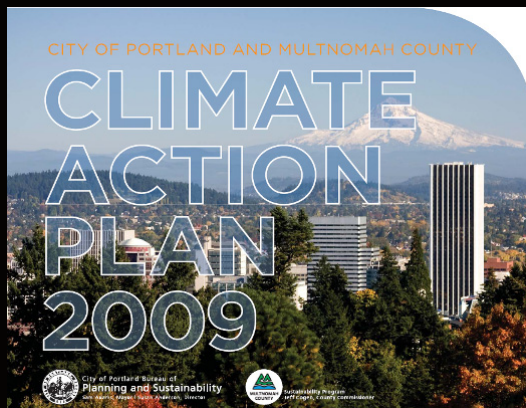


## ***Climate Action Plan***



**Builds on prior plans from 1993 and 2001**

**2050 Goal:**  
80% reduction in emissions

**2030 Interim goal:**  
40% reduction

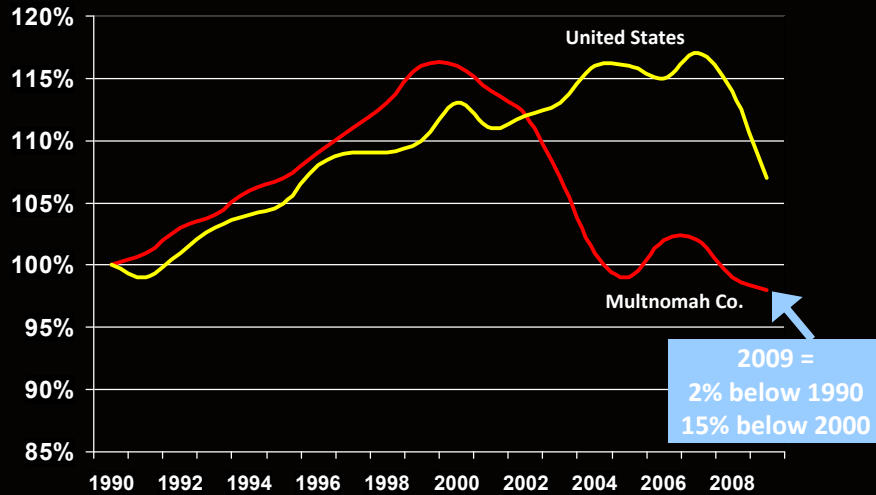
**2030 Objectives**

**2012 Actions**



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## Carbon emissions trends



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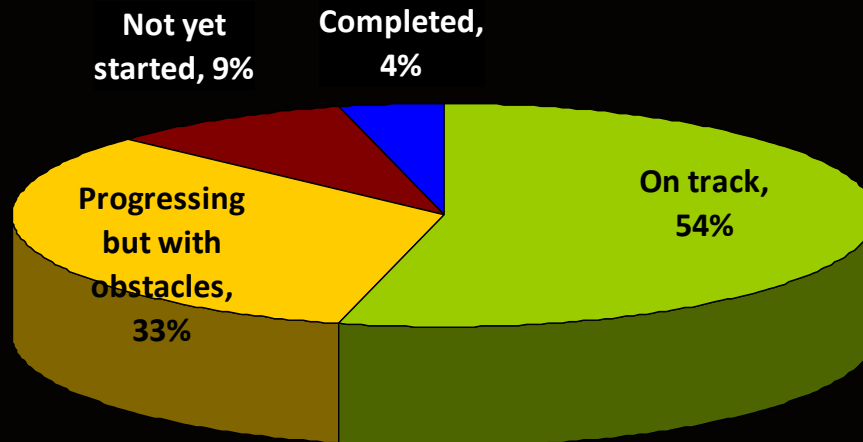
## Eight Action Areas

- |   |                                      |
|---|--------------------------------------|
| <b>1</b> BUILDINGS AND ENERGY               | <b>5</b> FOOD AND AGRICULTURE        |
| <b>2</b> URBAN FORM AND MOBILITY            | <b>6</b> COMMUNITY ENGAGEMENT        |
| <b>3</b> CONSUMPTION AND SOLID WASTE        | <b>7</b> CLIMATE CHANGE PREPARATION  |
| <b>4</b> URBAN FORESTRY AND NATURAL SYSTEMS | <b>8</b> LOCAL GOVERNMENT OPERATIONS |



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## Status of Climate Plan actions



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### 1

## BUILDINGS AND ENERGY

### Clean Energy Works

- Goal: \$50 million fund for energy efficiency retrofits
- To date have secured \$26 million; leverage is expected to reach \$100 million
- Based on current funding (next 3 years):
  - Energy-efficiency improvements in 6,000 homes
  - Total lifetime bill savings = \$125 million



## Solar

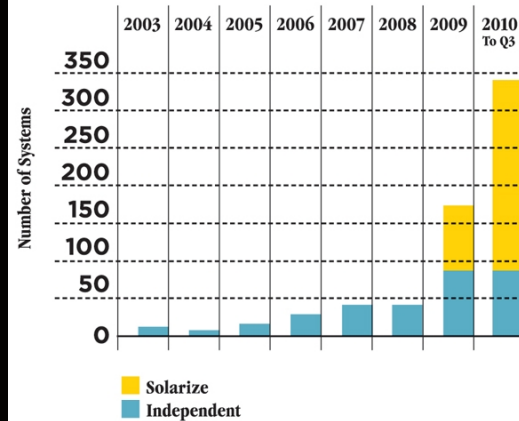
2012 goal =  
10 MW installed

By end of 2010,  
~9.8 MW will be  
installed



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Residential solar installations, including installations done through the Solarize Portland effort.



Coal: Boardman coal plant expected to  
close no later than 2020



## Still in development



- Policy addressing existing commercial buildings
- Establish new district energy systems

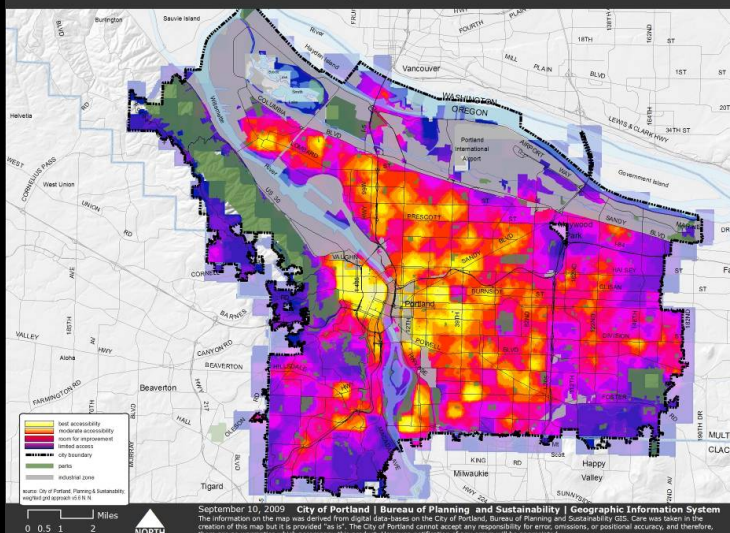


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## URBAN FORM AND MOBILITY

### 20-minute neighborhood concept







## THE PORTLAND PLAN

25-year plan for growth and development of Portland



arts & culture



neighborhoods & housing



educational opportunity



civic life



economic vitality



connections & access



environmental health



community design



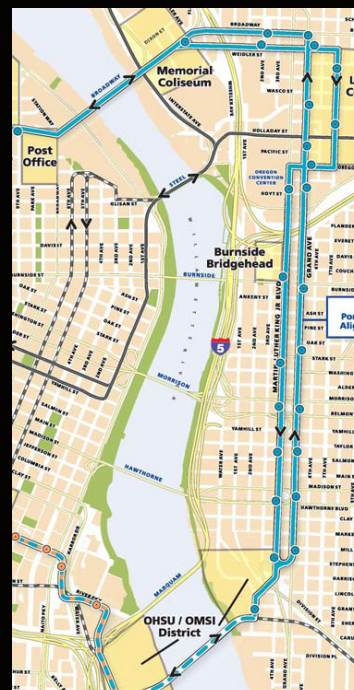
human health



## Eastside streetcar construction proceeds



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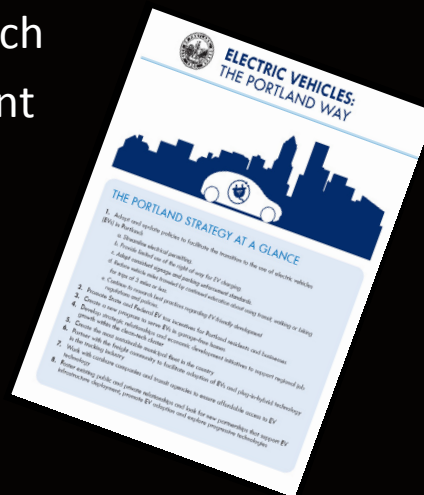
## Bicycling

- Bicycle Plan for 2030 adopted
- 15 miles of Neighborhood Greenways built



## City Council adopted EV Strategy July 2010

- Policies (permitting, parking, right-of-way)
- Incentives and outreach
- Economic development
- City Fleet
- Partnerships

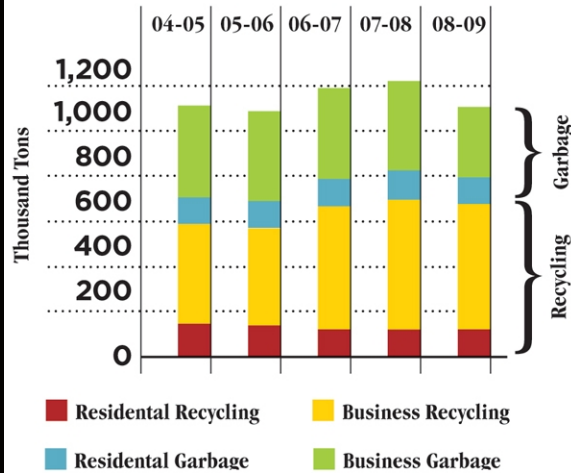


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# 3

## CONSUMPTION AND SOLID WASTE

Portland solid waste trend.



### Key actions:

- Residential curbside food-waste collection pilot now underway

# 4

## URBAN FORESTRY AND NATURAL SYSTEMS



- Citywide tree project nearing completion
- 100,000 trees and shrubs planted
- 169 new green street facilities completed
- Challenge: Trees as capital investment



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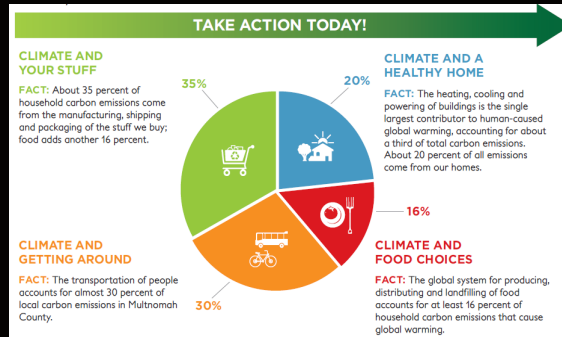




## FOOD AND AGRICULTURE

### Key actions:

- 225 community garden plots added
- Zoning code project underway to address barriers to urban food production



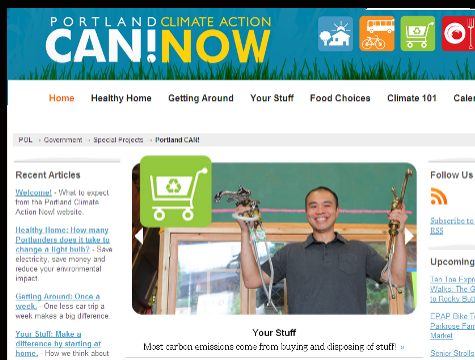
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## COMMUNITY ENGAGEMENT

### Key actions:

- Engage residents
  - Climate Action Now campaign
- Coordinate with government
  - State of Oregon, Metro, neighboring cities



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### Example business actions:

- Climate Prosperity Project
- BOMA's Carbon4Square initiative

The  
**Portland Metro  
Climate Prosperity  
Project**

**A GREENPRINT  
FOR THE METRO REGION**

DRAFT June 2010



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#### THE WORKING GROUP

Climate Solutions  
DSW Collective  
Formos  
Greenlight Greater Portland  
Lane Powell  
Metro  
Nike  
Oregon Business Council  
Oregon Institute of  
Technology  
Portland Bureau of Planning  
and Sustainability  
Portland Development  
Commission  
Portland Sustainability  
Institute  
Regional Partners  
Worksystems, Inc.



## CLIMATE CHANGE PREPARATION

- Investing in green infrastructure
- Water Bureau continues to be national leader in policy and analysis
- Currently scoping a systematic assessment of vulnerabilities
- Portland team participated in Climate Leadership Academy workshop in September





## LOCAL GOVERNMENT OPERATIONS

### Key actions:

- 2<sup>nd</sup>-generation LED traffic signals installed
- Renewable energy now 10% of City operations:
- Energy retrofits:
  - Lighting retrofits at three community centers
  - Replacement windows at Peninsula Park
- LEED for Existing Buildings in Portland Building
- Fleet preparing to add electric vehicles



## ***Key actions for 2011***

- Portland Plan
- Energy policy for existing commercial buildings
- Progress on sustainable funding for transportation
- Assess climate vulnerabilities and develop adaptation plan



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## Portland Water Bureau – Progress on Climate Action Plan

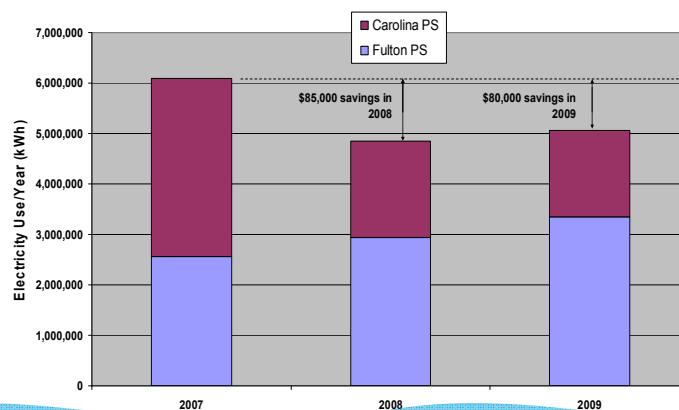


## PWB Energy Goals

- Reduce bureau's overall electrical use by 5%
- Reduce electrical use by 5% at top 10 facilities (highest electrical use)
- Install renewable energy facilities with minimum capacity of 400 KW

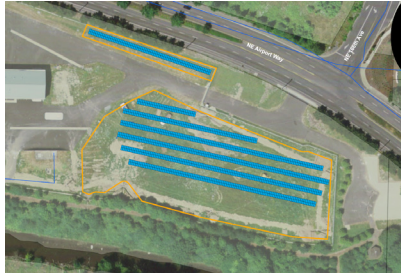


## Energy savings by favoring more efficient Pump Station





## Now Operating: Groundwater Solar Array



- 270 kW capacity
- Will generate 300,000 kWh per year
- Equivalent to power for 50 Oregon homes
- Provides approx. 5% of groundwater electricity



## Now Operating: Meter Shop Solar



- 12 kW capacity
- Equivalent to power for 1-2 Oregon homes
- 8-10% of the building's normal electrical load
- 100% of water heating needs approx. 6 months of the year



## Planned: Vernon Micro Hydro



- Taps unused energy within existing piping system
- 25 kW Capacity
- Equivalent to power for 12 Oregon homes

