Renewable Energy Advisory Council Agenda

Virtual meeting via Zoom
Wednesday, July 28, 2021
9:00 – 11:30 a.m. – please note the 9:00 a.m. start

To join the Zoom meeting, you will need to register in advance:
https://us06web.zoom.us/meeting/register/tZIvd-6oqzovHdxPCFKJusXvpUER_ByETx2H
After registering, you will receive a confirmation email containing information about joining the meeting.

9:00 Welcome and announcements
- Introduction of several new staff members

9:10 RAC input into 2022-23 budget and action plan
Before starting work on the 2022-23 budget and action plan, staff would like hear ideas from RAC members about Energy Trust's renewable energy priorities for the coming two years. A background memo is attached to help frame up some issues that staff would like to discuss. This discussion should be considered the beginning of our budget engagement, not the only engagement. RAC members who want to follow up after the meeting or want a more in-depth discussion should reach out Alina Lambert at alina.lambert@energytrust.org to set up a time to talk with renewable energy staff.

10:10 Priorities for Solar program
The solar program is reaching some inflection points that will require some decisions on priorities in 2022. Staff will seek input from the RAC on their priorities for the values the program provides. A background memo is attached.

11:00 RAC thank you to now-retired Peter West
Peter West, Energy Trust’s former director of energy programs and former manager of the renewable energy sector, retired last month. We will take a few minutes to hear from some former RAC members and send Peter into his new life of rafting and home improvement.

11:25 Public comment

11:30 Adjourn

You can view this agenda and notes from previous meetings at: energytrust.org/about/public-meetings. If you have comments on meeting notes, please email Alina Lambert.

Next meeting: Wednesday, September 15 at 9:30 a.m.
Memo

To: Renewable Energy Advisory Council
From: Energy Trust renewable energy sector staff
Date: July 28, 2021
Re: RAC input into 2022-23 budget and action plans

Energy Trust staff are seeking input from the RAC as we develop budget concepts and expenditures for 2022 and 2023. Specifically, staff are seeking information on RAC priorities regarding our work generally, equity work, community partnerships, workforce development, and resilience. RAC input will inform how staff allocates budget and staff time for the coming years in alignment with our 2020-2024 strategic plan and 2022 organizational goals.

Foundational information

Energy Trust’s budget for renewable energy is a fixed percentage of the public purpose charge (PPC) established in SB 1149 and very recently adjusted through HB 3141. Annual revenue for the renewable energy sector is approximately $8 million from the ratepayers of PGE and about $6 million from those of Pacific Power. Funding received from a given utility must be spent on and in that same utility territory. Energy Trust’s work in renewable energy provides benefits to utility ratepayers such as a greener grid and a strong renewable industry that enables utility and customer investments. We operate two programs utilizing public purpose charge funding: Solar and Other Renewables.

The Solar program provides:

- Standard installation incentives: Installation incentive based on the size of the system designed to offset the upfront cost of residential and commercial solar projects.
- Equity-focused incentives: a higher installation incentive for income-qualified homeowners (Solar Within Reach) and for non-residential affordable multifamily properties, non-profits serving under-resourced Oregonians, and Tribes (Equity Solar Incentives)
- Solar Development Assistance and cross-program early stage assistance:
  - Solar Development Assistance provides funding for a system design and feasibility report to help more complex projects that may have long timelines including nonprofit, public, new buildings, utility grant applicants, solar+storage, and community solar projects.
  - Cross Program Offerings: Incentives designed and delivered with the New Homes and New Buildings programs to support incorporating solar and solar+storage into commercial and residential new construction. Includes – solar early development assistance, solar ready, solar+storage ready, residential net zero, and energy smart home offerings.
- Resilience and advanced/grid services expertise: Staff assist communities seeking to use solar combined with batteries to improve their resilience and meet energy and
climate goals. Such projects are also useful to utilities in that they can provide grid services.

- Installation incentives for smaller community solar projects directed at low-income and under-resourced Oregonians

The Other Renewables program is targeted at small-scale hydro and biopower projects and provides:

- Installation incentives for hydro and biopower projects: custom incentives distributed through several solicitations per year to help pay for the costs of installing projects
- Project Development Assistance for hydro and biopower projects: incentives for feasibility studies, design work, and other early-stage project development activities.
- Technical assistance: Expert assistance from staff and outside firms, mainly to governments that are exploring their opportunities for renewable generation from sources such as food waste, FOG (fats, oils and grease), and water pressure reduction sites.
- Irrigation Modernization Program: A initiative to help irrigation districts holistically plan for modernizing and piping their infrastructure, creating opportunities for hydropower development, energy savings, and water conservation.

In addition to these two programs, Energy Trust has a sub-contract to provide administrative services for the Community Solar Program and a contract with PGE to provide implementation support for its residential “Smart Battery” pilot program.

Energy Trust’s Renewable Energy sector has a staff of 9.5 FTE. This staffing level is not likely to grow due to limits on staffing costs that are part of the organization’s performance metrics with the OPUC. Some of the areas of work listed above currently utilize staff time, but little funding. Others are more financially intensive, relative to staff time required. Proportions of incentive dollars and staff time are shown here.

<table>
<thead>
<tr>
<th></th>
<th>2021 forecasted spending</th>
<th>Renewable energy staff time</th>
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</thead>
<tbody>
<tr>
<td>Solar: standard installation incentives</td>
<td>41%</td>
<td>26%</td>
</tr>
<tr>
<td>Solar: equity incentives¹</td>
<td>26%</td>
<td>20% less than 1%</td>
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<tr>
<td>Solar development and cross program assistance</td>
<td>2%</td>
<td></td>
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<tr>
<td>Solar: resilience and advanced/grid services</td>
<td>3%</td>
<td>16%</td>
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<tr>
<td>Community solar: installation incentives²</td>
<td>1%</td>
<td>4%</td>
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<tr>
<td>Hydro and biopower: installation incentives</td>
<td>16%</td>
<td>9%</td>
</tr>
</tbody>
</table>

¹ Some of the time spent operating the standard program is included in equity because equity offers utilize the standard program’s processes, trade ally network, standards, etc.
² This table reflects anticipated spending in 2021. Energy Trust has budgeted $1.7 million for Community Solar installation incentives that we expect to commit this fall and primarily spend in 2022.
### Considerations for our work in 2022 and 2023

There are several factors that will affect our work in 2022. Following is a list of key considerations, but RAC members should note that this not an exhaustive list.

#### Implementation of HB 3141

Legislation updating the public purpose charge was passed in the 2021 session. HB 3141 does four main things that relate to renewable planning, budgets, and goals:

- Extends the public purpose charge for renewable energy through 2035
- Allows Energy Trust to fund “customer investments in distribution system-connected technologies that support reliability, resilience and the integration of renewable energy resources with the distribution systems of electric companies”
- Requires that 25% of renewable funding be “used for activities, resources and technologies that serve low- and moderate-income customers including for technologies that do not have above-market costs”
- Requires Energy Trust to report on progress achieving equity metrics set by the PUC

The OPUC is developing an implementation plan for HB 3141 along with other legislation passed that affects the OPUC and electric utilities. We can presume Energy Trust staff will need to set aside time for foundational work such as stakeholder engagement, rulemaking, program design, and other tasks. Although we have not received specific direction from the OPUC, it is clear from the priorities expressed in the bill that we should continue to expand our equity offers and grow our support for systems that provide resilience and grid services in addition to clean energy.

#### 2022 organizational goals

After receiving stakeholder input in the spring, including from RAC, staff have drafted a set of four goals for 2022 that will be presented to the board along with the complete draft 2022-2023 budget and action plan.

1. **Achieve savings and renewable generation goals while addressing the needs of customers who experience significant energy burden or are impacted by natural disasters**
2. **Expand support for community-led approaches to increase access to clean energy**
3. **Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities**
4. **Implement new work strategies to adapt and thrive in our changing environment and support staff while managing operating costs**

| Hydro and biopower: development assistance | 5% | 11% |
| Hydro, bio, other: technical assistance | 0% | 7% |
| Irrigation Modernization program | 6% | 7% |
These goals and associated objectives will inform 2022 budget and activity.

**Stakeholders want an increased focus on equity and resilience**

In discussions with stakeholders over the past eight months, including some RAC members, we have consistently heard that we need to continue to grow our equity portfolio and ensure that our programs benefit under-resourced customers and communities. Stakeholders see the work we have done in this area as a good start, but not complete. They have also encouraged us to develop systems for ensuring that we are listening to and partnering with community organizations early on, so communities can meaningfully influence and be involved in our work.

Stakeholders have also expressed interest in our continuing to grow our work on supporting energy resilience in order for Oregon’s communities to be better prepared for earthquakes, wildfires, heat events and outages that may result from the need to shut down power to prevent wildfires. This is particularly important for vulnerable populations and intersects with stakeholder priorities around equity.

Resilience work cuts across the technologies we support. Renewable energy microgrids can be made up of a combination of solar, bio and/or hydro paired with battery storage to provide backup power. Without clear direction on our role in supporting energy resilience, Energy Trust has not yet offered direct incentives for battery storage. Our investment in this area has primarily been in staff time and expertise focused on funding collaborative learning projects mainly with municipalities to identify replicable scalable models for funding renewable energy microgrids statewide.

**Community members would like us to work on workforce development, specifically increasing the diversity of the trade ally network**

RAC members have expressed this desire in the past and it was discussed at recent community summits held to gather input on Energy Trust’s programs. Community members strongly recommended that we increase and improve our efforts to bring more Black, Indigenous, and people of color into the solar industry. They would like to see more investment and partnerships between Energy Trust and organizations doing workforce training in BIPOC communities.

**As demands grow, we have limitations on staffing and budget**

As we have added important new functions to our portfolio over the years, staffing levels have stayed roughly the same. We have added resilience, expanded our equity work and offerings, and increased technical assistance while also maintaining our foundational programs and serving a growing number of participants. HB 3141 provides for new uses of the renewables public purpose charge fund and maintains the existing annual budget. Volume in the standard solar program has grown as we have steadily decreased incentives, and enrollment in Irrigation Modernization has also expanded. We have skilled staff who continually improve processes and systems, which has enabled us to expand our work. However, we believe the work ahead of us will require more staff time for relationship building, partnership and innovation, and larger allocations of our funding to equity and resilience. To do this, some current dimensions of our work will need to be de-prioritized.

**RAC discussion topics**

At the July 28 RAC meeting, staff will seek RAC input and ideas regarding the topics below and other topics that the RAC may wish to address. We will use this input as we develop the draft
budget. RAC members will be assigned to break-out rooms. The first topic on overall priorities will be discussed by all break-out rooms. Break-outs will then choose from the other topics as they see fit or add their own topics.

**Overall priorities**

As noted above, the strategy of continuing to squeeze everything in is becoming less tenable. Due to funding and staff time limitations, Energy Trust will need to set priorities and provide less time and resources to some functions.

- What do you see as the highest and lowest priorities for our work in the renewable energy sector given Energy Trust’s current 2020-2024 Strategic Plan and needs you are observing? What are the reasons behind your thinking?
- What are the areas where Energy Trust provides the most value?
- What would you like to see added to our portfolio?
- What considerations do you have regarding phasing down our involvement in de-prioritized areas?

**Workforce**

As noted above, we have heard some desire from stakeholders for Energy Trust to proactively work on diversifying the trade ally network and bring more BIPOC individuals into the solar industry as a key part of our equity-focused work.

- What are the important roles we could play in workforce development? What are the key values we could bring?
- What outcomes would you like to see from a workforce effort?
- Who are some possible partners in this area?
- How would you prioritize this work relative to other possible areas of focus?

**Community partnerships**

One of the main ways we will increase our equity work in the renewable energy sector is by partnering with and empowering community organizations. Stakeholders have told us that this collaboration with and deference to communities and community groups is important.

- What outcomes – equity outcomes particularly -- should we be working toward in these partnerships?
- What recommendations do you have for Energy Trust to be successful in this area?
- How would you prioritize this work relative to other possible areas of focus?

**Equity-focused work**

Staff have heard feedback from stakeholders about the importance of workforce development and community partnerships in our equity work. But working on those two areas may not reflect the full range of activities stakeholders would like to see.

- What outcomes would you like to see as Energy Trust works to make sure we serve all Oregonians in our service territories with our renewable programs?
- What kinds of initiatives and activities are highest priority?
Community Energy Resilience

Renewable energy projects support community resilience when they are located appropriately and paired with battery storage and controls. Currently Energy Trust provides staff time and expertise as well as funding collaborative learning projects to identify replicable scalable models for funding renewable energy microgrids statewide.

- What do you see as the most important role for us in this area? Possibilities include, but are not limited to technical assistance, education and awareness, grant-writing assistance, feasibility study funding, and installation incentives for projects.
- Should Energy Trust’s role for non-residential be focused on individual demonstration projects in targeted locations vs. widely deployed resilience planning and feasibility studies to leverage additional grant funds?
- Where would you like to see us focus our resilience work? Possibilities include, but are not limited to rural vs. urban areas, critical government facilities, community resilience hubs prioritized by communities, essential businesses, wildfire-impacted communities, and homes.
- What outcomes would you like to see us achieve in the coming two years?
- How would you prioritize this work relative to other possible areas of focus?
Memo

To: Renewable Energy Advisory Council
From: Energy Trust renewable energy sector staff
Date: July 28, 2021
Re: RAC input into future direction for the Solar program

This memo provides background information to help the RAC engage in a discussion about its priorities for the solar program that will help staff make decisions regarding solar activities in 2022 and 2023 as the competing demands for our dollars grow, particularly for Pacific Power territory. At the end of the document, staff list two statements about the solar program’s role and value in the market for the RAC to consider.

Background
Energy Trust has operated a solar program since 2003. The program’s goals have been to build volume, achieve generation goals, and grow and support a qualified set of solar trade ally contractors skilled in installing high quality systems. The program has primarily operated a residential and commercial incentive offering, and in recent years, added additional offers focused on addressing equity gaps. Foundational to all of these offerings have been infrastructure to deliver cash incentives that lower upfront cost, technical requirements, a network of qualified trade ally contractors, customer education and protection, and coordination with incentives from other sources. To date, the program has supported the installation of almost 19,000 systems at homes and businesses in Oregon and the development of a thriving solar industry responsible for much of Energy Trust’s recent generation:

1 At $0.14 per annual kWh (2021 average incentive), residential solar projects are Energy Trust’s lowest-cost source of generation, and compare favorably to many efficiency projects.
The program is reaching key inflection points that will require decisions about how it is structured in the future. In 2022, we expect that there will begin to be insufficient funding in Pacific Power service territory to meet the demand for the range of offerings that are currently available. (This is not the case in PGE territory at this time, where we currently have higher levels of funding available for solar.) This constraint is due to several factors:

- Volume has significantly increased during the last few years, and particularly in the past 12 months. In the first half 2021, Energy Trust received 1,600 solar applications across both utility service territories compared to just over 1,000 in the same period last year.
- Energy Trust’s scope is expanding as a result of the passage of HB 3141 which adds “distribution system connected technology that support reliability, resilience and the integration of renewable energy resources with the distribution systems of electric companies” to the list of our activities. Although this has not yet been defined, it is quite likely to include solar paired with battery storage and other technologies capable of providing grid services such as smart inverters.
- New offers aimed at addressing equity gaps in the program are growing and HB 3141 requires that 25% of renewable energy funding serve low-and-moderate income customers. More than half of the funds the program has reserved in 2021 have been for one of these equity-focused offerings, including:
  - Solar Within Reach which provides higher-than-standard incentives for low and moderate income customers.
  - The Equitable Solar Initiative which provides higher-than-standard incentives for affordable multifamily properties, qualifying non-profits and tribal projects.
  - The Small-Scale Community Solar Incentive for smaller, community-based projects with specific equity goals.

The chart below shows the increased activity and changes in the make-up of that activity over the past several years.

*Standard Business incentives include commercial, nonprofit, public, multifamily and tribal projects
This trajectory of doing more with the same level of funding will continue as we expand our portfolio of offers to support equity, resilience and grid flexibility in accordance with priorities from stakeholders, the Energy Trust board, and the recently-passed legislation noted above.

Our strategy to support growing numbers of projects with a fixed budget has been to make regular, small decreases to the incentive rate over time. This enabled us to support more projects and add some new programming without any major cuts. This strategy of gradual reductions can’t be continued indefinitely without other changes to the program. Currently, the average incentive provided to a residential homeowner in Pacific Power is less than $1,000. This may need to drop below $500 in 2022, to accommodate forecasted growth in demand and provide sufficient funding for equity offers. This potential lower incentive level raises questions about the role and value of an Energy Trust incentive to customers, contractors and stakeholders.

To adequately fund programs that are most important to the community, stakeholders, utility partners, the board, and OPUC, staff are looking for input from the RAC regarding choices, trade-offs and priorities. Below are two statements regarding Energy Trust’s role in the market to be used as a jumping off point for discussion. Staff expect to use information gathered from the RAC and other stakeholders to help inform the development of the 2022 and 2023 budgets. These two statements are focused on the residential market because that category represents the largest number of applications we process and therefore is exemplary of the staff time trade-offs we are asking the RAC to think about. It is also a significant portion of our generation. However similar principles could be applied to the commercial market.

Any changes to Energy Trust’s residential solar program would be implemented with a transition period and communication with the market and the industry appropriate to the extent of the change. For both statements listed below, staff are considering higher incentives for solar that provides grid services and/or resilience.

**Statement 1: Energy Trust should have a continued, but smaller role in funding solar residential projects that serve market-rate customers and are not capable of providing resilience or grid services.**

This statement reflects a desire to continue funding a market-rate solar offer, but at a reduced funding level (e.g. less than $500 for an average residential system) to make some room for other types of offerings.

A robust market of successful trade allies throughout Oregon is foundational to Energy Trust’s ability to deliver new solar offerings. This statement reflects the belief that a financial incentive is important for avoiding the risk of destabilizing the solar program’s foundation as it works to deliver new incentives focused on equity, resilience and grid flexibility. Maintaining the standard program’s financial incentives provides a foundation of technical standards, application-processing systems, consumer protection and other programmatic elements that trade allies offering solar or other grid-connected distributed energy resources can utilize. In addition, financial incentives for residential solar projects provide an opportunity for the renewable sector to connect directly with residential customers.

This statement assumes that financial incentives – even at reduced levels – are key to maintaining the foundations of the standard program and connections between trade allies and Energy Trust and helps ensure that trade allies are capable of doing more, such as offering batteries and other advanced technologies.
Statement 2: Energy Trust should only provide financial incentives for solar systems that provide additional values such as improved equity, resilience and/or grid services. Other services to trade allies such as providing leads would be sufficient for motivating them to remain connected to us and meet our standards.

Energy Trust has done substantial work in building a solar industry in Oregon, having supported 17,000 residential projects. Some stakeholders believe the industry can stand on its own without direct customer financial incentives from Energy Trust and that the saved dollars can be applied to other offerings. These stakeholders further believe that contractors would continue to benefit from Energy Trust’s customer leads and marketing support, training and workforce development, and soft cost reduction efforts and that these benefits would be valuable enough to motivate trade allies to continue to install systems in compliance with our technical standards and to register their projects with us. We would like trade allies to continue their connection to us in order for us to provide financial incentives for systems with more value to the grid and for resilience: solar with batteries, smart inverters with specific settings, etc.

The market recovered from the expiration of the $6,000 Residential Energy Tax Credit four years ago: the first half of 2021 has seen record demand despite much lower incentives than in the past. With the recently enacted one-time increase $10 million of funding for the ODOE Solar+Storage incentive, there may, in the near term, be less need for Energy Trust residential financial incentives. This would free up dollars and staff time to do more intensive hands-on work of building partnerships and supporting project development for systems that provide more equity, resilience and grid services.

This statement assumes that the non-financial benefits of Energy Trust’s standard program are adequate to supporting and maintaining a foundation for a robust solar industry that is capable of doing more such as offering batteries and other advanced technologies.

Discussion questions:
1. What do you see as the benefits and issues associated with each statement?
2. Which statement reflects your priority for Energy Trust’s future role in and value to the residential solar market? Why?
3. How important is it for incentive levels and offerings to be the same or similar across the two utilities?
4. What other considerations would you like Energy Trust staff to think about regarding how the solar program provides value and support for the solar market?
2022 Organizational Goals

- Achieve savings and renewable generation goals while addressing the needs of customers who experience significant energy burden or are impacted by natural disasters.
- Expand support for community-led approaches to increase access to clean energy.
- Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities.
- Implement new work strategies to adapt and thrive in our changing environment and support staff while managing operating costs.
Goal 1: Achieve savings and renewable generation goals while addressing the needs of customers who experience significant energy burden or are impacted by natural disasters

We will meet the 2022 targets of XX aMW of electric savings with BB MW during periods of summer and CC MW of winter peak demand, YY million therms of natural gas savings and ZZ aMW of renewable generation, with a focus on:

- Creating program offers to better serve customers with high energy burden
- Implementing programs and initiatives to help utilities manage loads during high demand periods
- Supporting communities managing natural disasters with clean energy and resiliency offers in coordination with utilities
Goal 2: Expand support for community-led approaches to increase access to clean energy

We will expand community-led approaches to increase participation in energy efficiency and renewable energy programs and support community objectives, with a focus on:

- Identifying partnerships with communities or community-based organizations that represent and serve communities of color, customers with low incomes and rural communities
- Working with communities and community-based organizations to help shape our offers to meet their needs within our regulatory guidelines
- Leveraging additional funding sources and insights from communities to better serve customers
- Tracking and supporting community energy policy and planning efforts to identify opportunities for collaboration
- Applying Energy Trust's community engagement guidelines to evaluate opportunities for one or more community-led initiatives that could help us accomplish savings and generation goals
Goal 3: Advance development as a core function that enhances the value energy efficiency and renewable energy provide our customers and communities

We will develop the capabilities necessary to increase funding that furthers our ability to deliver on our core savings and generation goals and expands our ability to meet changing customer and utility system needs. We will do this with a focus on:

• Building systems, processes and structures to facilitate development activities
• Developing relationships with organizations where there is mutual opportunity to pursue complementary activities or access other sources of funds
• Enhancing grid value with the utilities
• Informing policy discussions that leverage our development efforts
• Pursuing opportunities that improve the cost-effectiveness of our savings and increase adoption of renewable generation
Goal 4: Implement new work strategies to adapt and thrive in our changing environment and support staff while managing operating costs

New work strategies will need to evolve our work space, the way we work and our organizational culture, with a focus on:

- Creating a culture and environment that enables us to retain and compete for talent
- Ensuring an inclusive, flexible, accessible and supportive work culture
- Regularly prioritizing and scaling work for changing business conditions, utilizing business planning and other management tools while reservaing time for innovation
- Managing our administrative costs