

Regional GHG Emissions – Status

Greenhouse Gas and the Regional Power System Symposium

June 4, 2013
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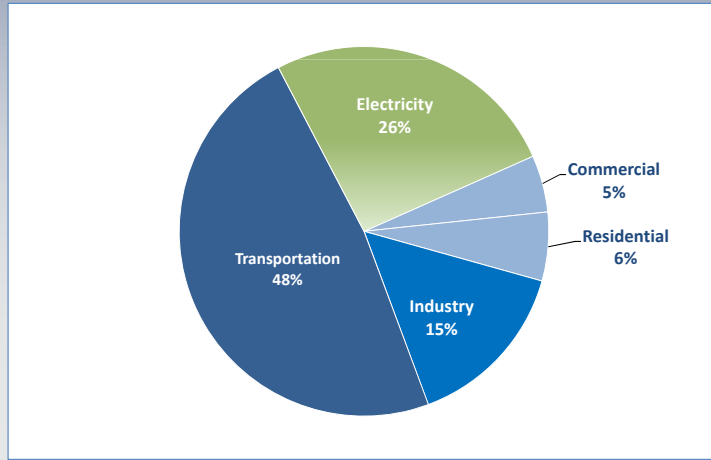


A few clarifications

- This presentation focuses only on the emissions of carbon dioxide from the electrical power system
- All emissions are displayed in **short tons** (not metric tons)
- The Pacific Northwest (PNW) region includes all of WA, OR, ID, and MT, plus portions of WY and NV (Bridger and ½ Valmy coal plants)



GHG Emissions by Economic Sector in the Pacific Northwest (2010)

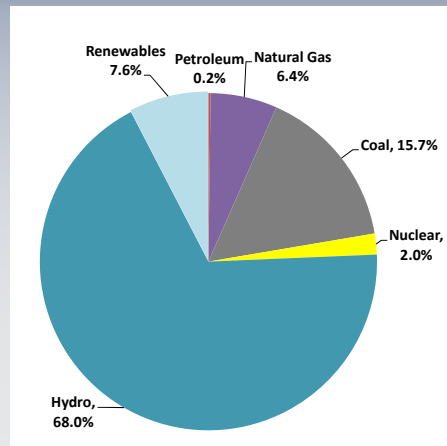


Data Source: EPA State Emissions from Fossil Fuel Combustion

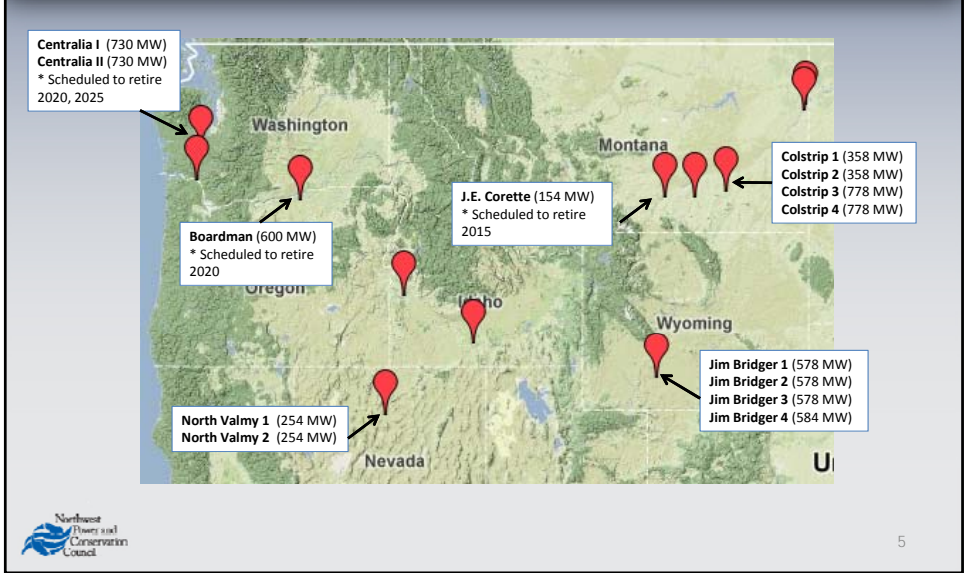
Electricity Generation in the PNW in 2011

In 2011, the region generated ~27,000 MWa

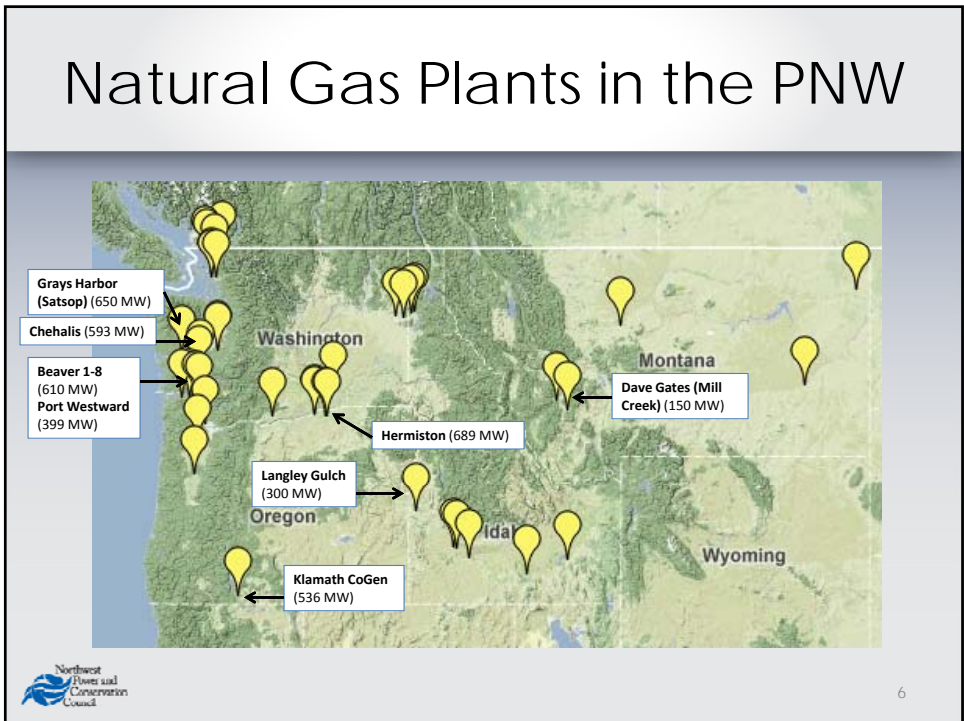
- 68% Hydropower
- 22% Fossil fuels (coal and natural gas)



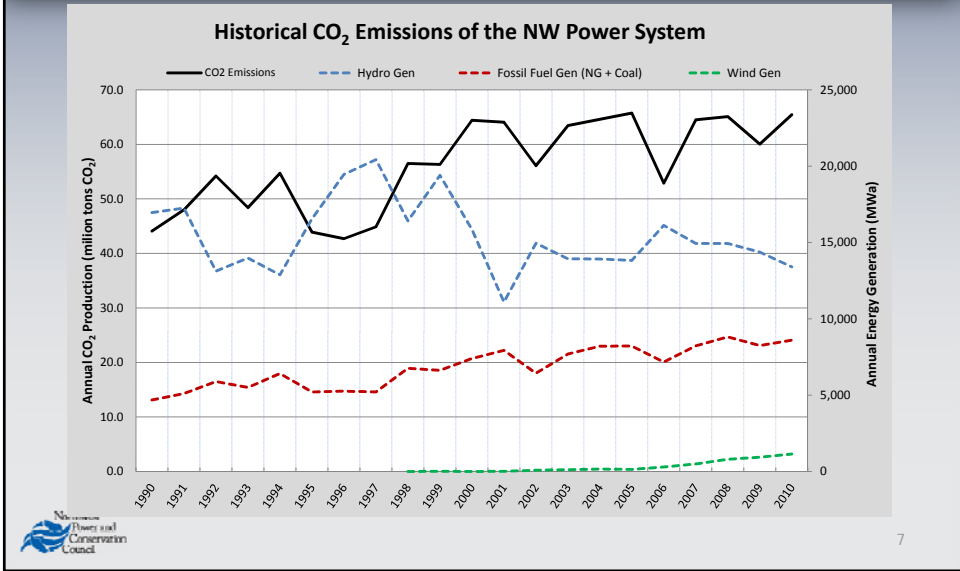
Coal Plants in the PNW



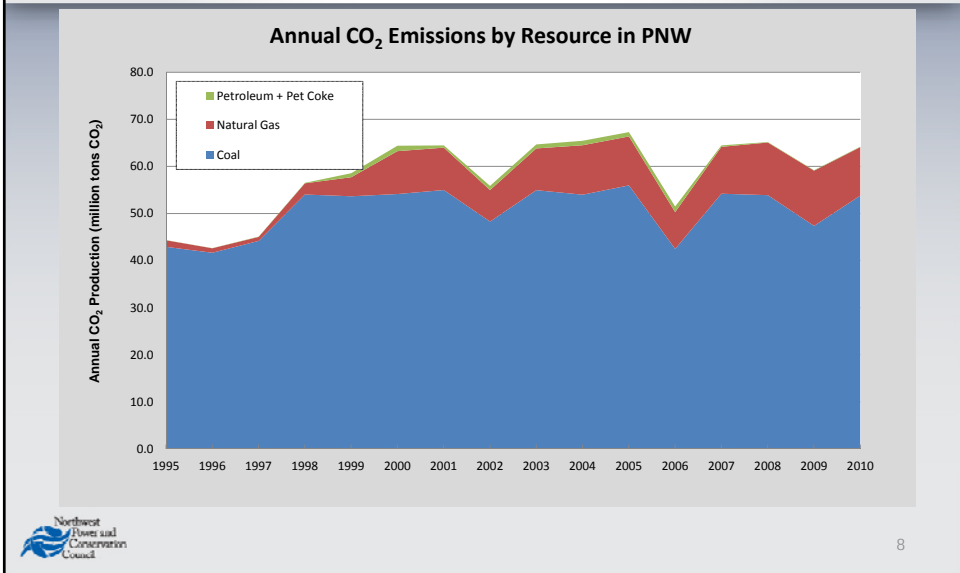
Natural Gas Plants in the PNW



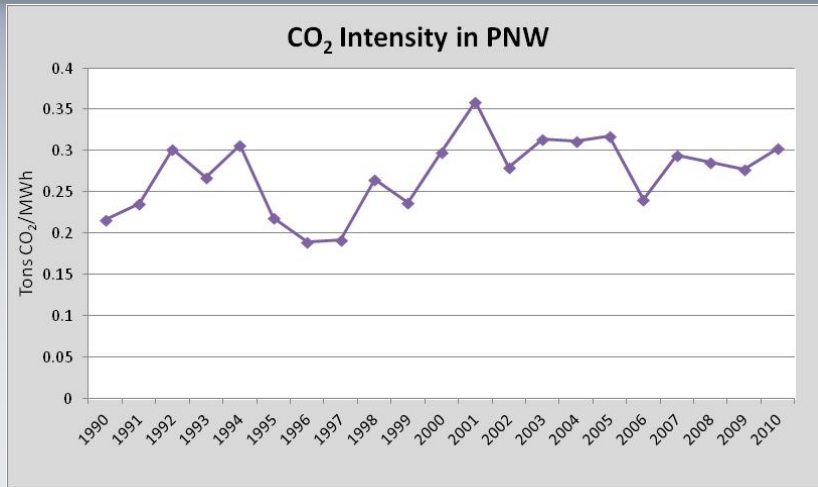
CO₂ Emissions from Electricity in PNW (1990-2010)



CO₂ Emissions by Resource in PNW (1995-2010)



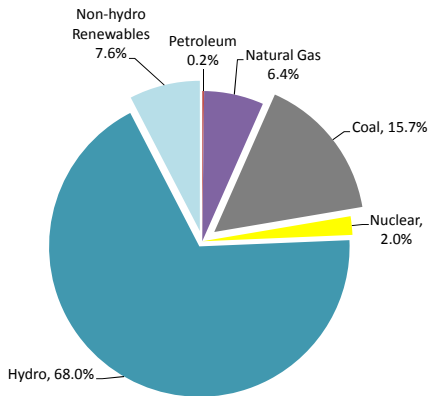
Intensity of CO₂ Emissions from Electricity in the PNW (Tons/MWh)



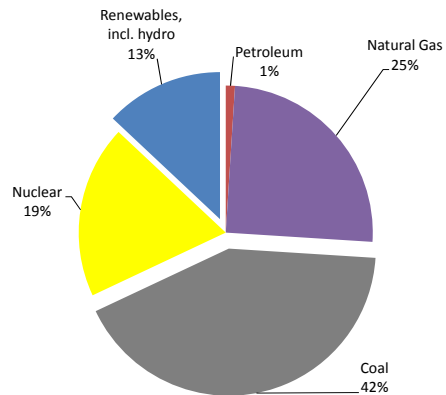
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Electricity Generation: PNW vs. US (2011)

2011 PNW Generation by Energy Source



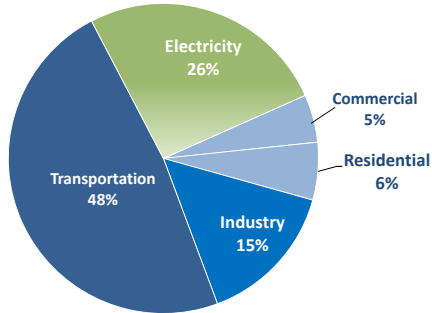
2011 U.S. Generation by Energy Source



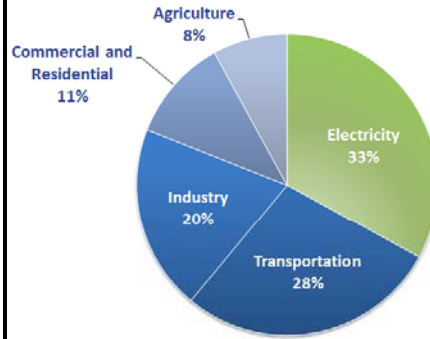
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Overall GHG Emissions: PNW vs. US

Total PNW* Greenhouse Gas Emissions by Economic Sector (2010)



Total US Greenhouse Gas Emissions by Economic Sector (2011)



* PNW only includes four state region of WA, OR, ID, and MT

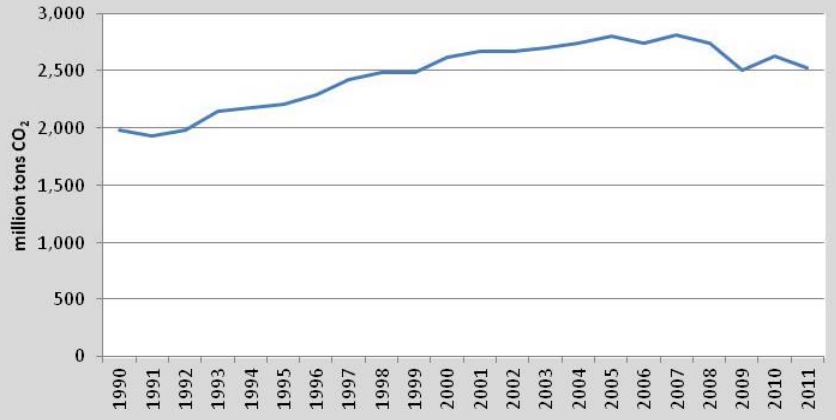


Source: EPA

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CO₂ Emissions in US (1990-2011)

Annual CO₂ Emissions from Electricity in US



Source: EPA

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GHG Intensity PNW vs. US vs. California (2001-2010)

