To: House Committee on Revenue

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

Date: April 7, 2015

Subject: HB 2447 A-Engrossed – Residential Energy Tax Credit

INTRODUCTION

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

The Residential Energy Tax Credit is a long-standing and successful program that promotes energy conservation and renewable energy resource development by providing 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 more than 570,000 tax credits totaling approximately $172 million. Over the last 36 years, the program provided tax credits for devices that will save or displace enough energy in Oregon to serve about 400,000 households for one year.

BACKGROUND

The RETC is available to all Oregon homeowners or tenants providing personal income tax credits for high efficiency residential products. Eligible devices are listed on Attachment 2.

The RETC program encourages purchases of high efficiency equipment and renewable systems for homes with incentives for a portion of the device cost. Dollar savings from tax credits and reduced energy costs benefit homeowners and tenants. Oregon and the region benefit from reduced energy use by reducing the need for new electric generation in the future. Savings from RETC eligible devices contribute to the regional energy plan that counts energy efficiency as an alternative to new electric generation. Energy saved is energy that does not have to be produced by new fossil or renewable sources.

Energy efficiency does come at a cost to purchasers and market intervention programs like RETC. Homeowners are willing to pay a portion of the cost of a more energy efficient device, and incentives make up the rest of the cost. When the entire cost is less than the cost of a new power plant, it is considered a cost-effective resource.

Complimentary to other programs and incentives in the state, tax credits are part of a set of tools that support a regional energy plan to acquire cost-effective energy resources, reduce Oregon's reliance on out-of-state energy supplies, provide clean power in the form of efficiency and spur the economy through accelerated purchases of energy efficient devices.

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. 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 saved or produced and an overall dollar cap of $1,500 for most devices and $6,000 for solar photovoltaic, wind and fuel cell systems.

In 2011, HB 3672 gave ODOE statutory authority to adjust the rate for solar photovoltaic and fuel cell systems based on market conditions. Over the last three years, ODOE has used that authority to meet with stakeholders to discuss market conditions such as system costs and the number of installations. ODOE has reduced the solar photovoltaic incentive rate twice and will annually evaluate the rate with the goal of making small adjustments in a transparent manner to minimize impacts to the market.

In 2011, HB 3672 also removed eligibility for clothes washers, dishwashers and refrigerators and the specific tax credit amount for other energy efficient appliances. Without the specific amount, the incentive rate for the remaining appliances reverted to 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.

DISCUSSION

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

Attachment 2 shows the changes in HB 2447A 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 2447A.

Rulemaking Authority to Adjust Incentive Rate

As noted above in 2011, ODOE was given the statutory authority to adjust the rate for solar photovoltaic and fuel cell systems based on market conditions by rule. HB 2447A expands that authority to adjust all RETC incentives by device based on market conditions. This rulemaking authority would provide ODOE the ability to respond to changes in market conditions in a timely manner, rather than requiring legislative action. In 2011, HB 3672 gave ODOE statutory authority to adjust the rate for solar photovoltaic and fuel cell systems based on market conditions. HB 2447A extends that authority to all RETC devices and clarifies ODOE'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 ODOE 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. Assessing market conditions allows ODOE to offer a reduced incentive where the market needs less intervention.

50 Percent Incentive Cost Cap

As noted above in 2011, the cost cap on energy efficient appliances was removed. HB 2447A places an automatic 50 percent cost cap for all category one alternative energy devices, including appliances. The bill would align the cost cap for category one devices with category two devices.

By adding a 50 percent cost cap for category one devices, HB 2447A 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. If there was a 50 percent cost cap on all category one devices, the program would have provided about $220,000 less in tax credits in 2013 and about $260,000 less in tax credits in 2014.[1]

In 2013 and 2014, alternative fuel devices (charging and fueling station installations) were capped at 25 percent of the cost of the device up to $750. HB 2447A would allow an incentive of 50 percent of the cost of the device up to $750. In 2013, this would have had an increased revenue impact of about $25,000.

ODOE estimates a similar volume of RETC applications for 2016, when HB 2447A would take effect. By adding a 50 percent cost cap on all category one devices, ODOE estimates potential revenue savings of about $145,000 to $185,000 a year.[2]

Extending Sunset

Extending the program from 2018 to 2022 would provide an additional four years to encourage the purchase of energy efficient or renewable devices to support statewide energy goals. RETC is a cost-effective way to spur increased investments in residential energy efficiency and renewable energy. These investments will be needed to help meet the goals established by state and regional energy plans. These investments may also be needed to help meet proposed federal regulations for greenhouse gas emissions from the power system that are planned to phase-in beginning in 2018.

Extending the RETC program now for an additional four years instead of waiting until the 2017 Legislative Session would provide predictability and continuity in the marketplace for RETC applicants, contractors and retailers. Putting RETC on the cycle to review the extension two years prior to the sunset would allow ODOE to make longer range plans for the program, staff and administration.

Program Updates

HB 2447A also offers ODOE opportunities to clarify and update program operations as listed in Attachment 1.

[1] RETC data as of Feb. 28, 2015. Due to the nature of when RETC applications are submitted, until April of the following year, the 2014 tax year data is not finalized.

[2] Capping incentives at 50 percent of the cost of the device, ODOE estimates about $75,000 less in revenue savings than the 2013 or 2014 cost cap of 50 percent would have produced. The $75,000 reduction in savings removes the revenue savings associated with duct sealing of $50,000. Starting in 2015, ODOE reduced the energy savings associated with duct sealing, lowering the maximum duct sealing tax credit from $460 to $250. This change places most duct sealing incentives under 50 percent of the cost. The additional $25,000 reduction in revenue savings is attributed to the revenue impact from increasing the cost cap for alternative fuel devices from 25 to 50 percent of the cost of the device.

SUMMARY

HB 2447A would provide ODOE the flexibility to respond to evolving markets and emerging technologies by calibrating RETC incentives as the market matures. HB 2447A places an incentive cap of 50 percent of the eligible cost on all category one alternative energy devices and provides ODOE rulemaking authority to adjust incentives by device based on market conditions. The bill would also extend the existing sunset for the program from Jan. 1, 2018 to Jan. 1, 2022. The Oregon Department of Energy asks for your support of HB 2447A.

Attachment 1: HB 2447A Residential Energy Tax Credit Program Updates

HB 2447A 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 bill updates the standard for geothermal systems.

OREGON DEPARTMENT OF ENERGY

Attachment 2: Residential Energy Tax Credit Program Statistics and HB 2447A 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 2447A 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. *Appliances previously had a cost cap of 25% of the cost of the device, but the cap was removed in HB 3672 (2011).*	**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**	*No change*

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

Attachment 2: Residential Energy Tax Credit Program Statistics and HB 2447A 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 2447A 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**
Solar electric (photovoltaic)	$23,447	$5,888	1,051	$1.70 a watt (in statute $3 a watt and by rule may set lesser rate)	50% of the cost of the device	*No change*	*No change*
Wind system	No 2013 data *$30,000 to $100,000 in prior years*	No 2013 data *$3,000 to $6,000 in prior years*	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 (in statute $3 a watt and by rule may set lesser rate)		*No change*	

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 2447A RETC Changes show statutory changes requested in HB 2447A.

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