

Oregon's Renewable Energy Action Plan



Prepared by the
Oregon Department of Energy
for
Governor Ted Kulongoski



OREGON
DEPARTMENT OF
ENERGY

www.oregon.gov/energy

Renewable Energy Working Group

Overview of the Renewable Energy Action Plan (REAP)

Bill Drumheller, ODOE

February 22, 2006



OREGON
DEPARTMENT OF
ENERGY

Structure of the REAP

- Goals: Short Term (before 2006) and Long Term (2007 - 2025).
- Initiatives: Legislative and those initiated by the Governor's Office.
- Actions: General (cross-cutting) and Resource Specific for the REWG and for state agencies and university system.



OREGON
DEPARTMENT OF
ENERGY

Electricity Generation: Long Term

- New (i.e., post-1999) renewable generation will meet 10 percent of Oregon's total load by 2015. This will increase to or exceed 25 percent of the load by 2025.
- Twenty five percent of state government's total electricity needs will be met by new renewable energy sources by 2010 and 100 percent by 2025.



OREGON
DEPARTMENT OF
ENERGY

Transportation Fuels: Long Term

- All diesel fuel sold in Oregon will contain 5 percent biodiesel by 2010, growing to 20 percent by 2025.
- All standard gasoline sold in Oregon will contain 10 percent ethanol by 2010.
- Five percent of all gasoline sold in Oregon will be an E-85 blend of ethanol and gasoline by the year 2015, growing to 15 percent by 2025.



OREGON
DEPARTMENT OF
ENERGY

Short Term Goals (End of 2006)

- Find and implement effective solutions to the transmission capacity bottleneck between eastern and western Oregon.
- All utilities in Oregon will offer customers a “stable-price” renewable energy product.
- An assessment of the feasibility of a renewable portfolio standard (RPS) for the state will be completed.



OREGON
DEPARTMENT OF
ENERGY

Short Term Goals: Electricity Generation

- Three hundred megawatts of new wind energy resources will be developed, of which 10 percent will be from community or locally owned wind energy projects.
- Five hundred additional solar photovoltaic electric systems will be installed in the years 2005 and 2006 for a total of about one megawatt.



OREGON
DEPARTMENT OF
ENERGY

Short Term Goals: Electricity Generation

- Five megawatts of new biogas generation facilities will be obtained from wastewater treatment, dairies and landfills.
- Twenty-five megawatts of new biomass-fueled electric generation will be built or be under construction.
- Twenty-five megawatts of new combined heat and power generation systems.



OREGON
DEPARTMENT OF
ENERGY

Short Term Goals: Electricity Generation

- 200 5-kilowatt fuel cells will be installed
- Twenty megawatts or more of geothermal electric generation will be in the process of being developed.
- One to four megawatts of new environmentally sustainable hydroelectric generation will be on line or in the process of being developed.



OREGON
DEPARTMENT OF
ENERGY

Short Term Goals: Transportation Fuels

- Diesel sold in Oregon will contain 2 percent biodiesel (on average), and Oregon gasoline will contain 2 percent ethanol (on average).
- Fifteen million gallons of biodiesel will be produced annually from Oregon crops or products and waste oils collected in Oregon.
- One hundred million gallons of ethanol will be produced annually.



OREGON
DEPARTMENT OF
ENERGY

REAP Legislative Initiatives: Passed in '05 Session

- Energy Loan Program changes (SB 735, SB 5503) for more renewable energy projects.
- Residential Energy Tax Credit changes for solar electric systems that allow total credit up to \$6,000 over four years (SB 31).
- Net metering changes (SB 84) allow for biomass energy and other modifications.



OREGON
DEPARTMENT OF
ENERGY

REAP Legislative Initiatives: Failed in '05 Session

- Various biofuel initiatives (HB 3481) -- although a siting exemption for biofuel production facilities did pass separately.
- MTBE ban (in biofuel initiative).
- Renewable projects on state lands (SB 737)
- Feasibility study funding for renewable projects (SB 834).



OREGON
DEPARTMENT OF
ENERGY

Remaining REAP Legislative Initiatives

- Resolve conflict between BETC and federal production tax credit (possibly resolved).
- Long-term power contracting for renewable energy to power state facilities.
- Funding for wind characteristic data collection, geochemistry of well sites, and U of O solar resource assessment work.
- A few other initiatives.



OREGON
DEPARTMENT OF
ENERGY

Governor's Office Initiatives

- Coordinate the REAP with Western Governor's Global Warming Initiative.
- Play an active role in recognition of programs, projects, and policies -- including designation of Oregon Solutions projects.
- Support the Oregon Renewable Energy Working Group.



OREGON
DEPARTMENT OF
ENERGY

The Oregon Renewable Energy Working Group

- Support a Renewable Energy Working Group to be coordinated through the Governor's Office and the Oregon Department of Energy to guide the **implementation** of this Plan.
- Support a **Renewable Energy Working Group** to oversee reaching the long and short term goals, and prepare regular progress reports to the Governor's Office and stakeholders.



OREGON
DEPARTMENT OF
ENERGY

General Actions

- Fifteen (15) action items for Renewable Energy Working Group to consider.
- Thirty-three (33) action items for state agencies to undertake -- including Energy, OECD, Administrative Services, PUC, Agriculture, State Lands, DCBS Building Codes, Oregon University System, and the Oregon Solutions team.



OREGON
DEPARTMENT OF
ENERGY

Resource Specific Actions

- Biofuels (Ethanol)
- Biofuels (Biodiesel)
- Biogas
- Ocean
- Biomass
- Solar
- Fuel Cells
- Wind
- Geothermal
- Hydroelectric
- Combined Heat and Power Systems



OREGON
DEPARTMENT OF
ENERGY

Resource Specific Actions

- Thirty-six (36) tasks for REWG.
- Fifty-two (52) tasks for state agencies and universities.
- Same agencies undertaking general tasks, but in addition the list includes Forestry, Geology and Mineral Industries, Water Resources, and the Military Department.



OREGON
DEPARTMENT OF
ENERGY

REAP Working Groups

- REWG will be able to utilize existing networks:
 - Biomass Coordinating Group
 - Wind Working Group
 - Geothermal Working Group
 - Solar Groups (MSR and OSEIA)
 - Ocean Energy (POWER group)



OREGON
DEPARTMENT OF
ENERGY