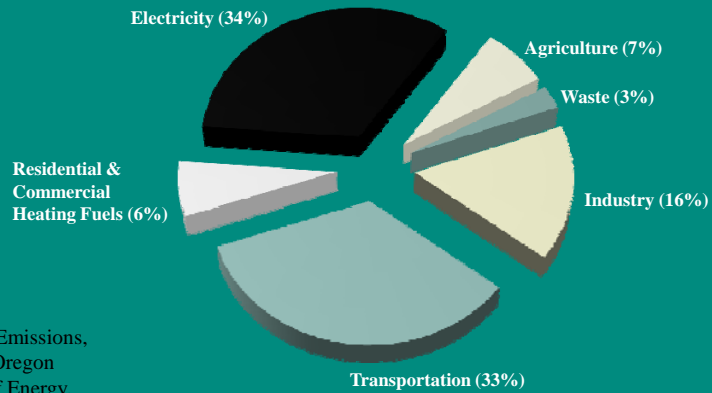


## 2009 Oregon GHG Legislation

- Expanded greenhouse gas reporting
- Authorized a low-carbon fuel standard
- Strengthened green building codes
- Ensured no new conventional coal power
- Provided energy efficiency financing
- Created pilot solar feed-in tariff
- Implemented biodiesel blending requirement



## Oregon GHG Emissions By Sector



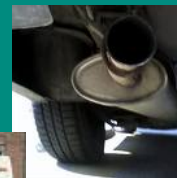
Oregon 2005 Emissions,  
Data source: Oregon  
Department of Energy,  
graph by DEQ



## Greenhouse gas emissions from Transportation

### The “Three-Legged Stool”

- Reduce tailpipe emissions
- Reduce the number of miles traveled
- Reduce the carbon intensity of the fuel





## Reducing Emissions from Fuels

- **Why pursue a Low Carbon Fuel Standard in addition to Renewable Fuel Standards (RFS)?**
  - Different goals
  - Effects on greenhouse gas emissions
- **How they work together**



## Low Carbon Fuel Standards around the Nation

- **Western Region**
  - California
  - Washington
  - Western Climate Initiative
- **Northeastern and Mid-Atlantic states**
- **Midwestern states**



## House Bill 2186



- Authorizes LCFS
- Lifecycle analysis to determine carbon intensity for each fuel
- Deferrals for adequate fuel supply
- Exemption threshold and exempted fuels
- Fuel quality
- Price of gasoline and diesel remain competitive



## House Bill 2186, continued



- Cost effectiveness
- Consider schedules, technical and economic studies from other states
- Environmental and public health impacts
- Sunset provision
- Reporting to legislature



# Questions?



For more information on Oregon's Low Carbon Fuel Standard, please visit: <http://www.deq.state.or.us/committees/lowcarbon.htm>



## Low carbon fuel rulemaking process

