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Energy Incentives Program

Application for Small Premium Projects (SPP) Final Certificate

5.12 Solar Water Heating

Informational Filing #:

1. Project Owner Informat	<u>ion</u>		
Project Owner Name:			
Federal Tax ID (REQUIRED)*:		SSN*:	
Contact Name:			
Mailing Address:			
City:	State:		Zip:
Phone:		Email:	•
2. Project Site Information			
Project Site Address:	C OD		7.
City:	State: OR		Zip:
SIC or NAICS Code: SIC #:		NAIC	
Principal Building Use (specify, if nec	essary):	New Construction: ☐ Yes ☐ No	Backup Water Heater: ☐ Boiler ☐ Electric ☐ Gas
Does Project Owner own or lease the property where this project will be implemented? □ Own □ Lease □ Other situation (specify):			
Natural Gas Utility:		Electrical U	tility:
Number of jobs created by the project:			
*OAR 330-210-0030 authorizes the Oregon Departr	nent of Energy	to use your federal tax ident	ification or social security number as an identification

^{*}OAR 330-210-0030 authorizes the Oregon Department of Energy to use your federal tax identification or social security number as an identification number in maintaining internal records and may be shared with the Oregon Department of Revenue to establish the identity of an individual in order to administer state tax law.

3. <u>Load Information</u>		
Estimated Hot Water Usage: (Gallons/day)	How many hours per year does the building operate?	What is the capacity of existing water heater(s)?
Must be greater than 150 gallons/day	hours Minimum of 2,000 hrs/year	gallons

4. System Information			
Using the chart provided adjacently, identify Oregon Solar Climate Zone in which project is located:	Oregon	Solar Climate Zones (by	/ county)
Chinate Zone in which project is focuted.	Zone 1	Zone 2	Zone 3
□ Zone 1 □ Zone 2 □ Zone 3	Benton Clackamas Clatsop Columbia Lane	Coos Curry Douglas Jackson Josephine	Baker Crook Deschutes Gilliam Grant
Total Solar Resource Fraction (TSRF) %	Lincoln Linn Marion Multnomah Polk Tillamook Washington		Hamey Hood River Jefferson Kalamath Lake Malheur Morrow
Manufacturer of the system:	Yamhill		Sherman Umatilla Union Wallowa Wasco Wheeler
Solar Rating and Certification Corp. (SRCC) System Number:	Clatsop ——— Washington –	Columbia Hood River Gilliam Multnomah / Sherman	Umatilla Wallowa
Annual Savings: kWh or therms.	Tillamook — Yamhill — Lincoln —	Polk Marion Wasco Wheeler	r =
$\hfill \square$ I have attached the SRCC Certification and Rating page for the system.	Benton ——	1 Linn Jefferson 3 rook	Grant
Panel Information	Coos	Lane Deschutes Douglas Lake	Harney Malheur
Name:	C7		
Name:Sqft	Curry	Jackson Klamath	
Mounting Tilt: Degrees)	
Orientation: Degrees	Jo	sephine	

Solar Site Assessment Worksheet

A tool for estimating the impact of collector tilt, orientation and shading

To estimate the performance of a solar energy system we need to know how much solar energy is available for your collector. This worksheet is used to estimate the impact of tilt, orientation and external shading on how much solar energy your solar collectors can collect. The Total Solar Resource Fraction (TSRF) represents the fraction of energy a particular collector would receive when compared to one in the same city, but that has optimal tilt, orientation and no external shading. For example, a collector with a TSRF of 80 percent indicates that 80 percent of the solar energy at your location over a year will be available to the solar collector.

For simplicity we have separated calculating the TSRF into two parts. The first part is to determine the impact of collector tilt and orientation. This Tilt and Orientation Factor (TOF) is estimated using one of the following plots. The second part is to uses a sun chart to estimate how much energy is lost on an annual basis from external shading from plants, buildings or other obstructions. The combination of these two effects will provide your collector's TSRF.

Step 1: **Tilt and Orientation Factor (TOF)** graphs (right) show the impact of tilt, and orientation on annual performance of a solar collector. TOF values range from 100% (no loss) at the center of the inner circle to less than 60% (40% or more loss) in the upper left and right corners.

Azimuth angles are based on true polar orientation, adjusted for magnetic declination (16-20 degrees for most of Oregon)

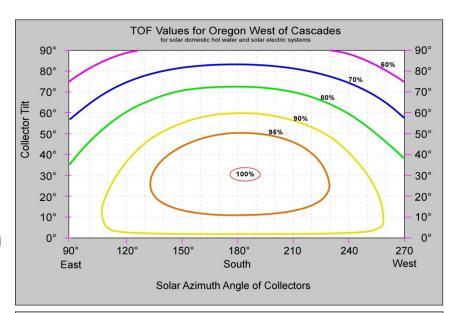
Use the upper graph if your system is installed West of the Cascades. Use the lower graph if your system is installed East of the Cascades.

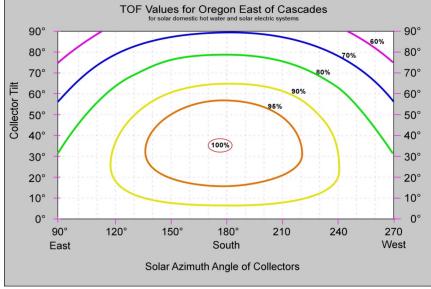
Draw a dark X mark the graph for your collector's tilt and azimuth angle. Interpolate between the nearest two lines to estimate the TOF value to the nearest 1%.

Collector Tilt = _____ (angle from horizontal)

Solar Azimuth = ____ (collector orientation)

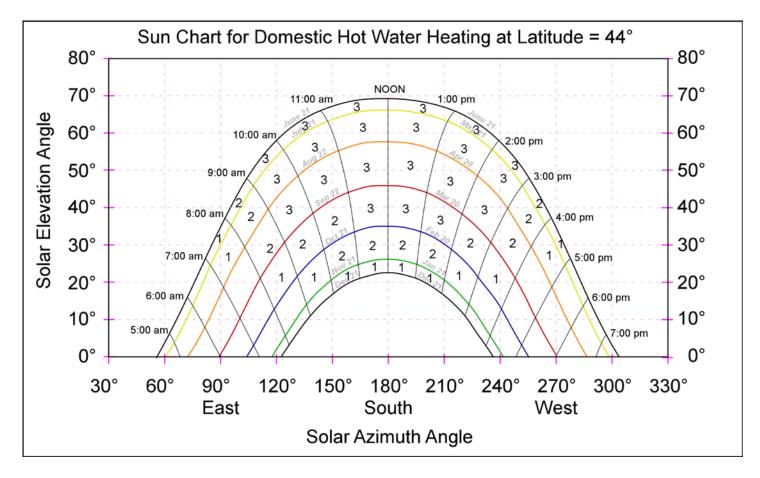
TOF = _____ 9
(value from graph)





Solar Site Assessment Worksheet (continued)

Step 2: Shading – From the midpoint of the solar array, draw the skyline on the graph below. Use the elevation angles and solar azimuth angles to determine the location of the obstructions. A solar site assessment tool such as the Pathfinder™, or Solmetric Suneye is recommended for increased accuracy. Energy Trust of Oregon sun charts can be used in lieu of the sun chart below. Draw deciduous trees with a dotted outline and fill with light shading. Year-round obstructions like buildings, or evergreen trees should be drawn with solid outlines and filled with heavy shading.



Add up the solar fraction numbers in the sections that have shading. For solar electric systems, partial shading in one section must be counted fully (no fractional amounts). Any deciduous tree shading below the Sept 22/March 20 line can be counted at half value to account for the fact that some light will get through these obstructions when the trees lose their leaves. This sum of all these values inside obstructed areas represents the percent of energy lost to external shading. The **percent not shaded** is 100% minus the value obtained from the shaded areas of the sun chart above.

Example: If the sum of the shaded boxes on the Sun Chart is 10, the percent not shaded will be: 100% - 10% = 90% (or 0.90)

Step 3 – Calculate the **Total Solar Resource Fraction (TSRF)** using the following equation:

5. <u>Incentive Information</u>

5.a. for "Domestic" Potable Hot Water Applications

Total Panel Area (Sq. Ft)	Tax Credit
30 - 50	\$2,422
50 - 70	\$3,276

70 - 90	\$4,045
90 - 110	\$4,730
110 - 130	\$5,331
130 - 150	\$5,848
150 - 170	\$6,280
170 - 190	\$6,629
190 - 210	\$6,893
<u>5.b. for Po</u>	ol Water Heating Applications
5.b. for Poor	ol Water Heating Applications Tax Credit
	Tax Credit
Total Panel Area (Sq. Ft)	
Total Panel Area (Sq. Ft) 275 - 325	Tax Credit \$1,505
Total Panel Area (Sq. Ft) 275 - 325 325 - 375	\$1,505 \$1,684
Total Panel Area (Sq. Ft) 275 - 325 325 - 375 375 - 425	\$1,505 \$1,684 \$1,863
Total Panel Area (Sq. Ft) 275 - 325 325 - 375 375 - 425 425 - 475	\$1,505 \$1,684 \$1,863 \$2,042
Total Panel Area (Sq. Ft) 275 - 325 325 - 375 375 - 425 425 - 475 475 - 525	\$1,505 \$1,684 \$1,863 \$2,042 \$2,221
Total Panel Area (Sq. Ft) 275 - 325 325 - 375 375 - 425 425 - 475 475 - 525 525 - 575	\$1,505 \$1,684 \$1,863 \$2,042 \$2,221 \$2,400

6. Project Payment Analysis Please list and describe all items associated with the materials or labor within the appropriate section.		
Materials/Equipment (Paid amounts must match itemized receipts or invoices): I have enclosed itemized invoices to verify amounts paid. (REQUIRED)		
List Materials/Equipment (allocate separate dollar amounts):	\$ \$ \$	

	TOTAL: \$(6A)
Labor (allocate separate dollar amounts):	\$ \$
	\$ \$
	TOTAL: \$(6B)
Date the project is operational and all contractors, vendors, etc. are paid in full:	
Date the project was placed in service:	
	Total Paid:
	\$(6C)
	* Enter this amount on pg. 12 under Total Project Payment to determine Final Review Fee. This amount MAY NOT exceed \$20,000.00
7. Project Payment Analysis, Cont.	
Loan Contracts or Binding Agreements:	
If your project was paid for with loan agreements or binding contracts, you must provid documentation from the lender that your loan/contract is not in default.	le
☐ Yes – I have a loan agreement or binding contract to pay for this project. I included <u>required</u> documentation from the lender that my loan is curnot in default.	

Amount of Loan: _______

Contact: _

Phone:			
□ No – I did not have a loan agreement or			
be issued a <u>Certified Amount Letter</u> that indicates certification is approved.	t owners that intend to use the Pass-through option will the final certified cost once this application for final <i>a 3.2</i> for information on the Pass-through Program.		
Refer to SII Opportunity Announcement Section	1 3.2 for information on the Lass-unough Flogram.		
Does the Project Owner intend to use Pass-through? ☐ Yes ☐ No			
- If 'YES', answer the questions below.			
- If 'NO', the tax credit will be issued in the project own	ner's name. Continue on to page 8 of this application.		
 Has the Project Owner identified a Pass-through partner Yes □ No 	er?		
 If 'YES', complete the separate Pass-through Program Attachment. (http://www.oregon.gov/energy/At-Work/Documents/EIP/General/2017 Pass Through Attachment.pdf) If 'NO', answer question 2 below. 			
2. Will the Project Owner request assistance finding a pass-through partner(s) from the Oregon Department of Energy?☐ Yes☐ No			
	Department will place your application on "Hold" status exercise due diligence to find a partner(s) but cannot		
 9. Other Incentives* List any utility, Energy Trust of Oregon, or other organization rebates or incentives (not loans) or any federal tax credits that you received (or expect to receive) for this project. List the name of the group and the amount received. If there are none, check the appropriate box. The sum of all financial incentives and a federal tax credit and the Energy Incentives Program tax credit may not exceed 100% of the Final Certified Project Cost. 			
☐ This project did not receive any other incentives, plo	ease place \$0 in Total		
Type of Incentive:	Amount:		
Federal Business Energy Investment Tax Credit (ITC)			

☐Tax Credit ☐ Taking as a grant	\$
Federal Grants	\$
Other Federal Tax Credits	\$
Energy Trust of Oregon	\$
Utility Incentives (investor or publicly owned)	\$
Large Electric Consumer Self Directed Funds Incentives	\$
Other Incentives	\$
Total of Incentives:	\$

By initialing this statement, I authorize any incentivizing entity outside of ODOE to release all relevant information on
his project to ODOE. This includes, but is not limited to, project information, incentives offered and received, and
nspection results.

Project (Owner	Initials:	

10. Project Owner Statement – All fields must be completed.

- 1. I certify that the information in this application is correct and I am the owner of this energy project. I have complied with all conditions of the Opportunity Announcement. I grant the Oregon Department of Energy (ODOE) permission to inspect the project for compliance with tax credit requirements either before issuing Final Certification or during the years in which the tax credit is being claimed. I understand that failure to grant an inspection is grounds for revoking a Final Certificate.
- 2. I understand that ODOE approval and certification of my project is for tax credit purposes only. ODOE Does not guarantee or in any way ensure the performance of any equipment, the quality of any system, or the reliability of any dealer.
- 3. I will comply with the provision that the facility must operate in accordance with the representation mad in the Small Premium Projects Informational Filing.
- 4. I certify that the project complies with all local, state, and federal requirements and I obtained all necessary permits.
- 5. I understand that this tax credit application is a public record and that ODOE may be required by law to disclose information in this tax credit application to the public on request. I have marked any information that I request be kept confidential. I understand that marking information does not guarantee that it will be kept confidential and that the Director of ODOE will make any decisions regarding public disclosure of information contained in this application in accordance with the Oregon Public Records Law.
- 6. I understand that ODOE does not endorse any company that requests information on this application and does not

sell information as a mailing list.

- 7. I understand that the sum of all financial incentives for this project and the tax credit amount cannot exceed the total project payment.
- 8. I verify that the project owner does not restrict membership, sales, or services on the basis of race, color, creed, religion, national origin, sexual preference, or gender.

Project Owner (Please print)		Informational Filing #:			
Name of project owner:					
Federal Tax ID:		SSN:			
Mailing Address:					
City:	State:	Zip:			
Phone: Email:		Email:			
By signing this statement, I certify that I am the above named project owner or an owner, partner, member or shareholder of the above named project owner. I have read and agree with the terms and conditions of the Project Owner Statement above and have not altered it in any way.					
Signature:		Title:			
Print Name:		Date:			

<u>Tax Credit Recipient Statement</u> — Photocopy this page for each tax credit recipient identified. Note that associated Pass-through fees will be assessed for each certificate issued, if Pass-through is utilized (See Page 6).

- 1. I understand that the Oregon Administrative Rules authorize ODOE to use my federal tax identification or social security number as an identification number in maintaining internal records and may be shared with the Oregon Department of Revenue to establish the identity of an individual in order to administer state tax law.
- 2. I understand that the tax credit recipient must comply with Oregon Department of Revenue requirements to document that the credit has been appropriately assigned, allocated or transferred, and claimed, and that compliance is subject to audit.
- 3. I understand that this tax credit application is a public record and that ODOE may be required by law to disclose information in this tax credit application to the public on request. I have marked any information that I request be kept confidential. I understand that marking information does not guarantee that it will be kept confidential and that the Director of ODOE will make any decisions regarding public disclosure of information contained in this application in accordance with Oregon Public Records Law.
- 4. I understand that ODOE does not endorse any company that requests information on this application and does not sell information as a mailing list.
- 5. The undersigned Tax Credit Recipient hereby releases the State of Oregon and its commissions, agencies, officers, employees, contractors, and agents, and agrees to defend and indemnify the foregoing from and against any claims, demands, or costs (including attorney and expert witness fees at trial and on appeal) arising from or in any way related to claims made by the Tax Credit Recipient or any parent or subsidiary of the Tax Credit Recipient and which are related in any way to ODOE's issuance or failure to issue any pre-certification or final certification to an applicant for an Energy Incentives Program tax credit, or the inability to obtain an Energy Incentives Program tax credit. This release and indemnification does not affect the right of the undersigned to claim an Energy Incentives Program tax credit on an Oregon tax return under a final certification issued by ODOE and in accordance with applicable law.
- 6. I verify that the tax credit recipient does not restrict membership, sales, or services on the basis of race, color, creed, religion, national origin, sexual preference, or gender.
- 7. I have completed this form to the best of my knowledge.

Tax Credit Recipient (All fields must be completed. Please print clearly.) Informational Filing #:				
Name of tax credit recipient(s):				
Recipient SSN or Tax ID #:		Tax Credit Share	:%	
The tax credit recipient's tax year is a Calendar Year Fiscal Year of:				
Recipient Mailing Address:				
City:	State:		Zip:	
Recipient Phone:		Recipient Email:		
named project owner*. I have read and agree with the terms and conditions of the Tax Credit Recipient Statement above and have not altered it in any way. I certify that I am an individual or a corporation that has an Oregon tax liability (a Pass-through tax credit may not be issued to a partnership, an LLC, or an LLP filing taxes as a partnership).				
Signature of Tax Credit Recipient:			Title:	
Print Name of Tax Credit Recipient:			Date:	
Signature of Tax Credit Recipient:			Title:	
Print Name of Tax Credit Recipient:			Date:	
* Tax credits not issued to the project owner or owners, partners, members or shareholders of the project owner must use the Pass-through				

option to obtain a tax credit. Information will be shared with the Oregon Department of Revenue to administer state tax law. Contact

ODOE for more information.



Energy Incentives Program

Please refer to this checklist before submitting application to ODOE to ensure all requirements have been satisfied. An application is considered incomplete if <u>any</u> part of the application is left blank, is omitted, or is not included.



ALL INCOMPLETE APPLICATIONS WILL BE REJECTED AND RETURNED TO APPLICANT AND WILL NOT BE PROCESSED.



The Application is COMPLETE . All spaces/sections completed All appropriate attachments/documents to supplement technical appendices
 Installation/Construction of the project is complete. ☐ Included documentation confirms the installed equipment and labor for the project is complete and paid for in full.
Final informational filing fee included.

All boxes MUST be checked in order for Application to be considered **COMPLETE**



• Energy Incentives Program tax credit will be taken the same year the application for <u>Final Certification</u> is submitted, <u>regardless of informational filing date or the date that the project was started or completed.</u>

Please do NOT print this page double sided. The credit card information will be destroyed once the payment is processed.

Final Review Fee

- 1. Payment **MUST** be received with application or you will not be eligible for a credit
- 2. Application will be **INCOMPLETE** if this payment is not submitted with application.
- 3. Payments considered "Received" when a signed check is included or credit card information is filled in and signed by the cardholder.
- 4. If payment is unable to be processed or is declined, the application will be considered **INCOMPLETE**

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Small Premium Projects Final Review Fee= 0.55% of Total Project Payment

Total Project Payment (6C)*:_____ x = 0.0055 =

Final Review Fee

* See **Project Payment Analysis** (Section 6, pg. 6).

Check: Please make check payable to **Oregon Department of Energy** and include with form.

Payment Method:

Mail completed application and application fee to:

Oregon Department of Energy EIP Small Premium Projects 550 Capitol St. NE, 1st Floor Salem, OR 97301

<u>OR</u>				
☐ Visa ☐ MasterCard ☐ Discover				
ALL FIELDS REQUIRED TO PROCESS				
Credit Card Number:	Expiration Date:			
Name of cardholder as shown on credit card:				
Security Code (3 digits on back of card):				
Billing Address for the card:	Zip Code:			
Email Address for receipt:				
Cardholder Signature:	Date:			
Credit card information will be destroyed once the payment is processed.				