



Oregon

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March 2, 2021

Senator Kathleen Taylor
Representative John Reardon
Joint Committee on Ways and Means
Natural Resources Subcommittee
900 Court Street NE
Salem, Oregon 97301

RE: Response to Questions Raised at March 1, 2021 ODOE Budget Presentation

Dear Senator Taylor and Representative Reardon:

The Oregon Department of Energy would like to thank you for the opportunity to testify before the Natural Resources Subcommittee on our 2021-23 Governor's Recommended Budget. Committee members raised several good questions during our presentation, and I am providing the following information in response.

What is the potential for Hanford to be used as a site to place nuclear waste from other facilities?

In 2016, the U.S. Department of Energy issued a final Environmental Impact Statement (EIS) that analyzed potential locations across the country that could be used to develop a national repository for a type of waste known as "Greater than Class C" waste or "Greater Than Class C – like" waste. The Hanford site was one of six USDOE facilities analyzed in the EIS, as well as generic commercial locations, for consideration as a potential future location for the waste repository for this specific type of waste. Letters in opposition to the selection of the Hanford site were submitted by the Portland-area members of the Oregon legislature, the Oregon Department of Energy, and the Oregon Hanford Cleanup Board. Ultimately, the USDOE did not select the Hanford site as its preferred location; rather, it selected a location in New Mexico and generic commercial location as its preferred alternative locations. While the selection of a preferred alternative does not entirely dismiss the use of the Hanford site as a future repository for GTCC, GTCC-like, or other types of radioactive waste generated elsewhere, the USDOE would need to undergo further additional National Environmental Policy Act analysis and justification to use the Hanford site; in recent years, the Oregon Department of Energy is not aware of any such proposals under consideration by USDOE.

The majority of radioactive waste currently at the Hanford site was generated by the federal government at the Hanford site during plutonium production. There is very limited radioactive waste that currently comes into the Hanford site, such as certain components from decommissioned navy nuclear submarines; however, the spent nuclear fuel from the decommissioned navy nuclear submarines does not go to Hanford, rather, it is sent to a USDOE location in Idaho.

There is a commercial low-level radioactive waste landfill owned and operated by a private company (US Ecology) located adjacent to the Hanford site. The landfill is licensed by the State of Washington and accepts low-level radioactive waste from across the Pacific Northwest, including Oregon.

In response to the question on the status of a national repository for radioactive waste, the Yucca Mountain, Nevada site is no longer under consideration by the federal government for use as the nation's permanent repository for high-level nuclear waste and spent nuclear fuel. There are no other locations under consideration at this time, and as far as ODOE is aware, there is not even a process underway to consider future potential locations for a national repository. As such, broadly speaking, the nation's nuclear waste and spent nuclear fuel will continue to remain at the locations where it was generated, such as at the Hanford site, or for the case of nuclear power plants, at the location of those facilities.

There is a facility in southern New Mexico known as the Waste Isolation Pilot Plant (WIPP) that accepts, for permanent underground disposal, a certain type of radioactive waste generated by the nation's nuclear defense industry. But the WIPP location cannot accept spent nuclear fuel or high-level radioactive waste from the defense industry. Additionally, there are currently two proposed commercial (non-government) consolidated interim radioactive waste storage facilities that, if approved and built, could accept the nation's spent nuclear reactor fuel. Those proposed facilities would be in New Mexico and Texas; and it is uncertain if either facility will receive federal approval and be constructed. However, both facilities are only intended to be interim facilities, and would not be permitted as terminal and permanent repositories.

Is ODOE monitoring potential Federal legislation and funding for the use of hydrogen and more electric vehicle charging stations.

ODOE staff are following Federal discussions on transportation infrastructure, especially potential Federal investment in alternative vehicle infrastructure.

The U.S. House-passed infrastructure package, H.R. 2, would invest \$1.4 billion in alternative fuel charging infrastructure, as well as increase tax incentives for purchasing zero-emission vehicles, manufacturing zero-emission vehicles, and deployment of publicly-accessible electric charging infrastructure, including in underserved communities. The bill would also include hydrogen fueling stations as eligible for funding in the Congestion Mitigation and Air Quality improvement program. In addition to electric vehicle charging, hydrogen, natural gas, and propane fueling infrastructure would be eligible for funding in a \$350 million annual competitive grant program.

President Biden has indicated that he will also be pushing for a \$2 trillion infrastructure package. Congress is expected to move forward on infrastructure and clean energy legislation after completing their COVID-19 relief package.

Oregon Representative Peter DeFazio, who chairs the House Committee on Transportation and Infrastructure, has expressed support for significant spending on electric vehicle charging stations, and ODOE's Electric Vehicle Dashboard demonstrates the need for new charging infrastructure in the state to meet Oregon's goal of 150,000 registered Zero-Emission Vehicles by 2025. ODOE has spoken to Chair DeFazio and his staff about Oregon's efforts on renewable natural gas, hydrogen cars, and how to address climate change in the transportation sector.

ODOE will work closely with our colleagues at ODOT and the Zero-Emission Vehicle Interagency Working Group to ensure Oregon is ready to benefit from available federal funding.

What are the lessons that ODOE has learned about operating energy incentive programs that have sunset?

I have included a memo with this letter that summarizes the lessons we learned over the 40 years ODOE has operated energy incentive programs. ODOE, with the assistance of the Legislature, has used these lessons in the administration of the Renewable Energy Development (RED) Grants and the Oregon Solar + Storage Rebate Program. I hope this is helpful, please let me know if members have additional questions.

Provide a list of energy siting facilities are under state or local permitting that appear in ODOE's database.

I have attached is a list of energy facilities that are under ODOE's jurisdiction for site certification and their status. The list includes information on each operational or approved project's bond or letter of credit. ODOE has a database of connected and planned energy projects that includes those under local jurisdiction, and we would be happy to work with any member to identify the jurisdictional authority and status of any particular project. We have also reached out to the Department of Land Conservation and Development to request their most recent list of energy facilities in rural areas. Counties file a Farm and Forest Report annually with DLCD and this contains the information on energy facilities that have been sited by their jurisdictions. We will provide the information in a follow-up letter.

Thank you for the opportunity to testify before the Subcommittee and to answer questions from the members.

Sincerely,



Janine Benner, Director
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MEMORANDUM

To: Representative Khanh Pham
Members of the Joint Committee on Ways and Means Natural Resources Subcommittee

From: Janine Benner, Director

Date: March 2, 2021

Re: Questions on Lessons Learned from Energy Financial Incentives

The purpose of this memo is to share information and lessons learned from energy financial incentive programs at the Oregon Department of Energy. ODOE has used these lessons learned in the administration of its two current incentive programs: Renewable Energy Development (RED) Grants and the Oregon Solar + Storage Rebate Program.

In their 35 years of operation, the Business Energy Tax Credit and Residential Energy Tax Credit programs supported almost 25,000 projects by businesses and more than 630,000 residential projects that saved energy, displaced conventional energy sources, and generated renewable energy. However, there were significant problems in the way that the programs were designed and run. Due to the challenges that the state had in implementing the legacy incentives, the legislature allowed them to meet their legislative sunsets by the end of 2017.

Because of hard work on the part of the ODOE team, and thanks to the leadership of the Governor and the diligence of the Legislature, the agency has made significant changes to our budget, operations, programs, data management, communications, oversight, and agency culture since these programs ended. In September 2017, the Secretary of State's Office released [an advisory report](#) on ODOE's legacy incentive programs, noting the many ways we've implemented changes to the agency to improve program oversight and performance. Specifically, the SOS Office evaluated how we had implemented recommendations we received from the Joint Committee on ODOE Oversight (2016 legislative session) and other third-party evaluations of tax credit programs. The report also noted that for incentive programs to succeed, the work must be collaborative – between the executive and legislative branches.

The information and analysis below was drafted in 2018 for internal use. It is based on the structure of legacy incentive programs and tools available at the time the programs were active. The analysis relied on historic documents and interviews with program staff that were in

the process of departing when programs ended and discusses seven categories of lessons learned from the financial incentive programs that no longer exist: (1) program design and structure, (2) program administration, (3) transparency, (4) compliance, (5) staffing, (6) communications and records, and (7) tax credit transfers. It also includes how these lessons learned were used to administer the RED grant program. After the lessons learned analysis, an appendix provides a summary of energy financial incentives, both current and those that have sunset, at ODOE.

In 2019, after this was drafted, the Legislature passed HB 2618, establishing the Oregon Solar and Storage Rebate program. In advising legislators and advocates during the development of the legislation, ODOE used the analysis below to help ensure the new program was well-structured and that the agency could effectively implement it. As described in our [2020 report to the legislature](#), this program has been successful in helping to reduce the upfront costs associated with the purchase and installation of renewable energy production and energy storage systems as well as supporting the solar installer industry. We have added information to the appendix on this program as well.

OREGON DEPARTMENT OF ENERGY LESSONS LEARNED – ENERGY FINANCIAL INCENTIVES

I. Program Design and Structure

Well-structured programs benefit the state and citizens of Oregon. Setting goals and objectives is the first part of creating and operating a program. From there, ensure that each part of the program aligns with those goals and the objectives. Goals and objectives of a program are mainly developed through the legislative process.

1. **Identify goals and objectives.** In statute, identify specific goals or an explicit purpose of the program. For example, ORS 469B.133¹ provided the policy for the Business Energy Tax Credit program. Other incentive programs administered by ODOE did not have policy or goal statements in statute. Incentives should have clearly defined goals to help ensure that programs and program rules support the state's objectives and provide direction to the agency administering the program. Measurable goals can be included by the Legislature or created by the agency based on the legislative stated policy and goals of the program. Desired statistics or metrics should be determined before the program begins to ensure appropriate information is collected, which avoids the difficulty of trying to draw conclusions from incomplete data.
2. **Program alignment.** The Legislature should place programs with agencies that have the most relevant expertise and can achieve economies of scale in program administration.

¹ **ORS 469B.133 Policy.** In the interest of the public health, safety and welfare, it is the policy of the State of Oregon to encourage the conservation of electricity, petroleum and natural gas by providing tax relief for Oregon facilities that conserve energy resources or meet energy requirements through the use of renewable resources.

The legislature could also provide that the administering agency work closely with an agency that has expertise in specified areas or resources to obtain necessary expertise as needed. A program should complement the assigned agency's mission, values, and expertise. Over the years, the scope of the RETC and BETC programs' eligibility expanded to incentivize additional devices and project types sometimes outside of ODOE's expertise. In 2007 (HB 3201), the Oregon Legislature added highly efficient wood and pellet stoves to the RETC program. Although not required by legislation, ODOE worked closely with the Oregon Department of Environmental Quality to set eligibility requirements, but DEQ's existing programs and expertise may have been better aligned to provide an incentive for wood and pellet stoves. Program administration can be transferred to another agency if a better fit is determined. The Oregon Legislature transferred the Manufacturing BETC to Oregon Business Development (HB 2523, 2011) and the State Home Oil Weatherization program to Oregon Department of Housing and Community Services (SB 100, 2017).

3. **Incentive recipient.** The Legislature's program design should align the incentive with the intended target audience. Low-income Oregonians may not be able to fully use a nonrefundable tax credit and others, such as retirees, may not file taxes.² Additionally, nonprofits, governmental entities, and businesses that do not have tax liability cannot directly benefit from a tax credit. Grants or other direct payments may reach a wider group of participants. For example, the State Home Oil Weatherization program provided cash payments to eligible applicants and low-income applicants through Community Action Agencies. The Renewable Energy Development grant program provides individuals, businesses, nonprofits, tribes, or other organizations that installed renewable energy systems cash grants up to \$250,000 upon project completion and approval.
4. **Program funding mechanism.** The Legislature should evaluate ways to fund the incentive to encourage desired behavior and meet the goals of the program. The State Home Oil Weatherization program provided cash payments to eligible applicants funded from the Petroleum Supplier Assessment (ORS 456.595); otherwise, most of the incentive programs administered by ODOE were tax credits that could be transferred. However, not all Oregonians and Oregon businesses benefit from a tax credit and a portion of the tax credit's value for the original recipient was given to the transferee when transferred (see Tax Credit Transfer section for more details).

For the Renewable Energy Development (RED) Grant, the Oregon Department of Revenue (DOR) auctioned tax credits to fund grants. This was helpful because the tax credit auctions separated the sale and use of the tax credit from the project. The statute set the lowest rate the credit could be sold at auction to 95 percent; on the other hand, ODOE's tax credit incentives were sold at a rate set by formula that could vary. Setting the rate to least 95 percent preserved greater value of the credit for the state, compared to other tax credits that were sold for less based on the variable formula (see

² Nonrefundable tax credits can only be used to offset taxes owed. Refundable tax credits are treated as payments of tax made, if greater than the tax owed a refund can be issued. Refundable tax credits can benefit low income Oregonians who owe little or no tax by allowing the benefit of the credit to be paid as a tax refund.

later section on Tax Credit Transfers). Additionally, RED grant recipients received less overall incentive funds compared to similar ODOE tax credits. For example, a RED grant recipient could receive 35 percent of project costs but with a limit of \$250,000 in a grant, while the conservation tax credit was 35 percent of project costs with a limit of \$3.5 million tax credit. With the RED grant, the state provided a lower incentive amount when providing a direct cash payment through a grant compared to the tax credit incentive programs. There are also inherent costs with tax credits because it takes longer to realize a tax credit's value and has additional risk through offsetting taxes or transferring the credit.

5. **Performance agreements.** If providing multi-year incentives, the Legislature should consider portioning the incentive based on program metrics. In 2015, ODOE supported HB 2448, which added performance agreements and recertification requirements to the EIP conservation program. Projects with certified cost of \$1 million or more were subject to a performance agreement as part of the final review process. The performance agreement required the recertification of the tax credit annually for up to three years after final certification to ensure project operation and performance before the entire value of the tax credit could be received.
6. **Limit funding.** The Legislature can create certainty of the program's revenue impact by setting a limit on the amount of incentive funds. The BETC program operated mostly uncapped. The RETC and Biomass programs were never capped. Near the end of the BETC program, the popularity of the uncapped program exploded – greatly exceeding estimates. Note that funding caps can create additional administrative tracking and review processes to award incentives.
7. **Operational and effective dates.** Enabling legislation should provide adequate time to get a new program up and running. Legislation often requires programs to begin 91 days after the end of session or on January 1 the following year. However, new programs need time for internal and external review; the permanent rulemakings process takes at least three months. In 2011, HB 3672 tasked ODOE with starting three new incentive programs 91 days after the end of session, plus continued work on RETC, the Biomass Producer and Collector tax credit, and the sunset of the BETC program. ODOE was unable to get the new programs running within that timeframe, which frustrated stakeholders. Depending on resources and staff experience at the agency and accounting for rulemaking, stakeholder outreach, and internal startup activities, new programs can take at least six months to start up. A bill can also include language allowing agencies to start working on the implementation of a bill before the operative date. For example, SB 100 (2017) section 16 allowed ODOE to start working on transferring the State Home Oil Weatherization program prior to the operative date.
8. **Program administration.** The Legislature should evaluate the cost of administering a program (staff and resource expenses) compared to the incentive provided and the benefit the state receives. When the programs ODOE administered were capped, an extra review step was added to larger projects to help disperse the limited funds. This competitive review step took additional staff time, resources, and increased administrative costs. Additionally, the cap on the program reduced the number of

projects associated with the incentive programs, which in turn reduced the amount of fees ODOE collected to administer the program. Most ODOE incentive program fees were based on the costs of the project or amount of tax credit. Due to the program's funding cap and size of the program, the Energy Incentive Program (EIP) for conservation and transportation tax credits did not receive enough fee revenue to cover the cost of administering the program, whereas the BETC program, with greater volume of applications and larger incentive amounts, was able to collect fees to cover the cost of administering the program. An agency administering multiple incentive programs could achieve economies of scale and more efficient operation of a program. Alternatively, smaller programs that have responsibilities split among staff members, who have others duties as well, may also be efficient.

9. **Rulemaking authority.** The Legislature should ensure the program's rulemaking authority includes the administration and enforcement of the program; for example see ORS 469B.306³. Some of ODOE's incentive programs also included specific rulemaking authority to clearly provide the ability to set certain criteria and review; for example see ORS 469B.103(1)⁴. However, the Biomass tax credit program limited the agency's inspection ability by not clearly providing enforcement or inspection authority in statute. When reviewing a draft bill, an agency should ensure the program's rulemaking authority will cover all actions the agency may need to take with regard to administration and enforcement of the program.

10. **Market conditions.** The Legislature should consider allowing an agency to adjust incentive rates based on market conditions rather than a set amount in statute. This authority allows the program to follow the market more closely in real time rather than rely on statutory changes that may no longer reflect market conditions by the time they are implemented. In 2012, ODOE received statutory authority in the RETC program to review and update by rule the incentive rate for solar photovoltaic systems based on market conditions; this allowed ODOE to reduce the incentive rate annually for the last four years of the program. In 2015, the Legislature expanded the authority to reduce the incentive rate by rule for all RETC devices based on market conditions. ODOE used the authority to reduce the incentive rate of electric heat pump water heaters because as the devices gained acceptance in the market, the retail price fell due to competition and scale. The market condition review and rulemaking authority allowed ODOE to respond and lower the incentive rate to stay within a range of strategic influence to encourage the purchase of this efficient water heater without over incentivizing. In general, when reviewing market conditions ODOE looked at: energy savings; alignment with resource acquisition programs; price of the device; installation cost; other costs (permits,

³ **ORS 469B.306 Policies and procedures; standards for single energy conservation project; rules.** The State Department of Energy shall by rule establish policies and procedures for the administration and enforcement of the provisions of ORS 315.331 and 469B.270 to 469B.306 and section 36, chapter 730, Oregon Laws 2011, including standards for what constitutes a single energy conservation project.

⁴ **469B.103 Criteria; federal standards; rules.** (1) For the purposes of carrying out ORS 469B.100 to 469B.118, the State Department of Energy may adopt rules prescribing minimum performance criteria for alternative energy devices for dwellings. The department may, in prescribing criteria, rely on applicable federal, state and local requirements for energy efficiency, including the state building code, state and federal appliance standards and any specialty codes and any code adopted by the Building Codes Division of the Department of Consumer and Business Services.

structure alterations, etc.); manufacturer availability; local availability; savings in relation to cost; other available incentives; market bearable cost; early retirement of device/replacement if it fails; market penetration; non-energy feature cost adders; and non-energy benefits.

11. **Incentive controls.** The Legislature should consider multiple controls on the amount of incentive paid to reduce risk in over incentivizing. Depending on the activity being incentivized and the goal of the program, one limit may not be enough to control over incentivizing. In statute, the RETC program had three limits on the incentive amount based on energy savings, the cost of the device, and overall limits. For most RETC conservation projects, the incentive was \$0.60 per first year energy savings measured in kilowatt hours. However, it was also limited to no more than 50 percent of the cost of the device up to \$1,500, and when combined with all other incentives could not exceed the cost of the device and installation. These multiple limits worked well to control the amount of the RETC incentive and reduce over incentivizing. The BETC and EIP programs limited the tax credit in statute to 35 to 50 percent of the final project cost. Also when the tax credit was combined with other incentives, it could not exceed the cost of the project. RED grants were limited when combined with other government incentives or grants, the total amount of incentives and grants exceeded 75 percent of the total system cost or over 100 percent with all incentives. Note that calculating the incentive amount as a function of the cost of the project could have the unintended effect of encouraging an applicant to inflate the costs of their projects in their applications.
12. **Reporting.** The Legislature should consider requiring an agency to report periodically on the status of the incentive program to include spending levels, program administration costs, and other relevant metrics. The report would keep the Legislature informed of the program success and needs for updates before potential issues arise. This report and evaluation would be in addition to the legislative process that reviews tax credits every six years. ODOE's incentive programs did not have mandatory legislative reporting requirements, although ODOE provided program information when requested.
13. **Incentive recovery mechanism.** The Legislature should create provisions in statute that allow an agency to recoup an incentive to correct errors and omissions by the applicant. Most of the incentive programs had statutory suspension or revocation authority; however, ODOE learned that as written the statute was hard to enforce – especially when a tax credit had been sold or transferred. In 2016, ODOE helped add suspension and revocation authority language, including transferred credits, to the Biomass Producer or Collector Tax Credit program. In 2017, ODOE worked with the Oregon Department of Revenue and the Legislature to add similar language to all energy tax credit programs; the bill did not pass (HB 2286).
14. **Ongoing requirements.** The Legislature should consider aligning project requirements with incentive timelines to reduce the need to recover incentive amounts if there is a failure to meet ongoing requirements. The BETC and EIP programs required projects remain in operation for five years after the award of the incentive.⁵ This was difficult for

⁵ See ORS 469B.145(2)(b), 469B.161(3)(e), 469B.285(2)(b), 469B.291(3)(e), 469B.326(2)(b), and ORS 469B.326(2)(b)

ODOE to verify and enforce. There could also be situations outside the control of the project owner impacting continued operation of a project. If an ongoing requirement is included in an incentive program, the Legislature should consider the ability of an agency to enforce and provide adequate mechanisms for the recovery of the incentive. The RETC incentive did not have a requirement that the device or systems remain in operation.

15. **Ending programs.** The Legislature should set a program ending point in statute and ensure that the ending point is uniform, workable, and clear to communicate. It would be helpful to identify any prerequisite actions that would be needed before the program ends. The BETC program sunset was a date by which ODOE had to issue a final certificate. This deadline strained agency staff to complete all reviews by a certain date, whereas the EIP and RETC programs' sunset was based on the tax year of the applicant. For businesses, each applicant could have a different sunset date based on their tax year ending – which was hard to uniformly communicate. For the RETC program, all applicants were individual tax filers with a tax year that ended on the same date. A set date in statute applicable to all applicants to complete an action – e.g. make a purchase, install a device, submit an application, etc. – could provide clear communication and lessen strain on agency staff.

II. Program Administration

Once legislation creates a program, the agency tasked with administering the program should intentionally construct the program based on the enabling legislation with public input. Taking the time to develop the program will provide future benefits for all Oregonians.

1. **Mission.** Define the mission and create a vision for the program based on the legislatively stated purpose and objectives. If not stated in the enabling legislation, establish a mission and vision from the legislative intent provided through testimony, comments, and other records. Utilize stakeholder input during the process to reach a broader consensus on the program.
2. **Measuring success.** If not provided in statute, identify measurable goals from legislatively stated policy and objectives. This allows the overall measurement of the program against benchmarks throughout the life of program to determine progress and level of success. The goals and metrics could be set in rule with stakeholder input.
3. **Program startup time.** Provide adequate lead time and staffing to get a new program up and running, which aligns with any operative dates in enabling legislation. New programs need time for internal and external review; rulemakings can take at least three months. Set realistic timelines for implementation and communicate timelines to stakeholders from the beginning. Depending on the type of program, staff resources and experience, and stakeholder involvement, new programs can take six months to start up.

4. **Program timeframes.** It is helpful to set application deadlines. The RETC program had no deadline for applicants to apply for the tax credit, except when the sunset provisions were added to the program in 2016. ODOE would sometimes receive RETC applications several years after the device was purchased and installed. On the other hand, after receiving preliminary certification, the EIP and BETC programs had set time periods for a project to complete construction and beginning operation of the project. The statute specified that BETC program projects were initially given three years and could apply for an additional two years to complete construction and begin operation of the project. Application deadlines help set clear expectations for applicants, provide clear application timeframes, and alleviate administrative tracking.

5. **Administering program caps.** Agencies administering programs with a monetary cap must determine how the funds will be dispersed. Depending on the popularity, size, and other factors, limited incentive funds can be distributed first come, first served, by lottery, or through a competitive review process. For example, ODOE used a competitive review process for incentive amounts over \$7,000 in the EIP conservation program. However, the competition added time and expense to the overall application and review process. ODOE required applicants to pay a nonrefundable \$500 competitive review fee, and some stakeholders commented that the competitive review fee deterred them from applying. Additionally, review criteria and points for scoring must be developed prior to the offering. Through several competitive review process, ODOE saw a trend that certain types of projects did not score as well. This evaluation led to adjusted scoring criteria and separate competitions within the RED grant process based on size of the project.

For the smaller incentive amounts in the EIP conservation program, ODOE used a first come, first served reservation process. Applicants submitted preliminary information to reserve a tax credit prior to building a project. ODOE accepted these preliminary applications up to a predetermined amount and completed an in-depth review once the project was completed prior to issuing tax credit.

In the final year of the BETC program, with limited funding for renewable energy projects, applications for tax credits under \$250,000 were reviewed on a first come, first served basis. However, due to demand, there was also a lottery-based system to distribute funds when the limit was reached. Applications were reviewed in the order received by day, and the day that the requested tax credits exceeded available funds, ODOE used a random number generator to allocate the ordering of application review until funding was exhausted. With a first come, first served process, a procedure should be created to fairly distribute funds if the cap is reached, such as a lottery or proportionately dividing of the remaining funds.

At the end of the BETC program, as directed by statute, ODOE divided projects into tiers based on project cost to have projects compete against similarly sized projects for available tax credits. ODOE also used project size to divide competitions for RED grants for some funding rounds. This practice was used because ODOE saw a trend of larger projects often scoring better during the RED grant competitive review – mostly due to

size and economies of scale – which also decreased the diversity of projects that benefitted from a grant.

6. **Stakeholder involvement.** For all aspects of program design, reviews, and administration, the agency should seek input and recommendations from stakeholders. Encouraging frequent feedback from stakeholders throughout operation of the program is helpful. For the incentive programs, ODOE encouraged stakeholder involvement a variety of ways through public meetings and input. Each program had a dedicated email address and program managers were available for phone or in person discussions.
7. **Establish measurement criteria.** Energy savings calculations for conservation measures that benefit from an incentive should be researched, vetted, and documented. These calculations should be consistent with industry standards and documented to describe the efficiency measure, baseline, savings calculation, and market conditions. Initial program design could be developed using a Logic Model effort to determine necessary program inputs, activities, outputs, and outcomes. Staff and a stakeholder advisory group could use a Logic Model to provide the framework to establish the program details, develop assumptions, and identify external factors that can have an effect on the program.
8. **Rulemakings.** An agency should ensure administrative rules and practices align with legislative intent, and the agenda should complete a permanent rulemaking process with public involvement prior to starting a new program. When starting the EIP programs in 2011-2012, ODOE worked with stakeholders, held public meetings, and filed temporary rules to get the programs up and running. Within six months, ODOE needed to complete a permanent rulemaking process. During this process, ODOE had enough time to do a permanent rulemaking initially, but at the time had a culture of filing temporary rules followed by permanent rules for new programs so that the programs could get started quickly.

The better approach would have been to do a permanent rulemaking and follow up (if needed) with another permanent rulemaking to update rules after operating the program. Permanent rulemaking provides a structured process by which parties are informed of the rulemaking and given an opportunity to comment prior to adopting the rules. Additionally, filing permanent rules first does not subsequently require another rulemaking process within six months. Temporary rulemaking should only be used when the agency determines that its failure to act promptly would result in a serious prejudice to the public interest or the interests of the parties concerned.⁶

9. **Standardized rulemaking process.** An agency should maintain a standardized rulemaking procedure to provide consistency and transparency in all rulemakings. Over three years, from 2010-2012, ODOE filed 11 BETC program rule changes with varying processes to seek public input. ODOE received feedback during that period that rulemakings were confusing and not transparent. In 2013, and through refinements since then, ODOE now has a standardized rulemaking procedure to provide a consistent

⁶ See ORS 183.335(5)

and transparent process that aligns with the state's requirements for rulemaking. Additionally, once rulemakings are complete, ODOE consistently and clearly communicates rule changes internally and externally. At the conclusion of each rulemaking, program forms should be updated and program staff trained on rule changes.

10. **Information collected in application.** An agency should consider the program's objectives, measurable goals, and review process to determine what information should be required as part of the application by the agency, balancing the need and value for the information. For each piece of information collected in an application form, determine (1) how the information should be provided such as units of measurements, defined choices, or open ended and (2) how the information will be used such as reporting, project review, back-up documentation. Based on the use of the information, determine how each piece of information will be stored at the agency such as database or paper file. To aid in establishing a detailed review of a project, ask detailed questions on the application and provide detailed instructions as to what is required. Due to lack of details in the application, small projects applying within EIP and RETC often did not provide enough project information, resulting in additional staff time to gather information. On the other hand, ODOE attempted to collect a lot of information that may have been burdensome to staff and applicants that did not ultimately get used.
11. **Application forms and review.** Although they have higher initial upfront costs, an agency should consider electronic application submissions. ODOE allowed certain RETC applications online (e.g. appliances and photovoltaic); all other incentive programs used paper applications. Electronic application submissions can streamline the process for all parties and may provide better quality data by reducing data entry errors and applying business intelligence to automatically correct or populate data. It also eliminates or reduces staff time to input data. An agency should set up a process for annual review of application forms to ensure correct reference and other information. In the past, ODOE had outdated forms posted on the website. An agency should actively review and maintain all incentive program webpages.
12. **Uniform application review processes.** Based on program design in statute, an agency should create a uniform application review process with review checklists and timelines with multiple checkpoints. An agency should build in quality control checks for review of a project. More than one person should be reviewing each project; the process should be broken up and provide opportunities for checking others' work. Depending on the statutory requirements of the program, ensure that the project's file documents meet those requirements. Ideally this would be documented in a uniform checklist or completed standard form for each project.

The larger EIP and BETC projects were complex, and ODOE did not always document project specific decisions well in each file. This presented challenges in verifying and understanding prior decisions. A culture of well-documented decisions made through a memo or other written correspondence in the project's file is beneficial. ODOE adopted this practice for the EIP tax credits and RED grant project files.

13. **Certified costs.** EIP and BETC incentive amounts were largely based on the final cost of the project – after energy related technical specifications were met. BETC and EIP statutes directed ODOE to require a CPA to certify project cost for projects over \$50,000.⁷ The role that the Legislature assigned to the CPA is to act as an independent verifier of this information for larger projects. ODOE provided guidance to CPAs on what they should be looking for in the documents, and staff frequently went back to CPAs to ask clarifying questions. Even if legislatively required to be certified by CPA, an agency should require additional documentation of the costs by the CPA and more thoroughly review the certification. However, ODOE did not employ staff with financial expertise to review this information. Future administrators of programs based on project cost or other financial measures could partner and use resources within the state, such as Oregon Business Development Department or other agencies with financial expertise, to provide this review in a consistent manner. Additional controls could also be placed on CPAs by the program’s incentive legislation or shared with the State Board of Accountancy, which establishes codes of conduct for CPAs.
14. **Database development.** An agency should use a database to store information collected in the application and review process in uniform ways that can be used to report on measurable objectives and goals. Program metrics should be established before establishing the IT tools to track the program. Programs should include appropriate resources for tracking and easily reporting program results. BETC and RETC were developed in the early 1980s, and computers and software advanced since that time; ODOE was often working without modern tools that could have more easily reported on incentive program results. Instead, incentive program data were stored in different formats such as FoxPro, Excel, and Access. Some programs, like RETC, had multiple databases that did not connect to one another. When creating a new program, adequate time should be allocated to set up an IT system to store data prior to program launch. When the EIP program started in 2012 an Excel file with multiple worksheets was used to collect data for several years until a database could be built. An Excel file does not provide the necessary quality control and other features to ensure and protect data. The database development process should be driven by the business needs of the program staff, should clearly define units of measurement for each field, and should include a data dictionary. Application fields should align with data collected in the database. On a project level, ensure data is collected to show that each project achieves program objectives. If using paper applications and not recording information in the database, ask why the data is being collected.

An agency should create a data verification process and quality checks at set timeframes. In all the incentive programs, ODOE struggled with data quality. This delayed and hindered ODOE’s ability to report program metrics. Quality control needs to be a regular administrative function of a program.

To prepare for the 2017-19 budget cycle, ODOE worked with a third party consultant to evaluate internal processes and IT systems. Recommendations from that evaluation helped to inform a Policy Option Package for the 2017-19 budget that passed and are

⁷ See ORS 469B.161(3)(b), 469B.291(3)(b), 469B.332(3)(b)

helping ODOE improve software and tracking functions within the agency. For incentive programs that were ending, ODOE improved data management and added steps to ensure that more than one staff member knows how to query the databases.

15. **Evaluation.** An agency should create a periodic evaluation to review program operations. This can inform whether program goals were met, but also identify opportunities for adjustments necessary to optimize the program. An evaluation should be performed prior to reporting on a program's objectives and goals. ODOE did not have a history of evaluating programs in a routine and consistent manner.
16. **Consistent reporting on objectives and goals.** An agency should create reports that easily and consistently provide program information and track progress of the measurable objectives and goals from baselines set at the beginning of the program. Over 40 years of operating incentive programs, ODOE reported data in a variety of ways, which can make it hard for the public to track progress and understand metrics. For example, the RETC program was reported on a calendar year basis for when applications were received. The calendar year includes multiple tax years, but RETC incentive rates were set by tax year. Later in the RETC program, data was reported by tax year to align the incentive rates with the tax credit provided. An agency should create standard reporting, even if not required by legislation, updated on a periodic basis to provide consistency and transparency. This should be in addition to reporting requirements under the State Transparency statutes.
17. **Prescriptive incentives.** For small dollar amount projects or well-defined measures, consider prescriptive requirements to streamline application and review processes. In the EIP energy conservation program, pre-qualified projects under \$20,000 could reserve tax credits on a first come, first served basis through a simplified application process. The simplified process was allowed because the defined measures were well-understood and had shorter timeframes to complete the project. Eligible projects included LED lighting, heat pump water heaters, ductless heat pumps, and building envelope improvements. ODOE reserved tax credits based on the pre-determined average cost of the device or measure. The applicant had one year to complete the project and submit a final application. ODOE reviewed the final application and could inspect the project to ensure program compliance. If the final application was approved, the applicant received a tax credit based on the reserved amount but no more than 35 percent of the actual cost of the project. The tax credit was a one-year credit that could be claimed entirely in the first year. However, overlapping cost requirements, as with the smaller EIP tax credits, can be restrictive for prescriptive measures. An agency should consider removing the other program limits when providing a prescriptive incentive or at least evaluate how they may interact.

ODOE also used prescriptive incentives for RETC because the statute required that the tax credit be based on the first-year energy savings. ODOE determined the average savings by type of device and set incentive rates based on the average savings. This streamlined the review process and provided certainty for the applicant on the amount of the tax credit.

18. **Program advisory group.** Agency should consider creating an advisory group to meet on a regular basis for review of proposed rules, prescriptive project criteria, and projects over a certain size. The Legislature could form this group in the program's enabling legislation or the agency could form the group as part of its implementation and administration processes. The review and recommendations of this group could enhance transparency of decision making. When needed, ODOE established advisory groups for input during the rulemaking process, but the groups were informally created for each rulemaking. ODOE could have benefited from consistent feedback over the years from a diverse range of stakeholders that understood the programs. Seeking an advisory group, beyond agency staff, to review projects over a certain size would provide an additional layer of input, transparency, and oversight of the program. In the early years of the State Home Oil Weatherization program, an advisory group met periodically to review and discuss program administration.
19. **Fees.** All ODOE incentive programs, except for the residential-focused programs RETC and SHOW, charged application and review fees as allowed by statute.⁸ These fees were to cover the cost of administering the program and were mostly set based on the cost of the project or amount of incentive in administrative rule. With the introduction of competitive incentives, ODOE started charging a fixed competitive review fee of \$500. The BETC program fees were all paid upfront. EIP divided fees to be paid as the project moved through the review process. EIP never collected enough fees to cover the cost of administering the program.
20. **Compliance auditing requirements.** An agency should set an audit schedule, with reports and controls established at the beginning of program administration. Throughout the 40 years ODOE administered incentive programs, there was no set audit schedule or consistent controls in place. An internal auditor could manage the agency's internal audit function and independently organize, lead, and perform various types of internal audits, including risk assessments. ODOE has since hired a full-time internal auditor to manage the agency's internal audit function.
21. **Regular periodic review.** An agency should set a review schedule for program metrics based on the program's cycle. An annual review after the close of the calendar year may be practical for most programs. Having updated data prior to the start of each legislative session can be helpful. In the last few years of the program, ODOE compiled basic data for the RETC program using the last complete tax year. It was helpful to have consistent and complete data ready to respond to questions during the legislative session.

III. Transparency

All aspects of an incentive program should be open and accountable by sharing information and allowing stakeholders to provide input.

1. **Rulemaking.** An agency should create a set time period to review program rules and procedures. For the last five years of the RETC program, ODOE reviewed RETC rules on

⁸ See ORS 469B.164, 469B.259, 469B.294, 469B.335, and 315.141(5)(b)

an annual basis. Each review may not result in a rulemaking, but allows for periodic consideration and review of program processes and performance. The review can also include public meetings and input from stakeholders.

2. **Awarded applicants.** An agency should publish program awardee information on the website and provide basic project information for larger projects to further transparency of the programs. Near the end of the BETC program and for the EIP program, ODOE posted lists of applicants successful in the competitive review process. Once successful projects passed technical review, ODOE would post online the name of the applicant, project type, project location, and amount of potential incentive. State transparency statutes also require certain information for all the energy incentive programs to be submitted on an annual basis once final certification was provided.⁹
3. **Program data.** An agency should post aggregated data reports on all projects and individual data on large projects receiving incentives, beyond transparency website requirements. This could align with periodic program reporting to the Legislature. Additionally, an agency should work to increase data sharing between entities providing other incentives, such as utility programs. ODOE worked to build relationships with utility programs and the Energy Trust of Oregon to share program data and experiences. Most of the projects ODOE incentivized were also receiving incentives from other entities. Statute could require coordination to help get other agencies, Energy Trust of Oregon, and utilities to the table for data coordination and reporting.
4. **Communication.** An agency should clearly articulate the benefits the program provides to stakeholders and Oregonians. Throughout the 40 years of administering incentives, ODOE used varying communication mediums to tell the success stories of project owners. Over the last several years, communication staff have highlighted successful incentive projects through stories on ODOE's website, blog, and printed brochures along with podcasts.
5. **Internal communication.** An agency should keep program staff informed of rule and program updates. Not all ODOE program staff participated in each rulemaking process. During the last few years of the BETC program, staff were unable to keep up with inconsistent and frequently changing rules. Additionally, annual changes to the RETC program were not always implemented by staff. To address the issue, ODOE added a step at the end of each rulemaking process to train all relevant staff on rule changes.

IV. Compliance

A compliance section within the incentive program ensures that the program's laws, policies and procedures are being followed by applicants and agency staff to protect the state's investment.

1. **Performance agreements.** For the BETC program, there were a few performance agreements put in place near the end of the program. Under the EIP program,

⁹ Oregon Transparency Website, Energy Related - Tax Expenditures information:
https://www.oregon.gov/transparency/pages/expenditures.aspx#Energy_Related_-_Tax_Expenditures

conservation projects over \$1 million had performance agreements requiring certain levels of performance prior to receiving portions of the tax credit. After receiving final certification, these project owners had to meet the requirements of their performance agreement annually for three years to receive the full value each remaining portion of the tax credit. Additionally, Renewable Energy Development grant projects have reporting requirements after the grant is issued.

2. **Inspections.** A project's application may not provide a complete review, whereas onsite inspections promote accountability and ensure the project was implemented as specified and is operational. Prior to July 2010, ODOE did not have staff dedicated to performing inspections for the incentive programs. Some inspections were done, but only on a sporadic basis by staff with other primary duties. In July 2010, two Compliance Officers were hired after the positions were approved by the Legislature. The new staff designed and developed the inspection program with rules and procedures. While ODOE could have inspected projects prior to the addition of these dedicated staff, staff resources were already constrained with reviewing applications and inspections were only performed on a limited basis.

About 4,400 projects received BETC certification from the beginning of the Compliance program in July 2010 to the July 2014 BETC sunset. The compliance staff inspected 990 projects, representing \$583 million in issued tax credits. Given limited staff resources, projects with higher preliminary certified costs were prioritized for inspection. The initial methodology was to inspect all conservation projects with preliminary costs of at least \$500,000, 5 percent of the remaining conservation projects, all renewable energy projects with preliminary costs of at least \$200,000, and 25 percent of the remaining renewable energy projects. The methodology was expanded over time to include more projects. More than \$8 million in potential tax credits were not awarded due to failed inspections in the BETC program.

For EIP, the goal was to inspect all projects with preliminary costs or grant awards above \$5,000 except for small premium projects, which were prescriptive; sustainable building projects, which were third-party certified by groups such as LEED and REACH; and transit services projects. Additionally, due to the decreased volume of projects in the EIP program, compliance officers expanded their scope of duties to provide inspection services to other ODOE program areas such as RETC and the Small Scale Local Energy Loan Program.

3. **Financial compliance program.** Depending on the incentive program's structure, an agency could benefit from a financial compliance program to inspect and ensure compliance of the financial aspects of the program. This would be a review of the project's finances and would be in addition to inspections verifying a project was built to meet program requirements. Although the BETC and EIP programs based the tax credit amount on final costs of the project, ODOE did not employ staff with financial expertise to review the final project costs. Rather, ODOE relied on a CPA letter provided by the project applicant, as required in statute and noted above.

V. Staffing

Program staff are tasked with all parts of creating and operating an incentive program. Additionally, other staff at an agency provide support to ensure the program has the tools and resources needed to operate the program. It's critical that the agency employee staff with expertise and skills based on the goals and objectives of the incentive program.

1. **Management.** An agency should document and develop written procedures for program processes. In the last 10 years of the energy incentive programs (2009-2018), ODOE experienced staff turnover at all levels of the agency. In that timeframe, there were six agency directors and eight incentive program managers. Institutional knowledge around decisions was often lost. Additionally, the inconsistency in management caused frequent changes in program practices and procedures based on management's view at the time. Program inconsistencies could have been mitigated had there been written procedures and practices in place based on staff and stakeholder input.
2. **Program staff.** In the last 10 years of the energy incentive programs (2009-2018), ODOE experienced staff turnover at the program level with analysts and administrative staff. Within the incentive programs, about 20 analysts and 13 administrative staff worked for the agency during that period. Some of these positions were limited duration, and though they were often extended each biennium, the uncertainty of employment did not foster long-term commitment of staff. Only two program analysts and one RETC administrative assistant remained the same during the 10 year timeframe. Inconsistency among administrative staff resulted in varying data collection practices in the database and paper files. Inconsistency among analysts resulted in varying reviews of projects. Having defined data collection and review process procedures in place can minimize inconsistency and staff turnover throughout the life of a program.
3. **Business staff.** Although BETC and EIP program incentive amounts were based on the final cost of the project, incentive program staff did not possess expertise in the financial and economic aspects of projects. As the BETC program became larger and projects of greater scale applied, ODOE should have widened the expertise of staff reviewing applications beyond energy-related fields to include financial and economic reviews.
4. **Number of staff.** At the peak of the federal stimulus programs (ARRA) and state incentive programs, ODOE had 39 staff¹⁰ – even then the agency was relatively small to manage the size of the BETC program. When taking on new programs, an agency should look at capacity and resources. It can be difficult when a program starts small and grows over time, outpacing the size of the agency. Support staff and agency management spent large portions of time on the incentive programs at the expense of other agency responsibilities and functions. For example, during the establishment of the EIP programs in 2011-2012, all three rulemaking staff worked on incentive programs and were unable to provide rulemaking support to other parts of ODOE.

¹⁰ 2011 budget organizational chart listed 39 positions with five vacant.

5. **Size of programs.** A program can start small and be manageable, but over the years take on additional scope and become larger and more complex to manage. BETC started in 1979 and by 1984, the program was well established and relatively stable. From 1984 through 2001, tax credits issued averaged \$9.4 million per year. In 1999 and 2001 the Legislature removed the cap on project costs (SB 1264, 1999) and opened up the ability to transfer the tax credit to all projects (SB 521, 2001). These changes prompted steady growth of the program in both number of applications and in the dollar value of tax credits issued, with about \$60 million in tax credits issued in both 2006 and 2007. To respond to economic crises in 2001, the Legislature initiated several economic stimulus packages. One such package was the expansion of BETC by increasing the percentage of the incentive from 35 to 50 percent and increasing the maximum allowable project costs for renewable energy projects (HB 3201, 2007). Following these changes, BETC dramatically expanded in size, with nearly \$180 million of tax credits issued in 2008. ODOE attempted to deal with the dramatic increase of applications by hiring additional staff, but without defined practices and procedures, there was a difficult learning curve for all employees.

VI. Communications and Records

Incentive program staff rely on other staff within the agency and other state agencies to operate. The relationship and communication among these functions is critical.

1. **Legislation.** An agency should track legislation relevant to its incentive programs and related incentives in the state. Throughout numerous legislative sessions, ODOE worked closely with the Legislature on potential changes to incentive programs, providing information to help legislators adjust BETC or other programs. When the Legislature was developing the EIP program, early lessons from BETC were used to shape EIP. Further, the agency helped shepherd specific changes to EIP to allow for more oversight. Specifically, in 2015 (HB 2448) legislative changed allowed for performance agreements to ensure energy goals were being met and tax credit recertification of larger projects to withhold parts of the tax credit until performance was shown. During the 2017 legislative session, ODOE coordinated with the Governor and worked with the Legislature to end nearly all incentive programs at ODOE.
2. **Public records.** Agencies should clearly communicate that information provided to state agencies is subject to public records law in program documents and application forms. Oregon statutes¹¹ exempt from public records disclosure some energy tax credit and grant application information, but the statute was not clearly understood by staff. ODOE received numerous public records requests for application files and spent a lot of staff time reviewing documents for compliance with the public records statutes. For assisting with public records requests, from the start of the program, an agency should outline parts of the application form that will be withheld based on statute. Additionally, review any public records statutes directly related to the program and work with DOJ to determine the meaning and application of the statute early in the program to put

¹¹ ORS 192.355(17)(b)

procedures in place. This would provide consistent and quicker disclosure of public records to staff and the public.

3. **Communications and public outreach.** Provide clear and timely information on the program's website and maintain an email list of interested parties to send program updates. Additionally, set up periodic opportunities for stakeholders to ask questions or provide feedback about the programs. With the Biomass Tax Credit program, ODOE staff heard from stakeholders that they wanted quarterly check-in meetings. Near the end of the program, ODOE hosted quarterly conference calls for stakeholders to ask questions or provide feedback.
4. **Oregon Department of Justice review.** Work with the Department of Justice to review program rules during the rulemaking process and application of statute and rules to specific projects. For the incentive programs, ODOE sought advice on legislative concepts, proposed legislation, rulemakings, denial letters, and other program correspondence. ODOE required manager approval for DOJ review due to the additional expense that DOJ review incurs.

VII. Tax Credit Transfer

A transferable tax credit allows applicants without a tax liability to realize an incentive and benefit by selling the tax credit. However, the mechanisms to sell a tax credit are not simple and can result in lost value to the applicant and state through transaction costs and the discounted value of the credit.

1. **Overall Process.** All tax credits administered by ODOE, excluding DOR auctioned credits, could be transferred as specified in statute. The transfer process and sale price differed for each program, but the purpose was to increase the range of potential participants in the programs to include participants that did not have an Oregon tax liability. However, any recipient of a tax credit could transfer that credit – there was no requirement that the transferee not have an Oregon tax liability. ODOE's involvement in the transfer process of tax credits ranged from minimal to full assistance depending on the tax credit.

ODOE was least involved in the Biomass Tax Credit transfer process, where ODOE set a minimum discounted value of the tax credit by rule.¹² Statute specified that the rest of the process was administered by the Department of Revenue. ODOE was not aware of which tax credit recipients transferred the credit.

ODOE had minimal involvement in the RETC program transfer process.¹³ In 2001, the RETC program started allowing transfers (SB 1192 & SB 520) at a uniform discount rate established by rule. ODOE set the transfer rate but did not assist RETC applicants with locating a transfer partner. RETC applicants usually found family members or friends to

¹² See ORS 315.144.

¹³ See 469B.106(9).

purchase the tax credit and notified ODOE of the transfer. ODOE then issued a tax credit certificate to the partner.

Originally, the BETC program did not provide for transferring the tax credit, but when the Legislature started allowing transfers (SB 521, 2001) ODOE became very involved in this process. Prior to this date, limited transfers were allowed, primarily for Consumer Owned Utility projects. This expansion opened the tax credit program to those without state tax liability, while at the same time the Legislature increased the tax credit amount for renewable energy projects to a \$10 million tax credit. Although the 2001 BETC statute¹⁴ only directed ODOE to establish by rule uniform discount rates to be used in calculating the present value of a tax credit, ODOE created a pass-through process as well. With the pass-through process, ODOE helped match project owners and transfer partners to facilitate the sale of the tax credit. Additionally, targeted businesses emerged to assist project owners looking for transfer partners and these businesses charged fees to the project owner for their service. The size and magnitude of the pass-through program grew as the BETC program grew between 2001 and the program's sunset in 2014. In 2012, ODOE started charging fees to assist with the transfer of a tax credit, whereas previously the transfer process was paid from the general fees collected from all applicants.

From the beginning, EIP tax credits were transferable and used a similar formula and process as the BETC program.¹⁵ Project owners were charged fees to use the transfer or pass-through process depending on the level of service requested.

2. **Economics.** When a credit is transferred, a portion of the value to the project owner and the state is lost in the sale of the credit and additional fees associated with the transfer – resulting in less benefit from the incentive. One proposal discussed to reform this process included allowing the state to have the first right to purchase the credit at the discounted value. When determining if and how a tax credit incentive will be monetized, the Legislature should consider the complete economic impact of a transfer transaction.
3. **Transfer process.** For transferable tax credits, the Legislature should evaluate the needs and processes used to transfer a tax credit and the expertise of the agency administering the credit. If a transfer process is desired, consider taking the administering agency out of the process and allowing the project owner to independently transfer the credit and provide transfer information directly to the Oregon Department of Revenue (DOR) – this was the process used for the Biomass Tax Credit. Additionally, DOR may be in a better position, with access to tax filings, and have expertise to track transfers and set transfer rates rather than the agency administering a tax credit. In 2017, ODOE worked with the Oregon Department of Revenue and the Legislature to have all transfer information go through DOR; the bill did not pass (HB 2286). Note that the process with DOR would not eliminate the fees that project owners incurred for the services from targeted businesses helping to locate a transfer partner.

¹⁴ See ORS 469.206 (2001) https://www.oregonlegislature.gov/bills_laws/archive/2001ors469.pdf

¹⁵ See ORS 469B.276 and 469B.323.

4. **Transfer formula.** Transferable tax credits usually have a set rate or formula by which the credit can be sold. The RETC and Biomass Tax Credit had uniform discount rates set in rule that rarely changed.¹⁶ At first, the BETC program also had a discount rate in rule. HB 2068 (2009) required ODOE to establish a formula to determine the prices of credits transferred. The formula was required to include inflation projections and market rates of return. To meet the requirement, ODOE developed an advisory group to establish a formula, which included staff from the Oregon Department of Treasury, Oregon State Economist, and Oregon State University. The formula was added to rule in 2010. However, based on stakeholder feedback that the formula was confusing, the formula was taken out of rule and replaced with a set rate-based formula.¹⁷ During the development and implementation of the formula, staff could have better communicated information about how to use the formula and calculate the rate.

The same rate-based formula was added to rule when the EIP tax credit programs were established in December 2011.¹⁸ The rule allowed ODOE to update the formula on a quarterly basis and ODOE posted each quarter's rate on the agency's website. Early in the program, during the economic downturn, the formula produced rates above the value of tax credit. In June 2012, program rules were amended to allow ODOE in a deflationary environment to add rather than subtract the Consumer Price Index metric to ensure the present value was less than the tax credit amount. This adjustment was made for the one year EIP tax credits from 2012 through the third quarter of 2015.

When creating a discount formula an agency should seek guidance from financial experts and engage with stakeholders. The formula should be tested in a wide range of scenarios to ensure the formula does not produce undesired results, such as during an economic downturn. The Oregon Department of Business Development used a similar formula for a tax credit program, but their rule included the ability to adjust the rate in certain economic conditions. The Legislature, in statute, or an agency, in rule, could also set a floor or ceiling for the discount rate so the rate would never exceed the value of the tax credit or go lower than desired.

5. **Formula quality control.** Until 2015, one staff member calculated the quarterly discount rate without quality control checks. This practice resulted in minor errors and inconsistencies. Additionally, the ODOE staff who were part of the working group that originally created the formula in 2009 no longer worked for the agency, and there was not detailed documentation on the creation of the formula. Program decisions and practices should be well-documented and vetted by multiple staff members to mitigate information loss during staff turnover. When calculating a rate or other metric, an agency should ensure the raw data and documentation used to calculate the rate or metric is saved each time in a uniform manner. In 2015 and through the end of the program, ODOE had two staff members calculate the discount rate to ensure accuracy and compliance with the process.

¹⁶ See OAR 330-070-0014 and 330-170-0070.

¹⁷ See OAR 330-090-0140.

¹⁸ See OAR 330-230-0130.

6. **Transfer quality controls.** All incentive programs should have controls and checks in place so that no one person oversees the entire process, especially when larger dollar amounts are involved. The transfer program for the BETC and EIP tax credits was mostly managed by one staff member and during the peak of the program, two staff members operated the process. The program did not have written procedures for how to process tax credit transfers nor a set method determining the order in which transfers occurred. The one staff member in charge of the process was able to operate the system for personal financial gain by accepting bribes from a business that assisted project owners with transferring the tax credit. That former staff member is now serving jail time for taking advantage of this program, taking bribes, and committing other related felonies. This experience underscored the importance of all staff members being familiar with rules that relate to their job responsibilities; training that helps ensure staff do their jobs in a way that's consistent with rules; and managerial oversight so that important steps are not occurring in a silo. Toward the end of the programs, ODOE implemented quality control checks so that more than one staff member reviewed key steps in tax credit sales.

7. **Timing the transfer.** For the EIP and BETC programs, the rate at which a project can be transferred is set at a specific point in time. With the BETC program, the transfer rate was set at the date ODOE issued the preliminary certificate, which could be several months after ODOE received the application.¹⁹ The BETC rate was not updated as often, and the timing of when the rate was set did not produce any known issues. For the EIP program, to provide more financial certainty to the project owner, the rate was set at the date ODOE received the preliminary application.²⁰ The rate was updated quarterly, and most EIP projects had up to three years to complete the project and receive final certification. By the time a project owner was able to sell the tax credit, the economic situation may have changed from the time that ODOE received the preliminary application. In this scenario, the assigned rate may be too high or too low and therefore not desirable to sell in current market conditions.

Due to the tax credit sale timing issue, several transit service applicants were unable to sell five-year tax credits because the rates were too high. The rate assigned, when ODOE received the applications, was about 97 percent. At the time of trying to sell the credits, the transfer rate was about 83 percent. In 2017, stakeholders proposed HB 3032 to modify the provisions to address tax credit transfer timing problems facing transit service projects, but the bill did not pass. The bill would have allowed the rate to be the lower of the value determined at time of application for preliminary certification or at time of final certification. Setting the rate at the time of the tax credit sale allows the credit to sell at a current market value, but creates uncertainty for the applicant not knowing the rate until after the project is complete. On the other hand, providing the certainty of the rate at the beginning of the process can make it difficult or impossible for the credit to be sold due to changing economic conditions.

¹⁹ See OAR 330-090-0140(1)(c).

²⁰ See ORS 469B.276(1).

8. **Tax credit auctions.** Auctioning tax credits to fund incentives disconnects the sale of the tax credit from the project and streamlines the process. In 2012, the Oregon Department of Revenue (DOR) started auctioning energy tax credits to provide funding for the Renewable Energy Development (RED) grant program (see more details in the program funding mechanism section). Oregonians purchased tax credit in increments of \$500 through the auction.²¹ DOR held nine auctions providing over \$8.5 million into the Renewable Energy Development Subaccount for RED grants. By statute, DOR can take 0.25 percent of auction proceeds for the cost of administering the auction.²² This method of funding the RED program has worked well and removed ODOE's role in transferring the credits for project owners unable to use a tax credit. Additionally, the auction removes the project owner's uncertainty around monetizing the credit after the project is built. DOR also auctions tax credits for other agencies such as the Oregon Film Office.

²¹ See ORS 315.326 and 469B.262.

²² See ORS 315.326(2)(a).

APPENDIX

Summary of Energy Financial Incentives and Loan Programs at ODOE

- **Small Scale Energy Loan (SELP) program**
 - Timeframe: The Small-Scale Energy Loan Program (SELP) was created in 1979, the Oregon Constitution was amended to authorize the sale of general obligation bonds to finance small scale, local energy projects (Article XI-J bonds). SELP made its first loan in 1981 and is currently scheduled to receive its last loan payment in 2035.
 - Purpose/Goal: ORS 470.080 directs SELP to use the bond funds to originate fixed-rate long term loans for qualified Oregon energy projects that invest in energy conservation, renewable energy, and alternative fuels, or that create projects from recycled materials. Private, tribal and public entities are eligible for SELP loans.
 - Funding Source: Article XI-J general obligation bonds.
 - ODOE's Administration of Program: The SELP staff administer all aspects of loan development, applicant underwriting, loan service, portfolio management, accounting, and daily program operations. Technical underwriting is conducted in collaboration with relevant agency technical staff as needed. When the program was actively lending it was supported by the Small-Scale Local Energy Project Advisory Committee under ORS 470.070. The nine appointed committee members consulted with the department on the establishment of the standards and criteria for projects to be funded by the loan program as well as making recommendations to the agency director on what loan applications should be approved. ODOE's staff continues to manage the existing portfolio of loans, including reducing the current cash flow deficit.
 - Other Key Program Design Features:
 - SELP receives an annual financial audit from the Oregon Secretary of State.
- **Renewable Energy Development (RED) grant program**
 - Timeframe: This program sold tax credits between 2011-2017. There is no sunset date on the program, only on the tax credits.
 - Purpose/Goal: ORS 469.256 B directs ODOE to award grants for systems that use biomass, solar, geothermal, hydroelectric, wind, landfill gas, biogas or wave, tidal or ocean thermal energy technology to produce energy. ORS 469.010 outlines Oregon's goal to promote the efficient use of energy resources and to development of sustainable energy resources.
 - Funding Source: Energy tax credit auctions administered by the Oregon Department of Revenue provide funding for the grants. Oregonian purchase tax credit certificates in increments of \$500 through the auction. ORS 315.26 and 469B.262 set the limit at \$1.5 million of tax credits that can be auctioned each fiscal year and \$750,000 beginning July 2017 and ending December 31, 2017. The
 - ODOE's Administration of Program: To apply for a grant, project owners applied in response to an open opportunity announcement. ODOE performed a completeness review, then projects were scored and competitively ranked

according to criteria in rule and the opportunity announcement. The top projects then moved to technical review. If the project passed technical review the renewable energy project was awarded a performance agreement. Projects must start construction within 12 months of the issuance of the performance agreement. During the construction of the project the applicant makes periodic reports to ODOE about the project's progress. Projects are usually given two to three years to reach completion.

- Once projects are constructed and operating, project owners submit a final report documenting the performance agreement has been satisfied. ODOE reviews the materials and generally conducts an inspection. At that point ODOE disburses the grant. All projects issued a grant must remain in operation for at least five years. ODOE can continue to inspect during the five-year period of operation.

- Other Key Program Design Features:

- All applicants paid fees set by rule during each point of the review process to cover the cost of administering the program.
- Funding from the 19-001 Opportunity Announcement is still being disbursed. Recently ODOE returned to the waiting list of projects when several awarded projects were not completed.
- Local and state agencies were eligible to participate and receive funding.
- RED grants can only provide up to 35 percent of the cost of a project.

- **Oregon Solar + Storage Rebate Program**

- Timeframe: The Oregon Solar + Storage Rebate Program was established by the Oregon Department of Energy at the direction of HB 2618, passed by the Oregon State Legislature in 2019. The program will sunset under statute on January 2, 2024.
- Purpose/Goal: The Oregon Solar + Storage Rebate Program provides rebates for the purchase, construction, or installation of solar electric systems and paired solar and storage systems to participating contractors as reimbursement for cost savings passed onto project owner at the time of project installation. The enabling legislation, HB 2618, directs the department to make at least 25 percent of the rebate budget available for projects installed for low- or moderate-income residential customers and low-income service providers. Low-income service providers are a specific group of non-residential customers that provide assistive services to low- or moderate-income individuals and households.
- Funding Source: A General Fund appropriation of \$2.0 million was provided for program administration and rebates. As of September 2020, the budget for program rebates has been fully reserved.
- ODOE's Program Administration: The Oregon Solar + Storage Rebate Program (OSSRP) features a tiered incentive rate for rebates based on the status of the project owner. The largest rebate amounts were reserved for low-income residential customers and low-income service providers in order to account for the reduced financial capacity of those populations. The smallest rebate amounts were established for non-income restricted residential customers that have access to existing financial incentives through their electric utility.

- Participating contractors and stakeholder groups advocated for the program to expand the ways in which a project could be deemed eligible for the low-and moderate-income rebate. Through rulemaking the department added additional means of qualifying for a low- and moderate-income rebate by adding the Supplemental Nutrition Assistance Program (SNAP), the Oregon Health Plan, and the Children’s Health Insurance Program (CHIP) to the list of programs under which a project owner would be eligible for a OSSRP low- and moderate-income rebate. In addition, the department added the ability of a residential project owner to prove eligibility by providing a current tax transcript from the Oregon Department of Revenue.
 - Program rules direct the department to inspect some solar and storage installations that receive rebates. The department is not required to inspect all projects and has focused on ensuring that at least one project per contractor is inspected, that inspections occur across the state, and that projects with higher value rebates are inspected. Inspections can occur before or after rebates are issued.
- Other Key Program Design Features
 - The OSSRP has a specific low- and moderate-income focus that was met through the use of a tiered incentive rate and expanded low- and moderate-income eligibility pathways.
- **No Longer Active: Alternative Fuel Revolving Fund Program**
 - Timeframe: this program was active 2013 – 2017.
 - Purpose/Goal: ORS 469.962 directs the ODOE to provide loans to provide public bodies, tribes and certain private entities to assist with the purchase of new alternative fuel vehicles or the conversion of existing vehicles using gasoline or diesel fuel to alternative fuel vehicles. ORS 469.010 encourages energy-efficient modes of transportation
 - Funding Source: Department of Revenue auctioned Transportation Tax Credits populating the revolving loan fund with \$2.89M.
 - ODOE’s Administration of Program: Administered through the Small Scale Energy Loan Program. ODOE solicited applications for this program by publishing funding opportunity announcements but never resulted in a loan. The loan fund was a continual, revolving pool of funds available to borrowers for expanding the use of alternative fuel vehicles. As borrowers would repay the loans, the department re-loans to additional borrowers.
 - Other Key Program Design Features:
 - SELPAC provided some advisory structure for the program.
 - Competitive application process, no stakeholder facilitation involved
 - ODOE’s policy division includes fleet and alternative fuel transportation expertise that provided analysis for available options to borrowers in an effort to improve the program’s usage to meet statutory goals/purposes.
- **No Longer Active: Business Energy Tax Credit (BETC) Program**
 - Timeframe: this program was active 1979 - 2014

- Purpose/Goal: ORS 469B.133 outlined that in the interest of the public health, safety and welfare, it is the policy of the State of Oregon to encourage the conservation of electricity, petroleum and natural gas by providing tax relief for Oregon facilities that conserve energy resources or meet energy requirements through the use of renewable resources.
- Funding Source: Fees and tax credits
- ODOE's Administration of Program: Generally, the process for issuing BETCs started with project developers submitting an application and fee for preliminary certification to ODOE. Once the application was submitted, the agency would review it based on its technical merits and issue a precertification. At that point, developers could begin constructing a project. ODOE did not play a role in the construction phase. After project construction was complete, the applicant could apply for final certification of the project and project costs. ODOE again reviewed submitted materials, and if the project received certification, the applicant would receive a tax credit equal to a percentage of the certified costs, as dictated by statute. Alternatively, the applicant could choose to transfer the tax credit to another entity in exchange for a cash payment. The payment amount was the net present value of the tax credit as prescribed by ODOE.
- Other Key Program Design Features:
 - In the 35 years of the program's existence, ODOE certified 24,744 BETC projects that helped save energy, displace conventional energy sources, or generate renewable energy.
 - BETC benefited businesses, organizations, nonprofits, tribes, schools and public bodies that invested in energy conservation, renewable energy resources, rental weatherization and cleaner transportation fuels in Oregon. The program was used by many sectors, including commercial, agricultural, industrial and renewable energy – the top 10 industries represented in the program are shown on the next page. Equipment vendors, engineering firms and the construction industry also benefitted from the added business due to eligible purchases and installations.
 - Prior to 2001, the program was relatively small, and limited options existed for transferring tax credits. In 1999, the Oregon Legislature removed the \$40 million cap on total certified costs for all projects (SB 1264). In 2001, the Oregon Legislature revised the transfer provision to make it applicable to all BETC facilities (SB 521).
 - In 2007, the Oregon Legislature increased the percentage of the incentive from 35% to 50%, and increased the maximum allowable project costs that could qualify for the tax credit to \$20 million for renewables, co-generation, and renewable equipment manufacturing facilities (HB 3201). That year, the Legislature further expanded the program by increasing from three to five years the length of time for which preliminary certifications for renewable equipment manufacturing facilities were valid (HB 3619).

- **No Longer Active: Biomass Producer Collector Tax Credit Program**

- Timeframe: Created in 2007, but was first administered by Department of Revenue and ODOE began administering the program in 2010. In 2017, it was

transferred to the Department of Agriculture, where it continues today as the “Bovine Manure Tax Credit.”

- Funding Source: Fees, ESA, and tax credits
- Purpose/Goal:
 - 469.010 Policy. The Legislative Assembly finds and declares that: . . . (2) It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources. The need exists for comprehensive state leadership in energy production, distribution and utilization. It is, therefore, the policy of Oregon: (a) That development and use of a diverse array of permanently sustainable energy resources be encouraged utilizing to the highest degree possible the private sector of our free enterprise system. (b) That through state government example and other effective communications, energy conservation and elimination of wasteful and uneconomical uses of energy and materials be promoted. This conservation must include, but not be limited to, resource recovery and materials recycling.
 - 526.277 Findings. The Legislative Assembly finds and declares that: (6) The policy of this state is to support efforts to build, and place in service, biomass-fueled energy production facilities that use biomass collected from forests or derived from other sources such as agricultural crop residue when: (a) The facilities use sustainable supplies of biomass from cost-effective sources; (b) The use of woody biomass for energy maintains or enhances the biological productivity of the land, taking into consideration transportation costs, existing forest conditions, management objectives, vegetation growth rates and the need to sustain water quality and fish and wildlife habitat; and (c) The set of forest values to be sustained, in addition to wood and biomass for energy, is considered. Forest values include forest products, water, wildlife and recreation.
- ODOE’s Administration of Program: Applications submitted to ODOE after applicant has already harvested, converted, processes, and/or delivered material to end user. ODOE may review biomass origination, production/collection activities, or operating activities of the biofuel producer prior to issuing tax credit. ODOE reviewed applications for compliance with statutes and administrative rules to determine eligibility of the applicant and biomass material.
- Key Program Design Features:
 - ODOE issued more than \$29 million in tax credits for the production, collection, and utilization of biomass materials.
 - Only entities with tax liability eligible to apply for the biomass producer collector tax credit; this excludes nonprofits, tribes, and public entities
 - Project owners may use the tax credit themselves or use the pass-through or transfer process administered by ODOE to sell the tax credit. Statute directs ODOE to set, by rule, a minimum discount value at which the tax credit may be transferred, which is currently 90%. The transfer process is administered by the Oregon Department of Revenue; ODOE has no role in the transfer of the tax credit.

documenting that the performance agreement has been satisfied. ODOE reviews the submitted material and may conduct a site visit before dispersing grant funds.

- All projects issued a grant must remain in operation for at least five years. Through its compliance program, ODOE may inspect a project prior to issuing the grant funds and through the required five-year period of operation. All applicants pay fees set by rule during each point of the review process to cover the cost of administering the program.
- Key Program Design Features:
 - Oregon Laws 2011, chapter 730 (HB 3672) authorized ODOE to start issuing RED grants.
 - Oregon Laws 2012, chapter 45 (HB 4079), clarified when the grant was awarded and expanded the time an auction could take place through April 15 of the follow year.
- **No Longer Active: Energy Incentive Program (EIP): Conservation Tax Credit Program**
 - Timeframe this Program was Active: 2011 to 2017
 - Purpose/Goal: ORS 315.331 provides a tax credit for energy conservation projects up to 35 percent of the certified cost of the project. ORS 469.030 states that ODOE shall endeavor to use all public and private sources to inform and educate the public about energy problems and ways in which the public can conserve energy resources. ORS 469.010 outlines Oregon's goal to promote the efficient use of energy resources and to development permanently sustainable energy resources.
 - Funding Source: fees, tax credits
 - ODOE's Administration of Program: The program promoted energy savings and market transformation by providing a tax credit of up to 35 percent of certified costs for businesses, organizations, public bodies, schools, nonprofits, and tribes that make a capital investment in energy efficient devices, measures, or upgrades that yields a simple payback period greater than three years. The conservation tax credit program is capped and could not issue more than \$28 million in tax credit preliminary certifications for any biennium, and no more than \$7.5 million for the six months beginning July 1, 2017, and ending Dec. 31, 2017. ODOE would issue competitive and non-competitive opportunity announcements for conservation projects to apply for a tax credit. Applications for projects are processed through several levels of review, and if successful result in a preliminary tax credit certificate. Once the project is complete and operational, ODOE reviewed and may inspect the project prior to issuing the tax credit. Project owners may use the tax credit themselves or use the pass-through or transfer process administered by ODOE to sell the tax credit.
 - Key Program Design Features:
 - Oregon Laws 2011, chapter 730 (HB 3672), authorized ODOE to start issuing conservation tax credit certificates. In 2011, HB 3627 also authorized eligibility for combined heat and power projects under the Conservation program, but delayed their eligibility until January 1, 2013.
 - Oregon Laws 2012, chapter 45 (HB 4079), amended the program to set the present value rate at the time of the application for preliminary certification.

- Effective October 5, 2015, Oregon Laws 2015, chapter 545 (HB 2448) authorized the ODOE by rule to require the owner of an energy conservation project with certified total project costs of \$1 million or more to enter into a performance agreement as part of the tax credit certification process.
- **No Longer Active: Residential Energy Tax Credit (RETC) Program**
 - Timeframe this Program was Active: 1977 - 2017
 - Purpose/Goal: ORS 316.116 provides a personal income tax credit for the construction or installation an alternative energy device in a dwelling. ORS 469.010 outlines Oregon’s goal to promote the efficient use of energy resources. ORS 469.030 states that ODOE shall endeavor to use all public and private sources to inform and educate the public about energy problems and ways in which the public can conserve energy resources.
 - Funding Source: ESA, USDOE SEP Grant, Fees, tax credits
 - ODOE’s Administration of Program: Homeowners or renters could apply for a tax credit certificate to use on their personal Oregon income taxes after purchasing qualifying energy efficient products and renewable energy systems. The application process included submitting a receipt or proof of purchase. If the device, appliance, or system is deemed eligible, the applicant receives a tax credit certificate. ODOE offered a set of prescribed personal income tax credit incentives for eligible devices that homeowners or renters can purchase and install in their primary or secondary residence located in Oregon. Eligible devices, appliances, and systems have changed over time in to adapt to changes in energy use and market conditions. Applicants may sell their RETC tax credits to others with a personal income liability at the present value uniform discount rates set in rule.
 - Key Program Design Features:
 - Oregon Laws 1977, chapter 196 (SB 339) created the Residential Energy Tax Credit; Oregon Laws 1997, chapter 534 (SB 892), added eligibility for alternative fuel devices, such as alternative fuel vehicles and fueling stations, and energy efficient appliances such as washers, refrigerators and dishwashers. ODOE filed permanent rules effective at the beginning in 1998.
 - The program expanded in 2000 to include fuel cells and in late 2001 to include high-efficiency furnaces, boilers, heat pumps (ducted), and air conditioning systems.
 - Oregon Laws 1999, chapter 765 (SB 1192), made alternative fuel vehicle RETCs transferable, and Oregon Laws 2001, chapter 584 (SB 520), made alternative energy device RETCs transferable at a uniform discount rate established by rule.
 - Oregon Laws 2005, chapter 832 (SB 31), increased the solar electric tax credit to \$6,000 but limited the credit to 50 percent of the total installed cost. Only \$1,500 of the credit could be claimed in a single tax year. The bill also added that the RETC program would sunset for tax years on or after January 1, 2016.
 - Oregon Laws 2007, chapter 843 (HB 3201) increased the tax credit incentive for wind systems and fuel cells up to \$6,000 with only up to

\$1,500 claimed each tax year. Highly efficient wood and pellet stoves were also added to the RETC program.

- Oregon Laws 2009, chapter 909 (HB 2078) ended the tax credit for new gasoline-electric hybrid vehicles. That same year, Oregon Laws 2009, chapter 913 (HB 2067) accelerated the RETC sunset to tax years on or after January 1, 2012.
- Alternative fuel vehicles – such as those powered by electricity, natural gas and propane – were no longer eligible for a residential energy tax credit as of January 1, 2012, under Oregon Laws 2011, chapter 730 (HB 3672). HB 3672 also removed the eligibility of dishwashers, refrigerators, clothes washers, and air conditioners, effective January 1, 2012. HB 3672 gave ODOE statutory authority to adjust the incentive rate for solar photovoltaic and fuel cell systems based on market conditions along with adding eligibility for third-party installed devices. The RETC program sunset December 31, 2017.

- **No Longer Active: State Home Oil Weatherization Program**

- Timeframe this Program was Active: 1981 - present
- Purpose/Goal: ORS 469.010 outlines Oregon's goal to promote the efficient use of energy resources and to develop permanently sustainable energy resources; ORS 469.683 directs ODOE to provide cash payments to a dwelling owner or contractor for energy conservation measures.
- Funding Source: petroleum supplier assessment
- ODOE's Administration of Program: The program had two main components. Under one facet of this program, ODOE provided cash payments for a homeowner who purchases and installs energy conservation measures. Under the second facet, ODOE provides cash payments for households at or below eligibility levels that receive weatherization and energy conservation measure services from a Community Action Agency or other agencies serving low-income households.
- Key Program Design Features:
 - The program was transferred to OHCS where it continues to operate

- **No Longer Active: Energy Incentive Program (EIP): Transportation Tax Credit Program**

- Timeframe this Program was Active: 2011 - 2017
- Purpose/Goal: ORS 315.336 provides a tax credit for transportation projects up to 35 percent of the certified cost of the project. ORS 469.010 encourages energy-efficient modes of transportation. ORS 469.030 calls on ODOE to be a clearinghouse for energy information. ORS 469.060 directs ODOE to make recommendations for state and local governments to assist in the maximum use of renewable resources.
- Funding Source: fees, tax credits
- ODOE's Administration of Program: Transportation program was divided into three project areas. First: Transit service projects operated by government or nonprofit entities that receive state or federal funding or are sub-recipients of funds for transit services provided to members of the public. Second: Alternative fuel vehicle fleet projects requiring the acquisition or conversion of two or more vehicles that use an alternative fuel and produce lower exhaust emissions, or are more energy efficient than equivalent vehicles fueled by gasoline or diesel. Third:

Alternative fuel vehicle infrastructure projects requiring installation or construction of a facility for mixing, storing, compressing or dispensing fuels for alternative fuel vehicles, and any other necessary and reasonable equipment. Under the Transportation Tax Credit program, ODOE issued opportunity announcements for transportation projects. The opportunity announcements were non-competitive, and project applications were processed on a first come, first served basis. Qualified projects received a preliminary certification for a tax credit. Once the project was complete and operational, ODOE reviewed and may inspect the project prior to issuing the tax credit. Project owners may use the tax credit themselves or use the pass-through or transfer process administered by ODOE to sell the tax credit.

- Key Program Design Features:
 - Oregon Laws 2011, chapter 730 (HB 3672) authorized ODOE to issue transportation tax credit certificates. Oregon Laws 2012, chapter 45 (HB 4079), amended the program for transit services applicants to expand project eligibility, added materials to demonstrate total cost, and created a process for allocating preliminary certifications and proportionately reducing the amount of a tax credit.
 - In 2013, Oregon Laws 2013, chapter 774 (SB 583) amended the program to include alternative fuel vehicle fleets projects.
 - In 2013, SB 583 created a \$3 million one-time reduction in the \$20 million per biennium transportation tax credit cap. The \$3 million was used to authorize a tax credit auction by the Oregon Department of Revenue, and the proceeds of the auction were used to seed the Alternative Fuel Vehicle Revolving Fund loan program.
 - Oregon Laws 2011, chapter 730, section 54 ended the tax credit provisions for transit service projects. As a result, ODOE was not able to issue tax credits for tax years beginning on or after January 1, 2016, for transit service projects and stopped accepting applications.

Oregon Energy Facility Siting Council-Jurisdictional Renewable Energy Projects

Project Name	Wind Gen. MW	Solar PV Gen. MW	Battery Storage MW	County(s)	Parent Company	Status/Notes	Solar Acres/Sq. Miles	Bond/Letter of Credit Amount
Stateline Wind Project	222	0	0	Umatilla	NextEra Energy	Operational	N/A	\$ 11,557,000
Biglow Canyon Wind Farm	450	0	0	Sherman	Portland General Electric	Operational	N/A	\$ 17,406,000
Klondike III Wind Project	300	0	0	Sherman	Avangrid - Iberdrola	Operational	N/A	\$ 11,764,000
Leaning Juniper IIB Wind Power Facility	111	0	0	Gilliam	Avangrid - Iberdrola	Operational	N/A	\$ 6,076,000
Leaning Juniper IIA Wind Power Facility	90	0	0	Gilliam	Avangrid - Iberdrola	Operational	N/A	\$ 6,076,000
Shepherds Flat South	290	0	0	Gilliam, Morrow	Caithness Equities Corporation	Operational	N/A	\$ 10,225,000
Shepherds Flat North	265	0	0	Gilliam	Caithness Equities Corporation	Operational	N/A	\$ 8,672,000
Shepherds Flat Central	290	0	0	Gilliam, Morrow	Caithness Equities Corporation	Operational	N/A	\$ 10,451,000
Montague Wind Power Facility	201	0	0	Gilliam	Avangrid - Iberdrola	Operational	N/A	\$ 7,865,000
Wheatridge Renewable Energy Facility I	100	0	0	Morrow	Portland General Electric	Operational	N/A	\$ 3,444,000
Wheatridge Renewable Energy Facility II Phase 1	200	0	0	Morrow	NextEra Energy	Operational	N/A	\$ 16,300,000
Subtotal (operational)	2,519	0	0				0/0	

Golden Hills Wind Project	400	0	0	Sherman	Avangrid - Iberdrola	In construction	N/A	\$ 11,903,000
Summit Ridge Wind Farm	194	0	0	Wasco	Apya Power	In construction	N/A	\$ 12,000,000
Subtotal (construction)	594	0	0					
Port Westward Generating Project Amendment #11	0	0	6		Portland General Electric	Approved - Part of operational 650 MW Natural Gas Power Plant	N/A	N/A
Bakeoven	0	300	100	Wasco	Avangrid - Iberdrola	Approved 4/20	2,717/4.2	\$ 23,000,000
Wheatridge Renewable Energy Facility II Phase 2	0	0	30	Morrow, Umatilla	NextEra Energy	Approved W of Battery	N/A	See above
Wheatridge Renewable Energy Facility III	0	150	0	Morrow	NextEra Energy	Approved -	900/1.4	\$ 9,400,000
Wheatridge Renewable Energy Facility East	200	0	20	Morrow, Umatilla	NextEra Energy	Approved	N/A	\$ 7,000,000
Carty Generating Station Amendment #2	0	50		Morrow	Portland General Electric	Approved	315/.5	\$ 2,700,000
Boardman Solar Energy	0	75		Morrow	Invenergy	Approved	798/1.25	\$ 8,780,000
Montague Solar Facility	0	162	50	Gilliam	Avangrid - Iberdrola	Approved - Split off from Montague Wind Power Facility	1,189/1.85	\$ 6,024,000

Oregon Trail Solar Facility	20.5	20.5	50	Gilliam	NextEra Energy	Approved - Split off from Montague Wind Power Facility - Any combination of wind and Solar PV up to 41 MW	1,228/2	\$ 3,000,000
Subtotal (approved)	221	758	256				7,147/11.16	
Obsidian Solar Center	0	400	50	Lake	Obsidian Renewables	Application Submittal	3,921/6.1	N/A
Madras Solar Energy Facility	0	63	63	Jefferson	EcoPlexus	Application Submittal	270/.4	N/A
Nolin Hills Wind Power Project	350	260	120	Umatilla	Capitol Power Corporation	Application Submittal	1,858/2.9	N/A
Blue Marmot Solar Energy Facility	0	50	0	Lake	EDP Renewables	Application Submittal	2,322/3.6	N/A
Archway Solar Energy Facility	0	400		Lake	Invenergy	Notice of Intent Submittal	4,300/6.7	N/A
Bonanza Energy Facility	0	300	1,100	Klamath	Hecate Energy NAF LLC	Notice of Intent Submittal	2,700/4.2	N/A
Wagon Trail Solar Project	0	500		Morrow	NextEra Energy	Notice of Intent Submittal	4,500/7	N/A
West End Solar Energy Project	0	45		Umatilla	Eurus Energy America Corp.	Expedited Review Determination by Staff	324/.5	N/A
Subtotal (other)	350	2,018	1,333				20,195/31.5	
Total Renewable MW	3,684	2,776	1,589				10,759/24	