



To: House Committee on Energy and Environment

From: Anthony L. Buckley, Chief Financial Officer
Oregon Department of Energy

Date: February 10, 2015

Subject: HB 2447 – Residential Energy Tax Credit

INTRODUCTION

The Oregon Department of Energy supports HB 2447. HB 2447 modifies the Residential Energy Tax Credit (RETC) program by extending the program's sunset and placing two limits on the incentive amount, (1) a 50 percent cost cap and (2) the authority for the department to adjust incentives based on market conditions through rulemaking.

The Residential Energy Tax Credit program promotes energy conservation and renewable energy resource development by providing a wide range of personal income tax credit incentives to homeowners, renters and landlords to modify or purchase energy efficient equipment and renewable energy systems. The program has been in use since 1978 issuing over 570,000 tax credits totaling approximately \$172 million. Over the last 36 years, the program has saved or displaced enough energy in Oregon to power about 400,000 households for one year.

BACKGROUND

The RETC is available to all Oregon homeowners or tenants providing personal income tax credits for a wide variety of high efficiency residential products such as: gas furnaces, gas fireplaces, gas water heaters, electric heat pump water heaters, wood and pellet stoves, ducted and ductless heat pumps, geothermal heating systems and duct sealing. RETC also provides tax credits for solar electric and water heating systems, alternative fuel charging stations, solar photovoltaic systems and wind systems. These devices are listed on the attached chart with the green section showing the number of incentives provided in tax year 2013, the blue section showing the current tax credit rates for 2015, and the yellow section showing the changes provided for in HB 2447.



Applicants cannot receive an incentive for more than the cost of the eligible device.

The RETC program is uncapped, with the exception of third party solar photovoltaic systems that are limited to \$10 million in tax credit reservations per tax year. Which could provide incentives to about 1,670 solar photovoltaic systems a year. Tax credit amounts vary based on the alternative energy device and the amount of energy saved or produced. Each eligible device is limited by the first-year energy savings or energy produced and an overall dollar cap of \$1,500 for most devices and \$6,000 for solar photovoltaic and fuel cell systems. Department staff engage with stakeholders on an annual basis to discuss program operation and to review energy savings used to calculate tax credit amounts.

In 2011, HB 3672 gave the department statutory authority to adjust the rate for solar photovoltaic and fuel cell systems based on market conditions. Over the last three years, the department has used that authority to meet with solar photovoltaic stakeholders to discuss market conditions such as system component and installation costs and the number of installations. As a result of those meetings and analysis of the market, the department reduced the solar photovoltaic incentive rate twice in the last three years. The RETC solar photovoltaic rate will continue to be evaluated on an annual basis with the goal of making frequent small adjustments in a transparent manner to minimize negative impacts to the market.

HB 3672 also removed eligibility for washers, dishwashers and refrigerators and the specific tax credit amount for energy efficient appliances in ORS 316.116. Without the specific amount, the department provided energy efficient appliances the general category one incentive rate of 60 cents per first year of energy savings in kilowatt-hours, not to exceed \$1,500. This became a 50 percent increase in the incentive rate, previously 40 cents per kilowatt-hour, and an increase in the overall cap by \$500, previously \$1,000. The change in statute also removed a tax credit limit of 25 percent of the cost of the device. Without this cost cap, some RETC appliances receive tax credits for a large portion of the cost of the device.

DISCUSSION

HB 2447 modifies the RETC program by extending the program's sunset, placing a 50 percent cost cap on devices and expanding rulemaking authority to adjust incentive amounts.



Extending Sunset

Extending the sunset would provide residential property owners or tenants installing energy efficient or renewable devices personal income tax credits for an additional four years. The sunset extension would encourage the purchase of such devices, providing sales and installation jobs for contractors, and stability and continuity in the marketplace. Extending the sunset date would also allow retention of department staff and expertise.

50 Percent Incentive Cap

HB 2447 places a 50 percent cost cap for all category one alternative energy devices, including appliances. The bill would align category one devices with category two devices.

By adding a 50 percent cost cap for category one devices, HB 2447 would provide one of several methods to limit the amount of a tax credit. Most RETC applicants receive less than 50 percent of their eligible cost. The average tax credit to cost of device percentage for category one devices for tax year 2013 was 16 percent. Only about 10 percent of 11,400 category one tax credits issued were for more than 50 percent of the device cost in tax year 2013.

Rulemaking Authority to Adjust Incentive Rate

HB 2447 provides the department rulemaking authority to adjust RETC incentives by device based on market conditions. This rulemaking authority would provide the department the ability to respond to changes in market conditions in a timely manner, rather than requiring legislative action. In 2011, HB 3672 gave the department statutory authority to adjust the rate for solar photovoltaic and fuel cell systems based on market conditions. HB 2447 extends that authority to all RETC devices and clarifies the department's general rulemaking authority for program operations.

Most RETC devices receive the same tax credit rate set in statute, despite device costs varying widely. The rulemaking authority would provide flexibility for the department to adjust tax credit rates as market conditions warrant. Types of factors that could be used to inform market conditions for RETC category one devices include energy savings, price of the device, installation cost, device availability, other incentives, market penetration and non-energy benefits. Any rate adjustment would be implemented through a public rulemaking process involving stakeholders.



Alternative Fuel Devices

HB 2447 provides alternative fuel devices a tax credit of \$750. Currently, alternative fuel devices receive 25 percent of the cost of the alternative fuel device not to exceed \$750. The department is requesting an amendment to HB 2447 to allow alternative fuel devices to receive the lesser of 50 percent of the cost of the device or \$750, similar to other category one devices. This provision was inadvertently left out of the original bill.

Program Updates

HB 2447 also offers the department opportunities to clarify and update program operations as listed on the attached document.

SUMMARY

HB 2447 extends the existing sunset for the program from Jan. 1, 2018 to Jan. 1, 2022. The bill places an incentive cap of 50 percent of the eligible cost on all category one alternative energy devices. Lastly, the bill provides the department with general rulemaking and expanded rulemaking authority to adjust Residential Energy Tax Credit incentives by device based on market conditions. The Oregon Department of Energy asks for your support of HB 2447.



HB 2447: Residential Energy Tax Credit Program Updates

HB 2447 provides the Oregon Department of Energy opportunities to clarify and update program operations:

- The bill repeals ORS 317.115 that provided a business tax credit for contractors installing fueling stations which ended Jan. 1, 2012.
- The bill repeals ORS 469B.109 that allowed owners of alternative fuel vehicles to transfer the tax credit. Vehicles were removed in from the RETC program starting Jan. 1, 2012.
- The bill removes the provision related to alternative fuel vehicles and hybrid vehicles because these vehicles were removed from the RETC program in 2010 and 2012.
- The bill also removes language related to investor owned utilities taking a fueling station tax credit since that allowance was removed from statute in 2001.
- The bill adds that devices be installed “at” a dwelling, in addition to being installed “in” a dwelling. This will allow the installation of alternative fuel devices such as a charging station for an electric vehicle outside of a garage.
- Several sections the bill adds the ability to allow the department to also consider state and federal appliance standards when determining eligibility for RETC devices.
- The bill updates solar standards by removing the SRCC 200 standard which does not exist and adds the SRCC 300 standard which defines system requirements and performance of solar domestic water heating systems. The department uses the SRCC 300 standard to ensure quality and generate performance estimates for solar water heating.
- The bill removes an outdated energy savings assumption for domestic water heating. Removing the specific reference will allow the department flexibility to use appropriate standards as changes to hot water consumption continue to decrease.
- The definition of “cost” is changed to reflect the current RETC program practice that eligible cost may include the acquisition, construction, and installation of the device.
- The bill amends the definition of “first year energy yield” to clarify that RETC devices may produce or save energy.
- The department is also requesting an amendment that would update the standard for geothermal systems.



Residential Energy Tax Credit Program Statistics and HB 2447 Changes

Category One Alternative Energy Devices as defined in ORS 469B.100 Tax credit based on energy savings, unless stated incentives are \$0.60 per first-year energy savings in kilowatt-hours, up to \$1,500.								
		Tax Year 2013 Applications			RETC Rates for Tax Year 2015		HB 2447 RETC Changes	
		Average Cost of Device	Average Tax Credit Amount	# Credits Issued	2015 Tax Credit & Rate rules effective 1/1/15	% of Cost Cap	Tax Credit Rate	% of Cost Cap
Appliances	Electric heat pump water heater	\$1,094	\$624	630	60¢ per first-year energy savings: \$585 to \$985	No percentage of cost of device cap on tax credit. <i>Appliances previously had a cost cap of 25% of the cost of the device, but the cap was removed in HB 3672 (2011).</i>	Cap of \$0.60 per first-year energy savings in kilowatt hours and by statute add the ability to set lesser rate by rule by device type	In statute, set a cap on the tax credit of 50% of the cost of the device
	Tankless gas water heater	\$2,269	\$241	292	60¢ per first-year energy savings: \$225 to \$245			
	Storage gas water heater	No Data, New for 2015			60¢ per first-year energy savings: \$175			
	Direct vent gas fireplace	No Data, New for 2015			60¢ per first-year energy savings: \$352 to \$550			
	Gas furnace	\$3,385	\$401	4,067	60¢ per first-year energy savings: \$352 to \$492			
	Air-source ducted heat pump	\$6,130	\$512	1,570	60¢ per first-year energy savings: \$340 to \$1,125			
	Ductless heat pump (mini-split)	\$3,487	\$933	3,055	60¢ per first-year energy savings: \$625 to \$1,300			
	Duct sealing (in unconditioned spaces)	\$1,050	\$454	848	60¢ per first-year energy savings: \$250			
	Whole house ventilation (HRV/ERV)	\$3,424	\$375	4	60¢ per first-year energy savings: \$225 to \$645			
	Waste water heat recovery	No data	No data	0	60¢ per first-year energy savings: \$92 to \$138			
Non-Appliances	Geothermal heat pump and upgrade of geothermal system	\$17,473	\$706	72	60¢ per first-year energy savings: \$600 to \$900	No percentage of cost of device cap on tax credit.		
	Wood & pellet stoves	\$2,504	\$302	645	60¢ per first-year energy savings: \$144 to \$1,500			
	Solar space heating (passive or active)	\$10,875	\$1,439	6	60¢ per first-year energy savings			
	Solar water heating (passive or active)	\$10,465	\$1,388	47	60¢ per first-year energy savings			
	Alternative fuel charging station	\$1,288	\$303	115	up to \$750	25% of the cost of the device	Ability to set lesser amount by rule	
	Solar pool/spa heating	\$4,996	\$1,339	57	15¢ per first-year energy savings	50% of the cost of the device	Ability to set lesser rate by rule	<i>No change</i>

Updated Feb. 2, 2015 *Data from April 2014 based on Tax Year 2013, the last year the department has complete data due to the nature of tax credits and when applicants apply



Residential Energy Tax Credit Program Statistics and HB 2447 Changes

Category Two Alternative Energy Devices as defined in ORS 469B.100							
Tax credit based on installed output in watts or first year energy savings, maximum tax credit is \$6,000, not to exceed 50% of the cost of the system. Tax credit is taken over 4 years, \$1,500 a year							
	Tax Year 2013 Applications			RETC Rates for Tax Year 2015		HB 2447 RETC Changes	
	Average Cost of Device	Average Tax Credit Amount	# Credits Issued	2015 Tax Credit & Rate <small>rules effective 1/1/15</small>	% of Cost Cap	Tax Credit Rate	% of Cost Cap
Solar electric (photovoltaic)	\$23,447	\$5,888	1,051	\$1.70 a watt <small>(in statute \$3 a watt and by rule may set lesser rate)</small>	50% of the cost of the device	<i>No change</i>	<i>No change</i>
Wind system	No 2013 data <i>\$30,000 to \$100,000 in prior years</i>	No 2013 data <i>\$3,000 to \$6,000 in prior years</i>	0	\$2.00 per first-year energy savings in kilowatt-hours		Cap of \$2.00 per kilowatt hour first-year energy savings and by statute ability to set lesser rate by rule	
Fuel cell	No data	No data	0	\$3.00 a watt <small>(in statute \$3 a watt and by rule may set lesser rate)</small>		<i>No change</i>	

Total RETC Applications Tax Year 2013	# Tax Credits Issued	Total Tax Credit Amount
	12,459	\$12,754,681

- Tax Year 2013 is the last complete tax year of data, data is provided by the tax year in which the credit could be first claimed.
- Tax Year 2015 rates are effective Jan. 1, 2015, the tax credit rate chart is available on the web:
<http://www.oregon.gov/energy/CONS/docs/2015RETCRates.pdf>
- HB 2447 RETC Changes show statutory changes requested in HB 2447.