BEND CLIMATE ACTION PLANNING

Energy Trust of Oregon
Bend Trade Ally Forum
October 19, 2018
2000 – City of Bend sustainability council goal and internal work group established
2003 – Bend hosts first statewide forum on Sustainability
2007 – City Council Resolution - Mayor’s Climate Protection Agreement
2009 – City of Bend receives Energy Efficiency and Conservation Block Grant
2013 – City of Bend joins ETO’s Strategic Energy Management Program
2016 – City Council Resolution calls for Climate Action and sets goals
2018 – City of Bend hires Sustainability Coordinator and appoints Climate Action Steering Committee in April
CITY OPERATIONS
Strategic Energy Management Plan to:
• Become carbon neutral by 2030
• Reduce fossil fuel use for City facilities and operations by
  • 40% by 2030
  • 70% by 2050

COMMUNITY WIDE
Community Climate Action Plan to:
• Reduce fossil fuel use community wide by
  • 40% by 2030
  • 70% by 2050

BEND CLIMATE ACTION GOALS
CITY OPERATIONS CLIMATE ACTION
CITY OPERATIONS GHG EMISSIONS INVENTORY

- Natural Gas: 15%
- Electricity: 64%
- Wastewater: 5%
- Wastewater: 5%
- T&D Losses: 6%
- Emp Commut: 6%
- Electricity: 64%
- Fleet: 1%
- Waste: 3%

Fiscal Year: 2014
Total Emissions: 21,155 equivalent metric tons of carbon
Pop: 77,000
“Employing energy efficiency and fossil fuel reduction policies to guide City operations and growth plans” – City Council Objective
PATH TO CARBON NEUTRALITY FOR CITY OPERATIONS

Energy Efficiency
- Interior, exterior, lighting upgrades
- Controls Upgrades
- Plumbing Upgrades
- Mechanical Upgrades

Renewable Energy
- Solar
- Biogas
- Small Inline Hydro

Energy Infrastructure
- Street Lighting
- Water Reclamation Facility Optimization
- Water System Optimization

Energy Supply
- Fleet Vehicle Alternative Fuels
- Offsite Renewable Energy Purchases

Intelligent Solutions
- Asset Management
- Capital Planning

Project Financing
- Utility Incentives
- Grants
- Bonds
- Public Private Partnerships

Phase 2 Considerations
**COMMUNITY CLIMATE ACTION PLAN FUNDRAISING**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Bend <em>(Redirected ARRA Funding)</em></td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Partners for Places</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Oregon Community Foundation</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Bend Climate Action Project</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$175,000</strong></td>
<td><strong>$175,000</strong></td>
</tr>
</tbody>
</table>
CLIMATE ACTION STEERING COMMITTEE

- **Mike O’Neil**, Chair, Business Seat, Solaire Homes
- **Jamie Klopp**, Business Seat, BEDAB, Epic Aircraft
- **Serena Dietrich**, Business Seat, Deschutes Brewery
- **Lindsey Hardy**, Chair, Environmental Seat, The Environmental Center
- **Russ Donnelly**, Environmental Seat, Climate Ordinance Working Group
- **Ryan LaPoma**, Topic Expert, Earth Advantage
- **Al Spector**, Topic Expert, Cascade Natural Gas
- **Sasha Sulia**, Government/Institution, BPRD
- **Casey Bergh**, Government/Institution, OSU Cascades
- **Andrew Skidmore**, Youth Seat, Cascade Middle School
- **Rebecca McCann**, Youth Seat, Bend High School
- **Marina Heppenstall**, At Large, Deschutes Land Trust
- **Eric Duea**, At Large, Gunter Group
### COMMUNITY GREENHOUSE GAS INVENTORY

#### Business As Usual Forecast

- **Community GHG Emissions (MT CO2e)**
  - Stationary Energy
  - Transportation
  - Waste
  - Refrigerants
  - Population BAU to 2040

#### Bend Sector-Based Greenhouse Gas Emissions

- **776,765 MT CO2e**
- **9.3 MT CO2e per capita**

- **Residential Energy**
  - 236,270 MT CO2e (30%)

- **Commercial Energy**
  - 179,155 MT CO2e (23%)

- **Industrial Process & Product Use**
  - 42,466 MT CO2e (6%)

- **Transportation**
  - 257,914 MT CO2e (33%)

- **Waste**
  - 37,378 MT CO2e (5%)

- **Industrial Energy**
  - 23,581 MT CO2e (3%)
Brainstorming actions with community engagement

October – December 2018

Community Survey: Feedback on Ideas

January 2019

Evaluating actions through triple-bottom-line lens

February – May 2019
CITY OF BEND

TIMELINE AND PROCESS

May 2019  
Community Survey: Feedback on final actions

June – August 2019  
Implementation Planning: Engage the relevant stakeholders

September 2019  
Draft plan to Council
Sector Working Groups

- Led by Climate Action Steering Committee members
- Direct input on barriers, objectives, and equity considerations
- *Brainstorm and create* list of potential climate actions
- Direct invites to major stakeholders to be at the table
  - Examples: Pacific Power, Cascade Natural Gas, Central Electric Coop in energy supply group, builders and realtors in energy efficiency in buildings groups

Working Group Dates

**Energy Supply**
- Meeting #1: Tuesday, October 23, 3-5 PM
- Meeting #2: Tuesday, November 6, 3-5 PM

**Energy Efficiency in Buildings**
- Meeting #1: Thursday, October 25, 3-5 PM
- Meeting #2: Thursday, November 8, 3-5 PM

**Transportation**
- Meeting #1: Wednesday, October 10, 3-5 PM
- Meeting #2: Thursday, November 15, 4-6 PM

**Waste & Materials Management**
- Meeting #1: Tuesday, October 9, 3-5 PM
- Meeting #2: Tuesday, November 13, 4-6 PM
Community Online Survey

- January 2019, open for the whole month
- Broader community input
- *Respond to* proposed ideas from working groups
- Share how proposed ideas might impact you
QUESTIONS?

Gillian Ockner
Senior Policy Analyst
City of Bend
gockner@bendoregon.gov
541-388-5505
BEND COMMUNITY GREENHOUSE GAS INVENTORY

Emissions from the production of imported food, goods, and energy consumed by the Bend community are as large as sources of local, sector-based emissions.

Figure 4: Detailed summary of sector-based emissions and comparison to emissions from household consumption and fuel production.

Note: Figure 3 presents location-based emissions for electricity. Market-based emissions details are included in Figures 3 and Figure 7.

Legend: Other Goods include electronics, toys, personal care products, cleaning products, printed reading materials, papers, office supplies, and medical supplies.