### **Solar – Frequently Asked Questions (FAQ)**

This document contains frequently asked questions about solar energy systems. The Oregon Department of Energy (ODOE) cannot provide specific tax advice, or is knowledgeable about the interaction between state, federal and utility incentives.

This document is a work in progress. You can help make this document more useful by emailing you questions to Christopher.s.dymond@state.or.us

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### Solar Basics

### 1. Does Oregon get enough sun for solar to work?

YES – Oregon receives as much sun as the national average. Oregon's sunnier locations are especially well suited for solar because of our relatively dry and cooler climate. For example, typical solar water heater in Central Oregon will save more energy than the same system in Miami, Florida.

#### 2. How much energy will a solar system save?

This depends on the technology and location. It is technically possible for solar energy to meet 100 percent of the energy needs of a typical home on an ANNUAL basis. However saving more than 50 percent of your energy is difficult and can be quite costly.

#### 3. What kinds of solar technologies are there?

There are three common types – solar electric, solar water heating and passive solar space heating and solar pool heating. Each technology is very different in design, cost and performance.

#### 4. What should steps should I take to evaluate if solar is right for me?

- Step 1 Evaluate how much energy you use.
- Step 2 Make sure your site has very little shade by trees or other buildings.
- Step 3 Determine what if any energy conservation steps you have not taken.
- Step 4 Determine how much you are willing to spend.
- Step 5 Determine what technology you are most interested in.
- Step 6 Call a solar company for a site visit and initial bid. (Visit the Oregon Department of Energy Web site at <a href="www.oregon.gov/energy">www.oregon.gov/energy</a> for a listing of solar companies with tax-credit certified technicians.)

### Residential Energy Tax Credit:

### 1. Are tax credits available for solar energy systems?

YES – All are limited to no more than \$1,500 in a single year. The amount of the credit is based on estimated first year energy savings (see yield tables). Solar water heating, solar pool heating and solar space heating are limited to \$1,500 per system. Solar electric systems (PV) are limited to \$6,000 per system.

### 2. How and when do I apply?

Residential Energy Tax Credits may be applied for after the system is installed. Your tax-credit certified technician should help you with the necessary forms. Solar water heating systems and solar electric systems must be "verified" by a tax-credit certified technician.

## 3. I want to install a solar hot water system and a solar electric system in the same year. Can I qualify for tax credits on both?

YES – Effective January 1, 2006, these technologies are defined in separate sections of the Oregon Revised Statues, enabling someone to install both in the same year and receive two Residential Energy Tax Credits.

# 4. I want to increase the size of my PV system. Can I get credits for the increased portion?

The maximum allowable tax credit for a PV system is \$6,000. System additions that increase the output of the solar PV system can qualify for additional tax credits provide that the maximum of \$6,000 per system cap has not been reached.

# 5. I've already maxed out on my solar PV tax credit for my system. Can I get more tax credits if I add additional system capacity?

No. The system cap is 2000 watts or \$6,000. The only way to get more solar PV tax credits is to install a completely new system with all new BOS parts, inverters, and panels.

## 6. I'm a homeowner and I want to install my own system. Does my solar system qualify for a tax credit?

Yes, however, solar water heating and solar electric system MUST be signed off by ("verified") by a tax-credit certified technician. If none are available in your area, contact the Oregon Department of Energy at 1-800-221-8035.

# 7. I don't have a tax liability or I don't want to take my solar electric tax credit over four years. Can I get it early?

Perhaps – State law provides a process for tax credits to be transferred to a third party, if the third party writes a check to the system owner. This process is called the "Pass-through Option." For more information consult the Oregon Department of Energy's Web page.

## 8. I don't have a large tax liability. How many years do I have to claim my tax credits?

State law allows you to take up to five (5) years to claim a residential tax credit. The credit, however, starts to be counted in the year in which it was installed. Following is an example.

| Tax Year | Tax<br>Credit | Tax Liability | Credit Claimed            | Carry Forward |
|----------|---------------|---------------|---------------------------|---------------|
|          |               |               |                           |               |
| 2006     | \$1,500       | \$500         | \$500                     | \$1,000       |
| 2007     | \$1,500       | \$500         | \$500                     | \$2,000       |
| 2008     | \$1,500       | \$2,000       | \$1,500 + \$500 (of c/f*) | \$1,500       |
| 2009     | \$1,500       | \$0           | \$0                       | \$3,000       |
| 2010     | \$0           | \$1,000       | \$1,000 (c/f)             | \$2,000       |
| 2011     | \$0           | \$1,500       | \$1,500 (c/f)             | \$500         |
| 2012     | \$0           | \$1,000       | \$0                       | \$0           |

<sup>\*</sup> carry forward

### Business Energy Tax Credit (BETC):

#### 1. What is the tax credit amount?

The total tax credit is limited to 35 percent of the eligible cost. The eligible cost for solar energy equipment is limited by its energy payback. For solar electric systems, the payback period allowed is limited to 30 years. For solar water heating systems, it is limited to 15 years. For systems over \$20,000 of eligible cost, the credit is spread over 5 years, with 10 percent taken the in the first two years and 5 percent taken in the following 3 years. For systems with eligible cost of \$20,000 or less, the entire 35 percent tax credit can be claimed in the first year.

### 2. When and how do I apply?

IMPORTANT – The business energy tax credit must be applied for **BEFORE** the project work has begun. Applications must be received by the Oregon Department of Energy prior the purchasing of any equipment or services. Processing of the application does not commence until after the application fee is submitted. If approved, the applicant will receive a "Preliminary Certification." Once the project is completed, the applicant needs to send the Department of Energy proof of project completion and cost before receiving the actual "Tax Credit Certification" which allows a credit to be legally claimed.

#### 3. I don't have a tax liability. Can I still take advantage of BETC?

Yes. State law provides a process for tax credits to be used by a third party, if the third party writes a check to the system owner. This process is called the Pass-through Option." For more information consult the Oregon Department of Energy's Web page (www.oregon.gov/energy)

### State Energy Loan Program

In progress

## Solar Electric Technology

In progress

### Solar Water Heating

In progress

## Passive Solar Space Heating

In progress

### Solar Pool Heating

In progress