



# Energy

Energy efficiency and renewable energy

## Opportunities for Oregon's Agricultural Producers

Oregon Department of Agriculture

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# Efficiency

Energy efficiency and renewable energy projects may help you save electricity, fuel, and other resources, and may even offer marketing benefits. State, federal, and utility energy incentive programs are available to help support many types of projects.

## Energy efficiency

Farm energy efficiency projects include irrigation efficiency, greenhouse heating efficiency, reduced tillage, nutrient use efficiency, and proper equipment calibration and maintenance. Several websites offer energy-saving suggestions for agricultural operations.

For more customized energy saving ideas, consider an energy assessment or energy audit. Some utilities provide energy saving assessment services. Other sources of assistance include local Soil and Water Conservation Districts, Resource Conservation & Development Councils, Oregon State University's Industrial Assessment Center, and private engineering and irrigation firms.



**Solar electric systems  
can offset electricity  
use.**



# Incentives

## **Incentives for energy efficiency projects**

- Oregon's Business Energy Tax Credit provides a 35 percent credit for certain energy conservation projects. You must apply to the Oregon Department of Energy for this credit before starting your project. The credit program is currently scheduled to expire on June 30, 2012.
- Oregon Department of Energy can help finance energy efficiency projects through its Energy Loan Program.
- The Energy Trust of Oregon provides incentives and support to help businesses install qualified energy efficient equipment. Oregon customers of Pacific Power, Portland General Electric, NW Natural Gas, and Cascade Natural Gas are eligible.
- Most co-ops and public utility districts offer rebates or other incentives for irrigation and other efficiency projects.
- USDA Rural Development's Rural Energy for America Program (REAP) offers competitive grants for up to 25 percent of energy efficiency project costs, and loan guarantees for up to 50 percent of project costs. Prior to applying, you must have an energy assessment or audit completed by a certified assessor.
- Other programs, such as USDA's Environmental Quality Incentives Program and Conservation Stewardship Program, and Oregon Watershed Enhancement Board grants, support natural resource stewardship projects that may have energy-saving benefits.



# Renewable energy

## Renewable energy opportunities for Oregon farms

- Generating electricity to offset your farm's electricity use, through solar, small wind, small hydro, and other technologies
- Generating heat through solar water heating, biomass furnace or boiler, geothermal heating, or a combination of these technologies
- Developing an off-grid renewable project such as a solar-powered livestock watering system
- Growing energy crops for your own use or for sale
- Hosting a third-party developed large-scale energy project, such as a wind farm or anaerobic digester
- Developing your own large-scale energy project and selling the power to a utility.

Greenhouse wall upgrades and other efficiency improvements can reduce heat loss and save energy.





# Incentives

## **Incentives for renewable energy projects**

- Oregon's Business Energy Tax Credit provides a 50 percent credit for certain renewable energy projects. You must apply to the Oregon Department of Energy for this credit before starting your project. This program is currently scheduled to expire on June 30, 2012.
- Oregon's Biomass Producer/Collector (BPC) Tax Credit offers per-unit credits for biomass produced in Oregon and converted to biofuel in Oregon. You must apply to the Oregon Department of Energy for certification of these credits. The BPC credit is currently scheduled to expire at the end of 2011.
- Oregon Department of Energy can help finance renewable energy projects through its Energy Loan Program.
- The Energy Trust of Oregon provides incentives and in some cases, feasibility and grantwriting support, to help businesses evaluate and install qualified renewable electricity projects. Oregon customers of Pacific Power and Portland General Electric are eligible.
- The USDA Rural Development's Rural Energy for America Program (REAP) offers competitive grants for up to 25 percent of the costs of renewable energy projects, and loan guarantees for up to 50 percent of project costs.
- The federal Investment Tax Credit is 30 percent for several types of renewable energy projects. In addition, projects begun through 2011 can take the credit as a grant through the US Treasury Department.



# Getting started

## How to get started

Oregon Department of Agriculture  
Renewable Energy Specialist  
(503) 986-4565  
<http://oregon.gov/ODA/energy.shtml>

Oregon Department of Energy  
(503) 378-4040 or (800) 221-8035  
<http://oregon.gov/ENERGY>

Energy Trust of Oregon, Inc.  
(866) 368-7878  
<http://energytrust.org>

USDA-Rural Development  
(503) 414-3366  
<http://www.rurdev.usda.gov/or/energy.htm>

USDA-Natural Resources Conservation Service  
(503) 414-3200  
Oregon state office website  
<http://www.or.nrcs.usda.gov>  
Energy website  
<http://www.nrcs.usda.gov/technical/energy>



# Getting help

## **How to find information**

Find your local Soil and Water Conservation District

<http://www.oacd.org>

Find your local Resource Conservation & Development Council

<http://www.rcdnet.org/rcd-councils>

Energy information from National Sustainable Agriculture  
Information Service

[http://attra.ncat.org/attra-pub/farm\\_energy/index.php](http://attra.ncat.org/attra-pub/farm_energy/index.php)

Information on federal tax incentives

<http://www.dsireusa.org> and click on “federal incentives.”

Online energy assessment tool

<http://ruralenergy.wisc.edu>

USDA ARS Virtual Grower

[http://www.ars.usda.gov/services/software/download.  
htm?softwareid=108](http://www.ars.usda.gov/services/software/download.htm?softwareid=108)

Climate Friendly Nurseries

<http://www.climatefriendlynurseries.org>

Anaerobic digesters  
can harvest energy  
from livestock manure.



## Agricultural perspectives on energy projects

“With present commodity prices, we would not be profitable without these changes.”

—ODA ag & energy survey respondent,  
describing benefits of energy efficiency project

“It’s very low-maintenance. It’s a great system. I’d do it again in a heartbeat.”

—Mike McKinnon, ranch owner, speaking  
about solar livestock watering system

“I’m interested in creating products with the lowest inputs possible. And I was excited about the idea of harnessing power from the sun. It was estimated to produce about fifty percent of the electricity the winery consumes. So far, it has exceeded our expectations.”

—Bill Stoller, Stoller Vineyards

“Farmers are aware of the cost of every pass they make over the field. I’m willing to leave the seed bed more coarse than I used to.”

—Phil Hassinger, farmer, Grande Ronde Valley

“We are evaluating every possible opportunity to maximize the value of the energy we use.”

—John Becker, Hart’s Nursery

“We see energy efficiency as a real resource, just like renewable energy or fossil fuel resources.”

—Pam Barron, Energy Director, Northwest  
Food Processors’ Association

Oregon Department of Agriculture  
623 Capitol St NE  
Salem, OR 97301-2532

<http://oregon.gov/ODA>



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