Agenda

- New Energy Cities/Stockholm Environment Institute
- Everett Energy Map
- Everett Carbon Wedge Analysis
- Q & A
Climate Solutions

New Energy Cities: Partnership with Northwest cities to reduce carbon emissions by accelerating climate-smart, clean energy solutions:

- Ambitious goal-setting
- Carbon math
- Strategies to achieve carbon reduction goals
- Programs to reduce GHG in buildings, transportation, energy supply
Why pursue carbon reduction?

- Climate imperative & economic benefits
- Washington State Emission Reduction Goals
  - By 2020, reduce to 1990 levels
  - By 2035, reduce to 25% below 1990 levels
  - By 2050, reduce to 50% below 1990 levels
- Compliance with City of Everett Comprehensive Plan Policy 10.3
  - “The City should inventory community-wide GHG emissions, and develop an Everett Climate Action Plan that includes goals and recommended actions for community-wide GHG reductions, measures to adapt to the impacts of climate change, responsibility for implementation of the measures, and benchmarks and metrics for monitoring implementation of the plan.”
# Key Data Sources for Energy Map & Carbon Wedge Analysis

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<th>Category</th>
<th>Measure/Assumption</th>
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<td>Transportation</td>
<td>Vehicle miles traveled</td>
<td>Puget Sound Regional Council</td>
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<td>Commercial, residential, industrial</td>
<td>Electricity consumption</td>
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<td>Natural gas consumption</td>
<td>Puget Sound Energy</td>
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<td>Population growth</td>
<td>Projected population growth</td>
<td>City of Everett</td>
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Everett 2014 Energy and Carbon Footprint

Source
Hydro
11240 BBTUs
End Use
Residential
74 KT CO2e
Commercial
119 KT CO2e
Industrial
118 KT CO2e
Transportation
361 KT CO2e

Carbon Emissions
672 KT CO2e

Nuclear
1110 BBTUs
Renewables
555 BBTUs
694 BBTUs
Coal
278 BBTUs

Electricity Generation
924 BBTUs
2166 BBTUs
1592 BBTUs
1329 BBTUs
1817 BBTUs
5055 BBTUs

Carbon Emissions
672 KT CO2e

Natural Gas
245 KT CO2e

Petroleum
361 KT CO2e
50 x 2030: What Will It Take?

- Avoid Mistakes We Haven't Made Yet
- Pursue Solutions Available Today

Growth Scenario

GHG Emissions To Avoid

GHG Emissions To Reduce

2014 GHG Emissions

50% Reduction below 2014 Base Year by 2030

Greenhouse gas (GHG) emissions (thousand metric tons CO₂ equivalent)

Year

2014 2019 2024 2029

New Energy Cities
Potential Targets to Meet 50 x 2030 Goal

- Federal Fuel Economy Standard
- State Clean Energy Code
- 40% Cleaner Fuels & Vehicles
- 25% Red. in Vehicle Miles Traveled
- 30% Red. of Natural Gas Use for Heating

50% Reduction below 2014 Level by 2030
Cleaner Fuels and Vehicles

Potential Priority/First Action
- Partner with SnoPUD, Everett Transit, and Port of Everett on transportation electrification
Vehicle Miles Traveled Reduction

Potential Priority/First Action
- Enhance commute trip reduction (CTR) program, in partnership with State of Washington and local employers
Potential Priority/First Action

- Join Regional Code Collaboration, and adopt stretch energy codes
- Adopt building energy benchmarking requirements for public and commercial buildings, in partnership with Smart Buildings Center and State Department of Commerce
Summary of Findings

- Existing laws will bring important reductions, but they alone will not achieve the goal
- State, regional, and local levers of change are all essential—and available—to meet reduction goals
- Bold action, partnerships, and proactive planning are needed to meet ambitious carbon reduction targets

*Achieving 50 x 2030 requires bold action and planning with a carbon reduction lens*
Thank you!

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Climate Solutions Mission

Accelerate *practical, profitable* solutions to global warming by:

- ✔ Galvanizing leadership
- ✔ Growing investment
- ✔ Bridging divides

**GOAL**: Make the Northwest a national and world leader in the clean energy economy
International nonprofit research organization

Environment and development issues from local to global policy levels for 25 years

Combines scientific research with policy analysis

Connects work to decision-makers and civil society

Focuses on global governance, national public policy, regional cooperation, local planning, and the private sector