



## Wind Energy in Oregon State and Federal Incentives

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OREGON  
DEPARTMENT OF  
ENERGY

### Overview

- Oregon's Business Energy Tax Credit (BETC)
- Oregon's Residential Energy Tax Credit (RETC)
- Oregon's Small-scale Energy Loan Program (SELP)
- Renewable Energy Feasibility Study grants in Oregon
- Net metering
- Federal Incentives



## Oregon's Business Energy Tax Credit (BETC)

- 50% tax credit for renewable resources
- Project cost limited to \$20 million; \$40 million for manufacturing facilities that make renewable energy equipment
- Project pre-certification **before** project start
- For small wind: maximum simple payback period is 15 years
  - Calculate the value of the first year energy produced by multiplying the estimated annual production times the value of the kWh (maximum 25 cents per kWh)
  - **Example 1:** Installed cost \$50,000, annual energy production is 20,000 kWh. Therefore, annual value is \$5,000, payback is 10 years, thus the total cost is eligible.
  - **Example 2:** Same installed cost, not so good site, annual energy production is 10,000 kWh. Annual value is \$2,500, payback is 20 years. Therefore, the eligible cost is \$50,000 times 15/20 times or \$37,500.

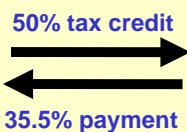
## BETC Pass-Through Option: **Caution: these percentages will change due to recent legislation**

### The Pass Through- Partner

- ◆ For 5-year projects: pays the net present value (33.5%) of eligible project costs and gets the 50% tax credit
- ◆ For 1-year projects: pays the net present value (43.5%) of eligible project costs and gets the 50% tax credit
- ◆ For energy efficiency projects these numbers are respectively 25.5 and 30.5 %
- ◆ Business or Individual (one or more)
- ◆ Must have an Oregon tax liability
- ◆ Can help capitalise a project

### Project owner

(church, school, public entity, business, etc.)



### Pass-through partner

(business or individual with an Oregon tax liability)

## Oregon's Residential Energy Credits (RETC)

- For small wind:
  - Based on estimated first year kWh produced (must be **at least 350 kWh/year**)
  - Maximum of \$6,000, with a maximum of \$1,500 per year spread out over 4 years
- Tax credit calculation:
  - Estimate first year annual energy production in kWh
  - Multiply this production number with \$2
  - Tax credit is the lesser of this multiplication amount or 50 % of the cost of the wind energy facility, with a maximum of \$6,000

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## RETC Pass-Through Option

Transfer the tax credit to an individual with an Oregon tax liability who will make a lump-sum payment to you equal to **95 percent** of the certified tax credit amount.

To use this option, complete an application form first. The application will be reviewed for eligibility. A *Pass-through Option Application* will be sent to the applicant in return. The applicant is responsible for finding the pass-through partner for this transfer and together they complete and sign the *Pass-through Option Application* and mail it to the Oregon Department of Energy.

The Oregon Department of Energy will then issue the tax credit certification to the pass-through partner.

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## Oregon's Energy Loan Program Terms

- \$20,000 to \$20 million
- 5 to 20+ year terms
- Construction and/or take-out loans
- Application fee + 1% loan fee
- Low fixed rates (August 2009)
  - Taxable 7-8%, 15 year
  - Tax-exempt 6-7%, 15 years
  - Subject to bond sale timing
- Collateral required



## State Feasibility Study Grants

- **Renewable Energy Feasibility (REF) Fund**  
Oregon Economic & Community Development Dep.  
Available to Municipalities  
Special Public Works Fund  
Maximum award is \$50,000 with 25% applicant cost share  
Spring and fall competitive awards  
<http://econ.oregon.gov/ECDD/CD/REFF/home.shtml>
- **Community Renewable Energy Feasibility (CREF) Program**  
Oregon Department of Energy  
Available to all public and private entities  
Reliant settlement  
Maximum award is \$50,000 with 25% applicant cost share  
Summer and winter competitive awards  
Repayment requirement if project is developed  
<http://oregon.gov/ENERGY/RENEW/CREF.shtml>

## Net metering in Oregon

- For customers of PGE, PacifiCorp and Idaho Power:
  - Maximum capacity is 2 MW for commercial customers, 25 kW for residential.
  - Annual net metering: surplus is donated back to the utility for low income customers.
- For customers of the Consumer Owned Utilities:
  - Maximum capacity is 25 kW
  - Rules vary



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## Federal Incentives

**Through the American Recovery and Reinvestment Act (ARRA)  
(February 2009):**

**Removal of small wind cost caps from investment tax credit (ITC)  
(Sec. 1103)**

- ARRA includes a provision to remove both cost caps on the federal small wind turbine ITC, originally passed on October 3, 2008.
- Taxpayers can now claim a 30% tax credit for the purchase and installation of qualifying small wind electric systems with rated capacities of 100 kilowatts (kW) or less.
- The credit is available from February 17, 2009 through December 31, 2016.

See:

[http://www.awea.org/legislative/pdf/AWEA\\_Summary\\_ARRA\\_Provisions\\_of\\_Interest\\_to\\_Small\\_Wind.pdf](http://www.awea.org/legislative/pdf/AWEA_Summary_ARRA_Provisions_of_Interest_to_Small_Wind.pdf)

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## Federal Incentives (continued)

### Through the American Recovery and Reinvestment Act (February 2009):

- Production Tax Credit Extension: 3 year, through December 31, 2012
- Developer may choose to receive a 30% investment tax credit (ITC) in place of the PTC for facilities placed in service in 2009 and 2010, and also for facilities placed in service before 2013 if construction begins before the end of 2010.
- The ITC then qualifies to be converted to a grant from the Department of Treasury.

**See:**

[http://www.awea.org/legislative/american\\_recovery\\_reinvestment\\_act.html](http://www.awea.org/legislative/american_recovery_reinvestment_act.html)

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## Federal incentives (ARRA continued)

### Treasury grant program in lieu of the investment tax credit (ITC) (Sec. 1603)

- ARRA allows taxpayers who are eligible for an ITC to receive an equivalent financial grant from the Treasury Department, in lieu of claiming the credit, if the property is either:
  - placed in service in 2009 or 2010, or
  - placed in service before the credit termination date (January 1, 2013 for wind projects), provided the construction of such property began in 2009 or 2010.
- The Treasury Department must pay the grant within 60 days of its application. The grant is subject to the recapture rules applicable to ITCs. The grant does not constitute taxable income and 50% of the grant reduces the basis of the property. The bill appropriates "such sums as may be necessary," ensuring that every eligible project electing to forgo the ITC will receive a grant in exchange for giving up the ITC.
- **Residential consumers are NOT eligible** for this grant. The grant is applicable only to entities as defined in Sections 45 and 48 of the internal revenue code, which, generally, are businesses. For more information on these tax code sections see [www.irs.gov/taxpros/article/0,,id=98137,00.html](http://www.irs.gov/taxpros/article/0,,id=98137,00.html).
- [http://www.awea.org/legislative/pdf/AWEA\\_Summary\\_ARRA\\_Provisions\\_of\\_Interest\\_to\\_Small\\_Wind.pdf](http://www.awea.org/legislative/pdf/AWEA_Summary_ARRA_Provisions_of_Interest_to_Small_Wind.pdf)

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## Federal Incentives: USDA Rural Development

- The grant and loan guarantee program "REAP" (Rural Energy for America Program).
- The "Value Added" (VAPG) program.

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## BETC - wind: qualified equipment

### Equipment must meet the following:

- Each model of the system must demonstrate reliable operation of that model of equipment and show monthly data of average energy produced (kWh) and average wind speed for one consecutive year at a site with average annual wind speeds of at least 12 mph; **OR**
  - Proof that the wind system model is listed on the official list of Qualified Wind Generators published by the Energy Trust of Oregon, the California Energy Commission, or the New York State Energy Research and Development Authority (NYSERDA) in effect as of March 20, 2008; **OR**
  - The manufacturer's power curve, the estimated annual energy production based on the site's wind speed data, and the manufacturer's performance guarantees (on-line availability and power curve).
- NOTE: ODOE reserves the right to deny eligibility for any reason including poor generator performance, concern about design, warranties, etc.
- See [http://oregon.gov/ENERGY/CONS/BUS/docs/OAR\\_BETC\\_final.pdf](http://oregon.gov/ENERGY/CONS/BUS/docs/OAR_BETC_final.pdf)

## BETC – wind: resource assessment

### Proof the wind resource is adequate for a feasible facility has to be provided

- The average monthly wind speed for 12 consecutive months at the proposed site. Measure wind speed at or as close as practically feasible to the hub height of a horizontal axis wind machine; or, the equator of a vertical axis wind machine; **OR**
  - Measure wind speed at two heights for 12 consecutive months, the lowest one at least 10 meters above ground and estimate the wind speed at hub or equator height; **OR**
  - In the event of less than one year's measurements at the proposed site, include the months of on-site measurements and supplement these data with estimated average monthly wind speeds at or near the proposed site to complete the 12 consecutive month data set. Such estimated data should be obtained from a nationally recognized firm that provides estimated wind resource data based on advanced national wind mapping technology; **OR**
  - The estimated average monthly wind speed for 12 consecutive months at or near the proposed site obtained from a nationally recognized firm that provides estimated wind resource data based on advanced national wind mapping technology.
  - In the event that **estimated** wind resource data are used, the project owner shall provide to ODOE not later than 14 months after the start-up date, one year of actual monthly energy production data and, if available, actual monthly average wind speed data of the wind energy facility's site.
- See [http://oregon.gov/ENERGY/CONS/BUS/docs/OAR\\_BETC\\_final.pdf](http://oregon.gov/ENERGY/CONS/BUS/docs/OAR_BETC_final.pdf)

## RETC – wind: qualified equipment

### To qualify for a tax credit:

- A wind system manufacturer must provide
  - Monthly data of average energy produced (kWh) and average wind speed for one consecutive year for each model of system to demonstrate reliable operation of that model of equipment at a site with average annual wind speeds of at least 12 mph; **OR**
  - The wind system model must be listed on the official list of Qualified Wind Generators published by the California Energy Commission or the New York State Energy Research and Development Authority (NYSERDA) in effect as of December 1, 2007.
- A wind system application must include the nominal rated electric capacity, the power curve and energy production data as a function of the average annual wind speed.
- A wind system must have a minimum five-year manufacturer's warranty.
- The first year energy production must be at least 350 kWh
- The Oregon Department of Energy reserves the right to deny eligibility for any wind system for any reason.
- See <http://oregon.gov/ENERGY/CONS/RES/tax/docs/oar-retc.pdf>

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## RETC – wind: resource assessment

**The first-year energy yield must be estimated using the measured or estimated wind resource data and the wind system's power curve or energy production data.**

- The provided wind data must cover at least a one-year period.
- Wind data may be used from
  - (1) three nearby wind monitoring stations, **OR**
  - (2) the wind site itself, **OR**
  - (3) in the event of less than one year's measurements at the wind site, the application shall include the months of on-site measurements and one year's worth of data from two nearby locations, or a nationally recognized firm that provides estimated wind resource data based on advanced national wind mapping technology.
- ODOE will use data supplied by the applicant to verify the first-year energy yield.
- See <http://oregon.gov/ENERGY/CONS/RES/tax/docs/oar-retc.pdf>

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