



ENERGY TRUST OF OREGON LOCAL GOVERNMENT RESEARCH REPORT

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Executive Summary

Introduction

Energy Trust of Oregon (Energy Trust) wants to work more closely with Oregon's 377 cities and 36 counties, from Grants Pass, to Portland, to Bend, to Umatilla, to Lakeview. They sponsored this research to discover how well the high priority needs of these jurisdictions align with the energy-related services and products they offer or could offer. Findings and insights from this research will be used to further develop tools to engage with local governments in energy efficiency and renewable energy projects.

This research is qualitative and based upon 23 in-depth interviews with directors and managers from cities and counties across Oregon (see **Error! Reference source not found.** in Chapter 2) conducted during July, August, and September of 2021. We used a list of 52 contacts Energy Trust provided and were able to complete interviews with 44% of them. Based on guidance from Energy Trust staff, we divided respondents into two groups: those who had **High Involvement** with Energy Trust, and those who had **Medium/Low Involvement** with Energy Trust. We used respondents as the unit of analysis.

The study addresses these questions:

1. What are the top issues for Oregon's cities and counties?
2. What barriers do they face in solving those issues?
3. How can energy efficiency and renewable energy help them address those issues?
4. What Energy Trust services do cities and counties want the most?
5. How can Energy Trust best work with Oregon's cities and counties?

Conclusions and Recommendations

The body of this report provides further data and insights to support these conclusions and recommendations.

Differences Between the Groups

Respondents in High and Medium/Low Involvement groups were qualitatively different in two key respects:

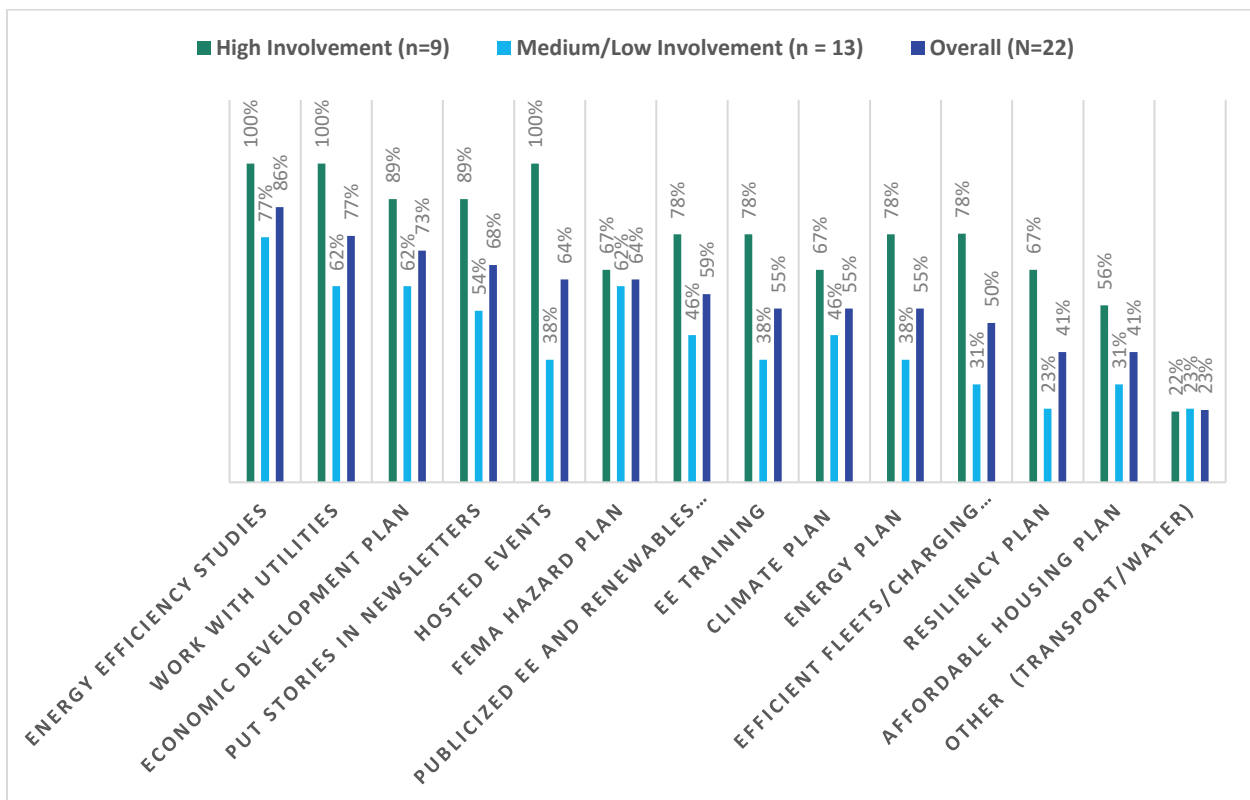
- High Involvement respondents tended to be in or near Oregon's larger cities, while the Medium/Low Involvement respondents tended to be in more remote areas.
- High Involvement respondents had energy on their minds more often than those in the Medium/Low Involvement group. When asked about fourteen energy-related activities, more respondents in the High Involvement group had engaged in each of them, often by a margin of twenty-five points or more, as shown in Figure 1.

Energy Trust actions likely influenced both differences. The first difference coincides with respondent perceptions in this and other research that Energy Trust is city-centric and needs to further its reach, something the organization is already working on.

The second difference suggests high involvement with Energy Trust is related to local governments taking desired energy-related steps beyond specific projects. Notably more High Involvement respondents reported they do the following:

- Work with their utilities on energy efficiency and renewable energy issues, including collaborating on projects and programs, serving on advisory boards, and discussing carbon reduction.
- Educate citizens and staff on energy-related topics, including hosting events, publicizing accomplishments, and training workers.
- Develop plans for a clean energy future, including energy and resiliency plans.

Figure 1 Energy Related Activities by Level of Involvement with Energy Trust



Top Issues for Cities and Counties

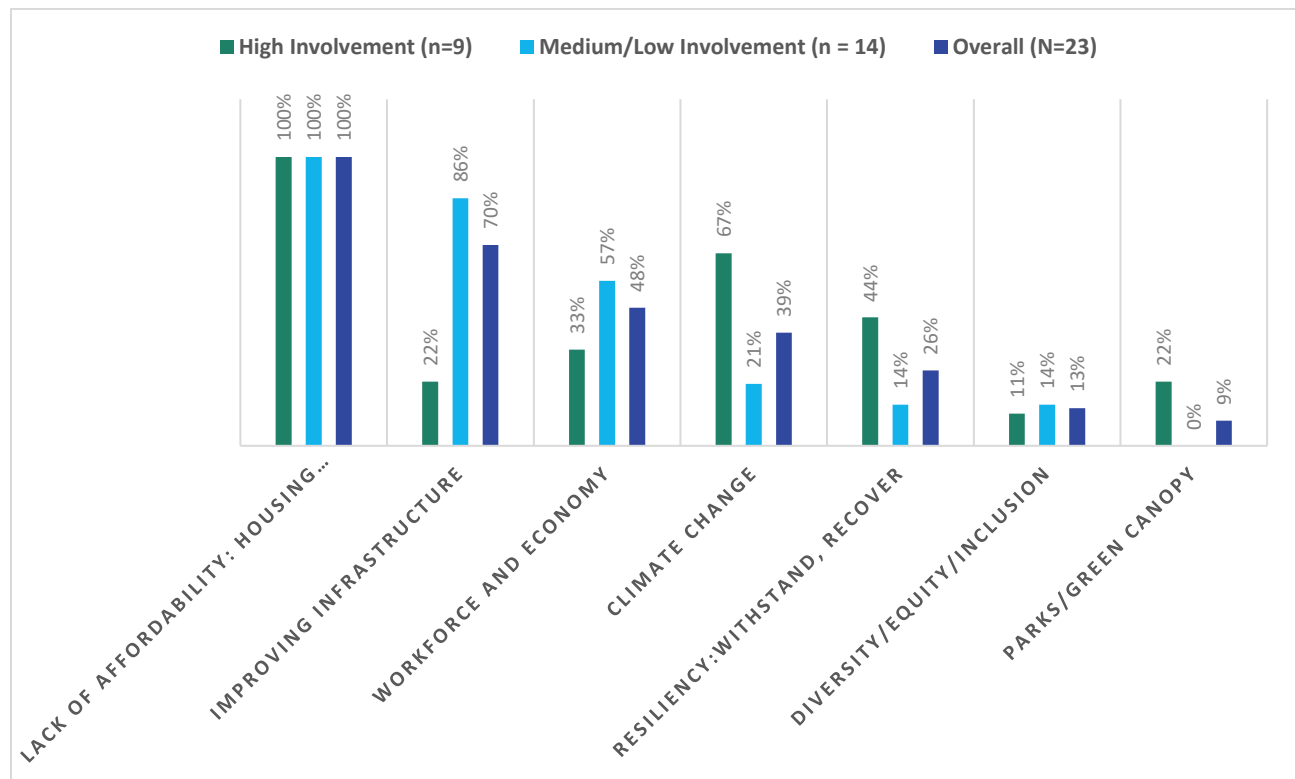
Four areas emerged as the top issues cities and counties will focus on in the next three to five years (see Figure 2):

- **Lack of affordable communities, especially housing costs**, is the top area of focus. Every respondent participating in this study included it as one of their top three issues.

- **The need to improve infrastructure** is a second area of focus and is more salient for Medium/Low Involvement respondents who tended to be from smaller, more remote communities with fewer resources.
- **Building the workforce and economy** is a third area of focus, which again looms larger for Medium/Low Involvement respondents.
- **Climate change and resiliency** is a fourth area of focus and will likely to be more salient in communities that already have High Involvement with Energy Trust.

Further discussion of these issues, the barriers to solving them, and the potential for energy-related solutions, can be found in Chapter 2.

Figure 2 Top Issues



Recommendation

Energy Trust should frame its program and service offerings for cities and counties around these three issues:

- **How to achieve more affordable housing**, using energy efficiency, solar energy, and other renewable resources, such as bio-digesters to lower wastewater treatment costs and bill increases. Services should address new and existing, owned and rented, single and multifamily homes.

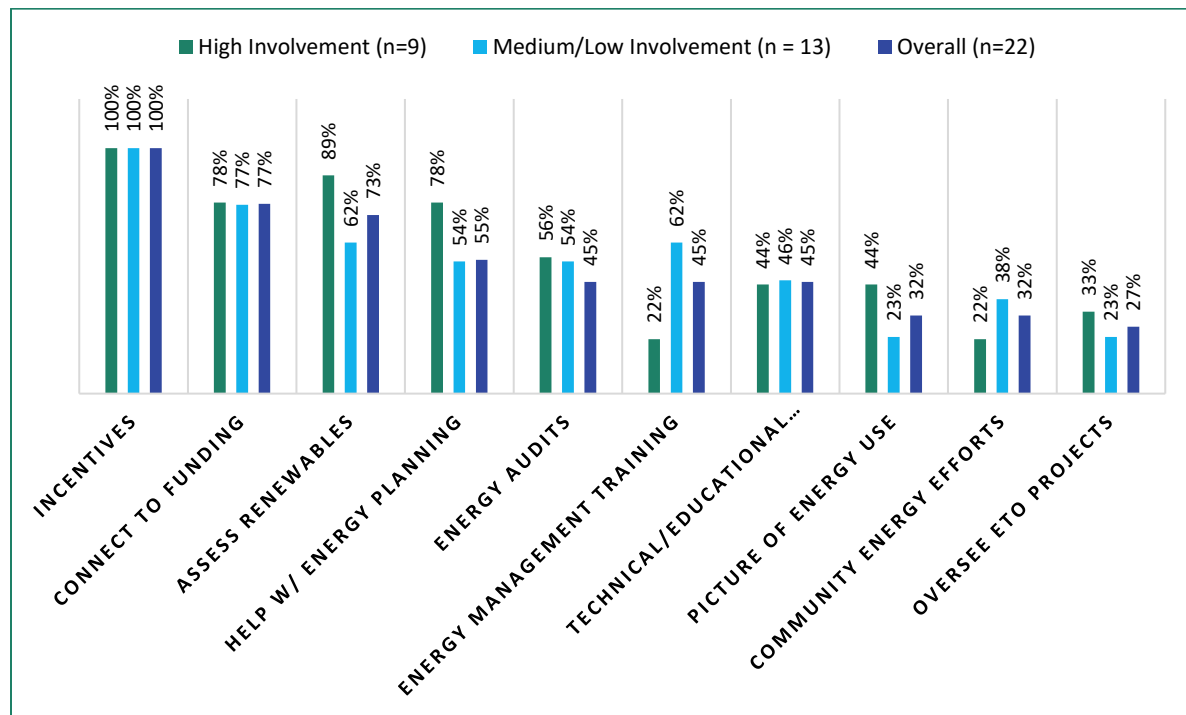
- **How to improve infrastructure**, using energy efficiency and renewable energy, including those for water and wastewater treatment plants, public buildings, and, if possible, transportation.
- **How to be more resilient to climate change**, including increased temperatures and other weather events, and wildfires.

We do not suggest framing program and service offerings with workforce and economy themes because Energy Trust has limited ability to support direct activities in these areas. However, the workforce and economic benefits of working with Energy Trust on these issues should be woven in wherever possible.

Top Products and Services

Figure 3 shows the level of *high* interest that respondents had in ten Energy Trust products and services.

Figure 3 Level of “High Interest” in Ten Product and Services



These four products and services received the highest level of interest from respondents.

1. Incentives for investing in energy efficiency and renewable energy (100%).

Respondents said incentives had made the difference in getting a project accomplished. They said it was a “*huge priority*” to obtain them because it was the “*best way to get a project to “pencil out.”*”

Respondents emphasized that the incentives reduce two key barriers to completing projects: paybacks that are too long and upfront costs that are too high.

2. Connection to other sources of funding for energy-related projects. (77%)

Over three-quarters of respondents thought that help with identifying further funding sources for energy projects would benefit them. Some envisioned it as a “one-stop shop” or clearinghouse that would help them evaluate options and determine “if the money is worth going for” given its reporting and other requirements. Many cited good past experiences with Energy Trust, with one saying staff are “very easy to work with and the paperwork is not difficult (*Willamette Valley*).” One respondent from a rural town suggested Energy Trust should help them develop projects, “*not just funding advice.*”

3. Assessment of renewable energy opportunities. (73%)

Respondent enthusiasm for exploring renewable energy opportunities was palpable. Some said their elected officials “wanted to look at solar.” Others asked if they could speak with someone at Energy Trust about a particular project or with specific expertise to help them think through a project.

“This is very beneficial. Every city should have that information. Many are looking at sustainability and energy. . .but don’t have the human capital.” – Southern Oregon

4. Expert help for energy-related plans, such as energy, climate, and resiliency plans. (55%)

While the high interest ratings for this service were lower overall, 78% of those in the High Involvement group were very interested in using Energy Trust’s expert staff to advise them on the energy portions of key planning documents. This group’s higher interest reflects their positive past experiences receiving expert help from Energy Trust staff – experience that those in the Medium/Low Involvement group did not have.

“This would be great. . .it would ensure we would look at the energy piece. We tend to focus on structure but need resiliency with power. Engineers like structure.” – Portland Metro

Recommendation

Based on these findings, Energy Trust has some developmental work to do, including:

1. Analyzing how current products and services can best be used to help address the top three issues for cities and counties (housing, infrastructure, climate change).
2. Identifying and fleshing out new products and services that should be developed to help cities and counties address these issues. The development of new offerings should keep respondent product and service preferences in mind (incentives, funding clearinghouse, renewable energy opportunities, expert help). It should also include research on city and county-based programs that might offer opportunities for collaboration. While Energy Trust does not serve the City of John Day, it has a program ripe for piggybacking with efficiency and solar incentives: The John Day Urban Renewal Agency & Housing Incentive Program is offering builders incentives to build

and remodel homes (<https://www.cityofjohnday.com/planning/page/john-day-urban-renewal-agency-housing-incentive-program>).

3. Identifying which staff can serve as experts on each of the three key issues: affordable housing, infrastructure improvements, and climate change resilience.
4. Developing a targeted issue-based menu of products and services for each key issue.
5. Communicating with cities and counties about the new issue-based menus, including how to easily access them. An early step in communicating with these audiences would be to send out a summary of this research to all respondents, since all were interested in seeing the results.
6. Assessing the results of this new approach.

Advice to Energy Trust

This section is based upon advice respondents gave to Energy Trust in how to best approach and serve them.

1. Keep doing what you're doing: Don't hold your light under a bushel basket.

Those who know Energy Trust value their staff and services. As one respondent simply put it: "We hold Energy Trust in high esteem around here." Continue to build upon your good reputation.

2. Use Benefits Messaging: Show me the money and then everything else.

The strongest benefits are financial: incentives, lowering upfront costs (and payback for businesses); saving money over time; lowering utility bills; making homes and businesses more affordable, freeing up money for other uses, creating jobs, and spurring the economy.

Non-financial benefits are also persuasive, including helping communities preserve quality of life, keeping people in their homes, and improving comfort, resiliency, and independence. Most respondents said that using the term "climate change" is usually acceptable but tread carefully.

3. Focus on Relationship Building: Find out more about the community and audience.

Before approaching local government contacts, learn more about how their organization is structured what their community values, and what they've been doing lately that might relate to energy efficiency and renewable energy. Use Energy Trust's local representatives and the city and county websites to help with this.

Use that intelligence to help build connections during initial and ongoing conversations. Listen to the stories that your contacts tell and connect them to what Energy Trust can offer. For instance, several respondents told "origin stories" about their towns, such as that they are rooted in timber and ranching (Wallowa), or that they "are not your grandpa's ag town." (Eastern Oregon)

4. Use Multiple Points of Entry: Start at manager and director levels, develop relationships with more than one contact, and ask about presentations to upper management and elected officials.

The director and manager level respondents interviewed for this research appear to be a good place to foster relationships: they are the ones most likely to have a stake in energy efficiency and renewable energy projects. If possible, develop multiple points of contact to become more embedded in organizational memory.

Many of these respondents also suggested Energy Trust work through them to determine if informational sessions for upper management and elected officials would be useful. Several noted that these groups would benefit from knowing more about Energy Trust, especially since they often needed to approve projects. They advised including a peer-level person from Energy Trust in these presentations to convey the importance of the relationship to Energy Trust.

5. Communicate: Stay in regular touch (but not too often)

Several respondents suggested meeting with them regularly (1-4 times a year) to ensure clients know the services available from Energy Trust and that Energy Trust knows about upcoming opportunities to provide services. These interviews, for instance, turned up several potential projects and requests.

Several respondents said they wished they had a more shorthand way to connect with the services Energy Trust offers. Consider whether a display-worthy directory with key links could be developed to help these clients find the resources they need.

6. Use Influencers: Let others work on your behalf.

Respondents indicated that they rely upon and are in touch with their peers for support and guidance: In particular, several public works directors, wastewater treatment facility operators, and town managers said they talk regularly with one another. Cities and counties also rely upon state, regional, and local non-profits (for instance, Solar Oregon and The Environmental Center); schools and universities (for instance, the Oregon Institute of Technology); and local chapters of national organizations (for instance, the Oregon Association of Clean Water Agencies [ORACWA]), to provide information and do projects.

A list of the organizations mentioned in the interviews is being provided to Energy Trust in a separate database. Energy Trust should take advantage of these peer networks and support professional associations to get energy more regularly on the agenda.

Memo



To: Energy Trust

From: Susan Jowaiszas

cc:	Tracy Scott, Amber Cole, Steve Lacey, Michael Colgrove
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Date: November 22, 2021

Re: Local Government Qualitative Research

The report's conclusions provide valuable input for program and outreach teams to help develop and deliver products and services that meet customer needs. Top issues for these communities include lack of affordable housing, need to improve infrastructure, addressing impacts of climate change and resiliency, and supporting the workforce and economy of the local area. There were significant differences in how different communities set priorities on these topics.

The report surfaced some key opportunities to increase the value that local communities can receive from Energy Trust. Program and outreach managers will be taking steps to address opportunities and needs:

- Analyzing current products and services that are available now to support communities. Program staff and outreach team members will coordinate to match current offerings with priorities for communities. Energy Trust has already begun developing focused offerings to support community needs. New and manufactured home incentives in areas impacted by wildfire is one example.
- Identifying new opportunities for products and services that could expand the scope of offerings that support communities and are consistent with Energy Trust's areas of expertise and resources. Findings will inform measure development and diversity, equity and inclusion efforts that could expand Energy Trust's portfolio of products and services.
- Developing staff expertise on how energy and our programs and services related to the top priority issues for communities.
- Developing and providing easier-to-access tools for communities to use to connect with Energy Trust and other related resources. This work has already started at Energy Trust with the development of Community Engagement Guidelines in 2020. The Wallowa County energy planning process currently underway will also produce lessons that can be applied when developing resources.

- Expanding outreach to communities with less exposure to and history with Energy Trust to begin to develop trustful working relationships. Energy Trust's regional outreach team will be a key link to share information about local needs with staff and to introduce products and services with communities in ways that are responsive to and respectful of their interests. A smaller number of relatively urban communities have established strong links to Energy Trust and built upon those links to benefit their communities. Smaller, more rural communities also need support. Energy Trust will need to demonstrate that staff understands their needs and values. This will be a high priority task for Energy Trust outreach staff and program managers who can begin to develop more contact points within these communities.

Chapter 1: Introduction and Approach

Context

From Klamath Falls to Portland to Wallowa, Oregon’s 377 cities and 36 counties grapple every day with a host of thorny issues, including affordable housing, disruptions related to a changing climate, population and cultural shifts, and aging infrastructure. The research reported on here is part of an ongoing effort to inform Energy Trust about the top concerns of cities and counties and how best to work with them on the energy-related components of those issues at the community level.

Over the past decade Energy Trust has increasingly worked with local governments to support locally led efforts. They train facilities staff in strategic energy management, advise on energy components of climate and resiliency plans, foster the availability of qualified contractors, and provide incentives for high efficiency and clean energy public buildings and facilities, such as the state-of-the-art net zero energy wastewater treatment plant in Gresham. This research shows these customers appreciate the services they have received:

“Energy Trust is already doing a good job – our relationship with them is phenomenal and we’re using their resources a lot.” – Southern Oregon

At the same time, many communities have been less engaged with Energy Trust for a variety of reasons. Current and past research suggests these communities are more likely to be smaller and more remote, have fewer resources, be skeptical of outside or “big city” help, think Energy Trust does not understand their community’s unique circumstances, or may not know how their needs fit with what Energy Trust can provide.

“What if a customer calls and they want to know what the city is doing for energy savings and climate change – ‘how do I do my part?’ . . . I don’t know where to send them. If Energy Trust could have that for cities – some type of flow chart or simple list. . .” – Central Oregon

Energy Trust would like to build more long-term relationships at the community level to ensure their resources are equitably distributed across all customers. They believe local governments, and their citizenry, will benefit through reduced energy costs and carbon use in their buildings and facilities. They also believe city and county leaders influence community action, both through example and policies. Finally, they hope these relationships will allow them to communicate with cities and counties about energy-related issues of mutual interest, such as carbon reduction, energy resiliency and environmental justice.

Research Goals and Methods

The overall goal of this research is to discover how well the high priority needs of local governments align with the energy-related resources available – or could be available – from Energy Trust. The desired outcome of this research is for Energy Trust to use this information to develop useful and cost-effective tools to engage with a wide array of cities and counties on projects that will reduce energy use or make use of renewable energy resources. The study builds upon previous work Energy Trust has conducted and addresses these research questions:

1. What are the top issues for Oregon’s cities and counties?
2. What barriers do they face in solving those issues?
3. How can energy efficiency and renewable energy help them address those issues?
4. What Energy Trust services do cities and counties want?
5. How can Energy Trust best work with Oregon’s cities and counties?

Research Approach

This research is qualitative and relies on a small number of interviews. While the data are rich, often convergent, and suggest issues and pathways for Energy Trust to focus on in serving local governments, they cannot reliably represent all cities and counties. In a few summary tables we have used percentages to allow useful comparisons, but we ask readers to keep the small number of respondents, and the qualitative nature of the research, in mind throughout.

The findings presented here are based on 23 in-depth Zoom interviews lasting forty-five minutes to one hour during July, August, and September 2021, with twenty-four directors and managers¹ at local governments and non-profit regional agencies serving local governments. Pivot Advising worked iteratively with Energy Trust stakeholders to develop an interview guide that addresses the research questions. The resulting guide (see Appendix A) is largely open-ended and conversational.

We took in-depth notes during the interviews, which we also recorded for reference. We entered the responses into a database and content analyzed their themes. We have not used respondent names in reporting but have identified the source of quotes by location; quotes may be edited for length and clarity. We offered respondents a summary of the findings from this research and all respondents said they would like to receive the summary.

Energy Trust provided a spreadsheet of their city and county contacts and Pivot Advising worked with them to refine the list and develop a qualitative sampling approach. We considered three variables to group the respondents: geographic region, urban versus rural location, and the level of involvement of each respondent with Energy Trust (High, Medium, and Low/No), based upon the judgment of Energy Trust staff members. We chose the level of involvement with Energy Trust as the variable most relevant to the research goals and most likely to reveal differences between groups.

¹ One interview had two participants. We have counted this as one interview.

Table 1 shows the sampling frame and the completion rate by respondent and unique organizations at each level of involvement. Overall, the completion rate was robust – 44% – especially given the limited sample. Our goal was to complete interviews with at least twenty-two respondents, spread evenly across the three levels of involvement. However, as the table shows, we had much greater success engaging respondents that Energy Trust had worked extensively with in the past, compared to those who had not, despite peer referrals and persistent attempts to reach them.²

Clearly, an existing relationship between Energy Trust and these customers was important to gain their cooperation for this research. We combined the Medium and Low/No groups for analysis purposes given the wide range of association with Energy Trust in the Medium group and the small size of the Low/No group.

Table 1 Qualitative Sampling Frame and Completion Rate

Level of Involvement	Number of Interviews	Total Number of Contacts	Completion Rate	Number of Organizations Represented	Total Number of Organizations	Completion Rate - Organizations
High	9	14	64%	7	10	70%
Medium	10	18	56%	9	14	64%
Low/No ³	4	20	20%	4	16	25%
Totals	23	52	44%	20	40	50%

Report Organization

The following chapters in this report address the research questions an include:

- Chapter 2: What are the Top Issues for Cities and Counties? (combines Research Questions 1-3)
- Chapter 3: What Services Interest Cities and Counties the Most?
- Chapter 4: What Advice do Cities and Counties Have for Energy Trust?
- Chapter 5: Conclusions and Recommendations

² While very few people refused to participate outright, they did not answer messages sent or left for them.

³ One respondent in this category lived in an area not served by Energy Trust due to an “instant” referral from another respondent. While this respondent was not asked all questions, particularly about preferred Energy Trust services, the interview was still very helpful.

Chapter 2. What are the Top Issues for Cities and Counties?

Who is Speaking in this Report?

Location of Respondents

Portland Metro/Columbia Gorge	5 respondents
Central Oregon	3 respondents
Southern Oregon	6 respondents
Eastern Oregon	5 respondents
Willamette Valley	1 respondent

The locations are both urban, sub-urban, and rural and have populations ranging from ~1,700 to ~650,000.

Unit of Analysis

Respondents are the unit of analysis for this report. The contact list often included several respondents from one jurisdiction, each with a different title and sometimes different levels of involvement with Energy Trust. Due to the limited sample, and the challenges in reaching people, in several cases we interviewed multiple people from the same jurisdiction (although that wasn't our original plan). This happenstance produced an important insight: respondents from the same jurisdiction knew about different topics and had different perspectives based upon their positions. Some also referred us to a co-worker for a better answer, saying the topic was "outside of their wheelhouse."

Respondent Titles and Responsibilities

Participants had a variety of titles including public works and facilities directors; sustainability, energy, and environmental managers; managers of water and wastewater treatment plants; policy and management analysts; and city and town managers. In larger cities, their responsibilities tended to be more focused, while in smaller ones they often carried a wide range of responsibilities. As one town manager said he "wore many hats – police, fire, public works, city administration, permits, and broadband."

Level of Involvement with Energy Trust

Respondents in High and Medium/Low involvement groups were qualitatively different in two key respects.

- The High Involvement group tends to be in or near Oregon's larger cities (78% of respondents), compared to only 31% of those in the Medium/Low Involvement group.
- As In particular, the High group had more often taken actions directly related to the services Energy Trust provides or encourages, including:
 - Working with their local utilities on energy efficiency and renewable energy projects, serving on their advisory boards, and collaborating on carbon reduction.
 - Having staff participate in long-term strategic energy management (SEM) training.
 - Undertaking energy-related planning, such as energy a
 - Engaging in outreach and various types of communications activities with their citizenry.
- Figure 4 on the next page shows, High Involvement respondents had energy on their agenda more often than Medium/Low Involvement respondents. More had engaged in each of the fourteen energy-related activities we asked them about, often by a margin of twenty-five points or more. While the underlying number of respondents is small, the pattern is clear.

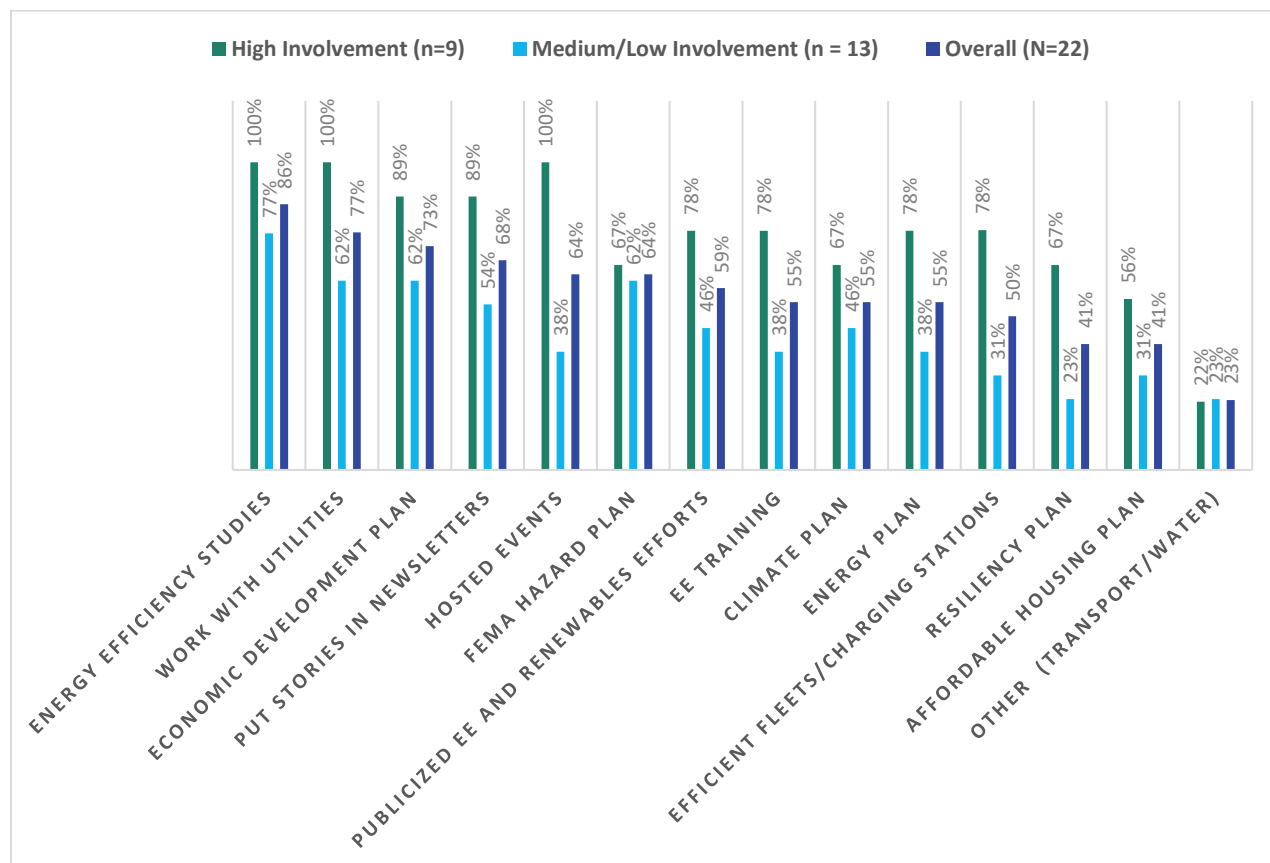
We asked these questions, in part, to qualitatively explore our hunch that the High involvement group had taken more energy-related actions than the Medium/Low group. These results suggest that while many factors likely influenced both patterns, it is also likely that Energy Trust's actions affected the areas served and the level of pro-active energy-related activities beyond specific incentivized projects.

In particular, the High group had more often taken actions directly related to the services Energy Trust

provides or encourages, including:

- Working with their local utilities on energy efficiency and renewable energy projects, serving on their advisory boards, and collaborating on carbon reduction.
- Having staff participate in long-term strategic energy management (SEM) training.
- Undertaking energy-related planning, such as energy a
- Engaging in outreach and various types of communications activities with their citizenry.

Figure 4 Energy Activities by Level of Involvement with Energy Trust



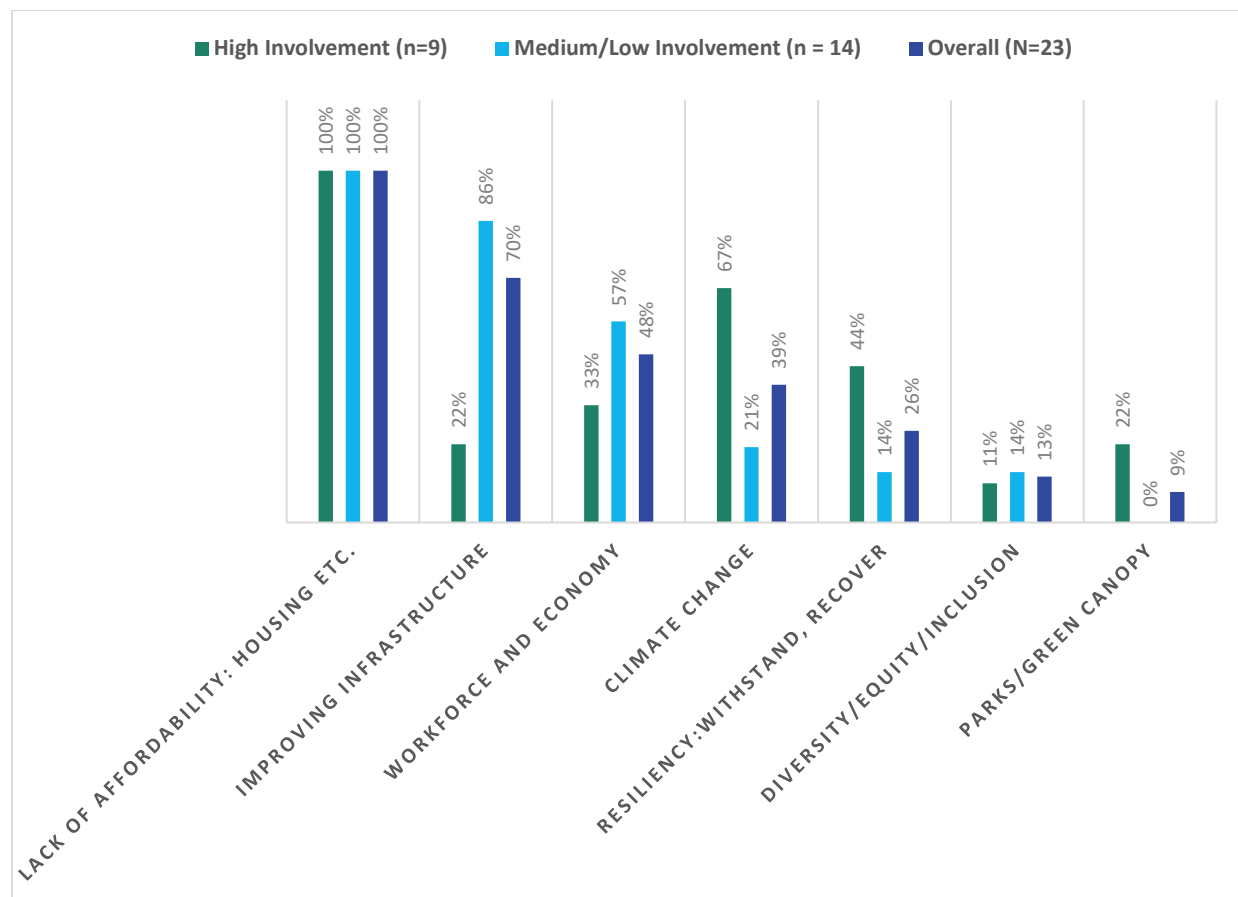
As subsequent sections of this report will show, differences persist between the groups in terms of the top issues for their communities and the types of services they are most interested in receiving from Energy Trust.

Top Issues for Oregon's Cities and Counties

Figure 5 shows the seven areas respondents identified as one of the top three issues their communities will focus on over the next three to five years. Notably, many respondents described complex issues, combined issues, and switched back and forth from a broad lens to a narrow one. We have tried to stay true to the flavor of their descriptions but bear in mind that the issues are not mutually exclusive.

One hundred percent of respondents said their communities were becoming less affordable, or viable, especially due to the high cost of housing; none of the remaining issues came close in universal concern.

Figure 5 Top Issues for Cities and Counties by Level of Involvement with Energy Trust



After affordability, differences emerged between High and Medium/Low Involvement groups. A greater proportion in the High Group named climate change and resiliency as top issues, while many more in the Medium/Low group mentioned the need to replace infrastructure, maintain or create jobs, and fund

public services and maintain buildings and facilities. Smaller and similar proportions in both groups singled out Diversity/Equity/Inclusion⁴ (DEI) and ensuring green spaces as top issues.

In the next sections we use respondent input to describe the top issues of concern and how energy solutions might help.

Lack of Affordable Communities

The Problem

Respondents say they face several intertwined affordability issues in their communities. Most were related to the cost of housing but they alluded to other rising costs, such as transportation, food, the lack of living wage jobs, and the high cost of doing business. However, they largely focused on housing costs and unavailability, since it takes up a large share of household budgets and has cascading effects in other areas.

Respondents mentioned these housing challenges:

- Inadequate existing affordable housing for “working wage” households.
- Lack of existing affordable housing for low-income households.
- Not enough new housing units to keep up with demand.
- Lack of affordable utility bills.
- Houselessness.⁵

Many of the respondents we talked with said their housing markets have tightened significantly in recent years, and they’ve seen a leap in the costs to build (including buying land and construction), buy, rent, operate, and maintain single and multi-family homes. Respondents in many areas say they are experiencing these barriers to affordable housing:

- Significant growth coupled with limited supply of housing.
- Limited land available for development due to zoning boundaries.
- Inability to secure affordable building materials, some of which are related to the COVID-19 Pandemic supply chain disruptions.
- Difficulties in attracting developers, builders, and tradespeople to their areas, especially if the areas are remote.
- Rising utility bills, making housing less affordable, especially for those with less income.

We did a quick Internet search on this issue and found many articles that cited a growing “housing crisis” in Oregon. An article in *Oregon Business* <https://www.oregonbusiness.com/article/opinion/item/19280-policy-brief-housing-crisis-at-a-tipping-point> (March 21, 2021) states Oregon’s housing shortage is the “worst in the nation as a percentage of existing stock, and the number of people experiencing homelessness was climbing daily.”

⁴ More respondents mentioned DEI are a part of other issues, such as housing and environmental equity.

⁵ Respondents often grouped houselessness with other housing issues, although housing for this population carries with it special challenges.

The guideline for both renters and buyers is that they should spend 30% or less of their gross income on housing costs. Oregon's median household income is around \$60,000, meaning that households should spend up to \$1,500 per month on rent, mortgage payments, and other expenses, such as utilities. Our quick glance at houses to buy or rent in several of the areas included in this research showed many households would likely need to spend much more, and that few choices existed within affordability guidelines.

This disparity between income and housing costs especially affects lower income households, leaving them with less money to spend on other essentials and making budgets tight. These more vulnerable households are just the ones that local governments want most to protect, such as those with disabilities, the elderly, and even college students.

One respondent said some people move further away from their jobs to find affordable housing but that, in turn, creates other problems, including the costs and time for travel.

It's a battle between affordable housing and jobs . . . people can't live here on normal paying jobs. It's insane. We have a joke that all the people who lived in Bend moved to Redmond and Redmondites have moved to Prineville, but they still have to have everyday jobs here. Not everyone can work remotely." – Central Oregon

Another described the crisis this way:

The market is absolutely crazy. There are not enough houses, people can't afford to get a house (personally, his own son) for less than \$350,000 - \$400,000. Development costs [are high], we maybe have one year of inventory [of lots]. . . all of the easy properties have been built out [so remaining lots] are more expensive to build on and more expensive houses go up." - Southern Oregon

Some respondents emphasized that rising housing costs in their communities is due to an influx of people who can spend more to buy or rent than local "working wage" and agricultural households. The housing situation becomes more dire for those with even lower incomes and impossible for some who may become houseless. Some respondents added that lack of affordable housing also threatens the traditional fabric and culture of their communities, so that, for instance, ranchers can't continue, in part because they can't find affordable housing for their workers.

"There is an ongoing diaspora from larger cities to rural communities where richer people are coming in and buying up big chunks of property [displacing] hard-working multi-generational ranchers." – Eastern Oregon

Other respondents said housing stock is limited and developers aren't building enough affordable new single and multifamily homes. The availability of affordable homes appears to be especially challenging in more rural areas where respondents say developers believe the costs and risks to build are high and their profits will not "pencil out."

“We have to get a developer to make the leap of faith in Pendleton . . . make a huge investment in building homes. . . that’s a hard sell.” – Eastern Oregon

“High cost of building; people charge more to come to them.” – Southern Oregon

Other respondents emphasized their concerns about how to make utilities more affordable for the more vulnerable populations in their communities:

“How to get people in older homes with low incomes supported and interested in energy efficiency when it’s not a high priority for them. There’s a lack of awareness - I don’t think folks keep up on Energy Trust incentives and what programs they have.” – Portland Metro

Respondents said local governments have few direct levers to control soaring housing costs and shortages, but are intent on finding ways to affordably and equitably house people in their communities.

Suggested Energy-Related Solutions

Respondents saw the potential for energy efficiency and renewable energy to help lower monthly utility costs and make homes more affordable, but some were unsure how much relief they could provide compared to the up-front high costs of buying and renting homes.

“Water and sewer bills can be mitigated. . . and energy bills. . . can be lowered, but it’s modest.” – Southern Oregon

“Yes, I can see how energy efficiency and renewables [would help.] Would love to have new housing have access to geothermal to heat. . . and use solar to energize.” – Southern Oregon

Still, many felt that everyone should live in efficient homes, and homes in some areas are very inefficient.

“A third of our homes were built just after World War II – a midnight special at the mill – and we are greatly in need of revitalized housing.” – Eastern Oregon

“Our last homes were built in 1990.” – Southern Oregon

Here are the energy related solutions to housing issues that respondents mentioned:

- **Ensuring high efficiency and solar powered homes (both new and retrofit, single family and multifamily) to lower occupant utility bills.**

Some pointed out that Energy Trust offers incentives to make homes more energy efficient or to use solar power, and others suggested supporting community solar projects. Some respondents hoped that Energy Trust could help attract developer and builders to their areas. The respondent from Eastern Oregon noted he has developed a successful new home incentive program to attract developers and has

attracted interest from other rural Oregon towns. He was open to the idea of energy incentives being added to the program.

Some respondents were concerned that building highly efficient and/or solar homes might increase up-front costs and make homes appear less affordable.

“We haven’t had a lot of success on the housing side. We tried to get the main contractor interested in ETO programs . . .but it didn’t pencil out to do more energy efficiency.” – Eastern Oregon

One respondent suggested sponsoring community-based solar approaches that could both power homes and provide energy to sell. Another hoped energy efficiency and renewable energy sector would bring better paying jobs, help their economy, and make housing more affordable.

Several respondents suggested Energy Trust could do more to emphasize the savings from living in a highly efficient or solar powered home, especially over the long term:

“Energy Trust needs to tell these stories: how do energy efficiency and solar . . .fit into affordable living.” – Central Oregon

“We don’t always think about the life cycle of a home; it’s important to have an energy efficient house and lower utility bills.” – Central Oregon

- **Lowering the cost to operate municipal facilities and utilities through efficiency and renewable energy to keep down utility costs.**

Some respondents who operated wastewater treatment plants mentioned how efficiency and renewable energy can lower utility costs and these savings can be passed onto customers and provide another avenue to make housing more affordable.

- **A change in policies, codes, regulations, and laws at the state and local level.**

A few respondents mentioned more “market transformation” actions, including stricter building codes for energy efficiency at the State level; State laws that allow individual jurisdictions to adopt “reach” codes require greater efficiency; and the adoption of Home Energy Score by jurisdictions. Some respondents said they did not know if Energy Trust were allowed to influence these types of activities.

One respondent said a greater focus should be put in multifamily affordable housing. She had heard that programs exist for landlords to receive tax credits and other benefits when they build and install efficient equipment in multifamily homes.

Replacing/Improving Infrastructure

The Problem

About 70% of respondents overall said their towns, cities, and counties are growing rapidly, want to grow, or have a more robust economy, but they face a variety of issues related to inadequate and out-of-date infrastructure, including those for water, wastewater, transportation, and connectivity. Those in the Medium/Low Involvement group were more likely than those in the High Involvement group to mention this issue (86% to 22%). Even if communities have adequate funding for these projects – and many do not – they find it challenging to plan and manage new infrastructure projects.

Some jurisdictions have substantial infrastructure plans but their towns – or the facilities -- may not be in Energy Trust territory. In addition, some respondents feel their infrastructure needs do not fit Energy Trust's services. The following quotes illustrate various challenges that cities, towns, and counties face in replacing and upgrading their infrastructure.

"We are managing an historic level of growth in the past three years. We are in full master planning mode. We have construction on two Amazon sites, and then a third site and fourth site. We will have 250,000 new square feet and \$4.4 billion of development. We are redoing the water system plan and being proactive to have inventory for future industrial development." – Eastern Oregon

"We are at capacity at the Wastewater Treatment Plant. [But] Our new facility is not in Energy Trust territory." – Central Oregon

"We lack broadband. . . if we can get broadband, people could work from anywhere." – Southern Oregon

"All our emissions are rising in transportation. . . the revenue source is freight and broken. We have a goal to quintuple the number of EV chargers by 2025." – Portland metro

"[Currently] we can't get our cogeneration engine running due to the power company needing to upgrade the substation." – Southern Oregon

Suggested Energy-Related Solutions

- **Some respondents were at a loss to say how energy-related solutions could help them with some of the infrastructure challenges they face.** For instance, they were unsure how Energy Trust services could help them with their broadband and transportation needs.

"Don't know. [regarding broadband and energy solutions]" – Eastern Oregon

"On the transportation side . . . we are continuing to grow carbon emissions. It's a big ship to turn in a new direction. . . Even the governor supports expanded freeways." – Portland Metro

- **Others saw several energy-related solutions related to infrastructure needs, through rehabbing, tweaking, and constructing buildings and facilities to be more efficient or to use renewable energy.**

Some respondents had partnered in the past with Energy Trust for key pieces of infrastructure equipment, including blowers, LED streetlights, sensors in buildings, solar panels on fire and police stations, and cogeneration at wastewater treatment plants.

Respondents also mentioned the Strategic Energy Management (SEM) program had helped facility staff look for efficiency and renewable opportunities in their buildings and facilities.

Finally, some respondents saw the energy savings or generation potential in new facilities.

Workforce, Economy, and Funding Issues

The Problem

About one-half of respondents overall (48%) talked about the ongoing challenges they have in balancing their funds with the services they can provide to their communities, with more in the Medium/Low group (57%) than in the High group (33%). Cities, towns, counties, and non-profits mentioned this balancing act and the effects limited funding can have upon keeping a skilled workforce, having a robust economy, and pursuing public projects.

Even when they get added funding, some were concerned about their ability to manage it well, given limited staff and funding requirements. As a respondent from a county in the Columbia Gorge described: *“It’s going to consume a lot of the Board’s time to spend \$5 million in stimulus funding for certain eligible projects.”*

Several respondents talked about the history of their economy being agriculturally based in timber or ranching, but with changes in those industries, they need to rebrand themselves. The following quotes describe the intersections between workforce, economic, and funding issues.

“This ain’t your grandpa’s ag town – we have state of the art water and wastewater, the most solarized array – think there is value to attract a workforce, especially young techies.”—Eastern Oregon

“Finding a balance between the resources County has and the level of service they can provide. We have an historical lack of funding, [challenges in} staffing and retaining staff.” - Columbia Gorge

“Twenty-five years ago, the lumber mills closed, bringing fear, chaos, and anxiety. Thirty percent of the county lost their jobs overnight. We came together to maintain employment, but it’s not the highest paying. We say our most valuable export is our children.” – Eastern Oregon

“We are creek intensive communities – a lot of bridges; our utilities need constant reinvestment; our parks are tired. We have property tax limits. . .and general obligation bonding which goes to voters.” – Willamette Valley

“We want to diversity our economy, develop [our town] as a recreation and tourism hub.” – Eastern Oregon

“It is hard for people to stay here. We used to be the timber capital of the world, but don’t have a lot of other industries. We need more employers that have family wage jobs.” - Southern Oregon

Suggested Energy-Related Solutions

Like infrastructure improvements, several respondents didn’t see how energy-related solutions would help them address workforce, economy, and funding challenges.

“Not off the top of my head what could be offered in terms of efficiency.” – Southern Oregon

“It’s political and needs a legislative fix (property tax limits).” – Willamette Valley

Other respondents saw the potential to mitigate utility costs through efficiency and take them off the grid with renewable energy. These actions, they hoped, would help make budgets go further, reduce costs for residents, and improve the appeal of their areas for economic development.

“If every sewer and water facility did generation, that would that affect rates.” –Southern Oregon

*“Efficient energy use goes hand in hand with water treatment... to reduce [costs] and carbon emissions.”
– Southern Oregon*

“If Energy Trust could help with solar panels for pedestrian safety lights. . .that would be great. Would have to have solar be reliable 24/7.” – Willamette Valley

Climate Change

The Problem

Those in the High Involvement group mentioned this issue more often than those in the Medium/Low group (67% to 21%). Respondents who chose climate change as a top issue described it as being multifaceted, unsettling, and challenging.

“Climate issues include transport, buildings, energy. . .the goal is to have good answers. . .a bunch of services. . .a way to comply. (Portland).”

They said a key challenge is to secure the unflagging attention and commitment of government, communities, and individuals to take action to reduce emissions:

“Through the lens of a small community. . .we have limited resources. The big thing is to decarbonize industry, transition away from natural gas.”

“There are different levels of understanding and commitment... [climate action requires] community involvement and individual commitment.” – Portland Metro

“I don’t know how concerned the City Council is compared to other concerns of livability, safety, economic recovery, and policing.” – Portland

“Bend has a good climate action plan. . . getting them to follow through will be challenging.” – Central Oregon

Some respondents focused on the horrific climate-related events in their own communities, including heat waves, wildfires, ice storms, and decreasing water levels.

“Climate change is showing up in a real way – radically reducing flow out of reservoir – stopping the water for key ag production – all about climate and the drought, wildfires, heat waves – all very real.” – Central Oregon

“Climate Change has brought catastrophic wildfires and ice storms, drought, low water levels in rivers. What can we do to reduce emissions and reach carbon neutral by 2050 – but also what can we do today?” – Portland Metro

Respondents also connected climate change to the need to be more resilient and adaptable, and to the need to protect the most vulnerable populations in their communities.

More broadly, we need to talk about equity and racial justice, education, food systems and security – all really important. And not what we work on every day.” Portland Metro

Suggested Energy-Related Solutions

Respondents see direct connections between reducing carbon emission and the energy-related solutions that Energy Trust has long offered, including a renewed and expanded focus on energy efficiency and renewable energy in the built environment. They also pointed to the need to pay attention to reducing natural gas use and improving the electric vehicle infrastructure.

Some were not sure of the role Energy Trust is playing and will play regarding climate change and some expressed concern that actions to reduce carbon need to go more quickly and need more aggressive action:

“The energy efficiency system is too weak . . . the transition away from natural gas too slow, and the uptake of rooftop solar and storage systems needs to be improved.” Portland Metro.

“Rome’s burning here. How can the Energy Trust really play a role, be more responsive? Can they offer a revolving loan fund?” – Central Oregon

One respondent suggested Energy Trust become more involved with energy conscious landscaping, such as help getting the “right trees for shading – to work with the changing climate and replace dying beech trees with climate friendly ones like black oak.”

Resiliency – Withstand, Recover, Adapt

The Problem

A small portion of respondents overall (26%) mentioned resiliency – the ability of a community to withstand, recover, and adapt after disruptions -- as a top issue. But resiliency issues were often embedded with other issues, particularly climate change and economic well-being. More in the High group (44%) than in the Medium/Low group (14%) individually termed it a top issue. In general, many respondents mentioned a bumpy road ahead for their communities, especially given the past few years with the Pandemic and rising climate change issues.

One respondent described economic resilience or “business resiliency” in this way:

“Business resiliency is being able to sustain disruptions whether from a forest fire or a medical disaster like COVID. Some businesses were able to pivot and keep going. A local company pivoted quickly and set up their outdoor/takeout delivery – a young couple changed their menu, found a new hot sauce maker, got caps to their plastic bottles.” Eastern Oregon

More generally, some local governments – even small ones in more remote areas – are focused upon developing ways to survive disruptions from natural, medical, and other disasters, keep their economies afloat, and keep serving the basic needs of their communities, from food security to having independent power sources to ensuring wastewater treatment continues to becoming tourist destinations.

They are taking some surprising steps. For instance, one city is rebranding itself as a gateway to an area of natural beauty, has a hydroponic solar greenhouse that raises and sells food (including melons!) to the grocery and hospital, and a state-of-the art wastewater treatment plant, where the processed effluent is used to fertilize commercially grown trees nearby. Another example is one community’s idea to expand upon geothermal resources to heat homes and businesses and to develop a one-million-acre night sky sanctuary and geothermal spa for rejuvenation and healing. And another city is building its reputation as the “most happening ag town in the country with arts and music.”

Suggested Energy-Related Solutions

Respondents see direct connections between resiliency, sustainability, and efficiency and renewable energy solutions. The respondent from city which endured wildfires in 2020, described how Energy Trust helped them rebuild homes above code and how the community is paying more attention to solar options and climate change.

“People (here) are climate focused – they want to rebuild to be more sustainable.”

A few respondents mentioned that Energy Trust could help create solar plus storage resources at the neighborhood level to power emergency centers for cooling during high temperature days and to provide staff and communications nodes in the aftermath of natural disasters, such as earthquakes.

“Is anyone providing technical support and an incentive package for solar + storage resiliency hubs?” – Portland.

Diversity/Equity/Inclusion (DEI)

The Problem

A small proportion of respondents named DEI specifically as a top issue, but quite a few referenced the need to pay attention to less represented, more vulnerable portions of their citizenry in the context of other issues such as houselessness and, in one case, energy inequity. One respondent talked about how, in the energy efficiency industry, middle to higher income households have been better served with programs and incentives, while lower-income households that are strapped for cash and live in households that need the most energy upgrades, are often underserved.

In general, the respondents who talked about DEI said it is a huge and newly rising issue, difficult to even find good help on how to proceed.

“Equity/inclusion. . .housing is a big piece. How do we really make that meaningful. . .similar to homelessness, no one knows, still trying to figure out how to do it.” – Central Oregon

Suggested Energy-Related Solutions

One respondent suggested that more efficient housing makes it more affordable for vulnerable populations and that better jobs may become available if the energy efficiency and renewable resources industry expands. A second respondent asks how programs can provide equitable incentives and motivations for low-income households to pursue energy efficiency and solar

Parks and Green Canopy

Problem

Only two respondents in the High Involvement group mentioned the need for parks and preserving tree canopies as a top issue. In one case, the growth in the community had taken down many trees and they had not been replaced, making the city realize they had not done a good job of enforcement around tree removal. In the second case, the respondent said park space was limited and enhancements were needed, but resources weren’t available to expand parks.

Suggested Energy-Related Solutions

One respondent suggested Energy Trust could consider supporting an increased tree canopy to shade homes and reduce load during peak demand periods. The second respondent suggests that parks would be a good place to generate solar power and to use solar to power park needs.

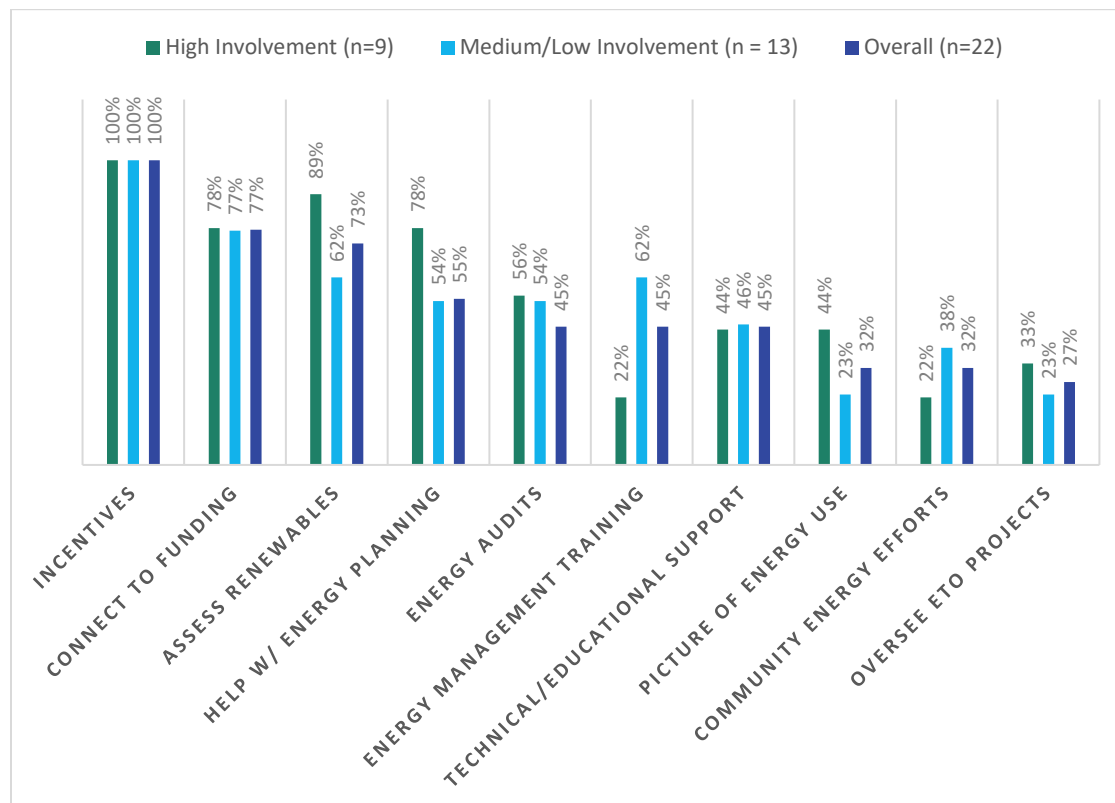
Chapter 3: What Energy Trust Services Interest Cities and Counties the Most?

Introduction

Energy Trust staff developed short descriptions of ten current and potential services and asked respondents to say how interested they were in each service. The goal was to do a “quick take” on which services interested city and county respondents the most and why.

Figure 6 shows the proportion of respondents, overall, and by group, and the proportion of respondents who said they were very interested in, or highly enthusiastic about, the service. Some ratings for services varied by group. We have found that singling out high interest is the best method to “predict” respondents’ likelihood of to give an offering consideration. High interest responses, however, do not guarantee people will follow through and act upon their interest.

Figure 6 Percent of Respondents “Very Interested” in Ten Energy Trust Services by Level of Involvement



Groupings of Very Interested Ratings

The ratings, while qualitative and based on a small number of respondents, fell into three rather neat categories:

- High Level: 55% or more of respondents were highly interested in the service (n = 4)
- Mid-Level: 45% of respondents were highly interested (n = 3)
- Low Level: 27% to 32% of respondents were highly interested (n = 3)

High Level

The four services that rose to the top of the very interested responses included:

1. Incentives for investing in energy efficiency and renewable energy (100% of all respondents).

Given all the input from respondents about the need cities and counties have for funding, it is not surprising that incentives have universal appeal. Those who had taken advantage of Energy Trust's incentives in the past highly valued the incentives and said Energy Trust have been "great partners"

Respondents pointed out incentives made the difference in getting a project accomplished. They said it was a "huge priority" to obtain them because was the "best way to get a project to "pencil out." Respondents emphasized that the incentives reduce two key barriers to completing projects: paybacks are too long and upfront costs are too high.

2. Connection to other funding sources for energy-related projects. (77%)

Respondents often had questions about how this resource would work, and we typically described it as a clearinghouse. As indicated, over three-quarters thought that help with identifying further sources for financial help with energy projects would benefit them, especially if it would save them time and help them evaluate potential opportunities. Many had had good experiences with Energy Trust staff as "very easy to work with." Some emphasized that they were "leery of chasing grant opportunities," that "money is never free" and that "federal money is the most expensive."

"We had a stretch of road that would cost \$1 million. [An elected official] found us the million. . .but federalized it cost \$2 million."

One respondent expanded on this idea saying they wanted "soup to nuts . . .not just on funding but planning and preplanning. . . rural people are not dumb, but they haven't been exposed to the scale of thinking in urban areas."

3. Assessment of renewable energy opportunities. (73%)

Respondent enthusiasm for exploring renewable energy opportunities was palpable for many. Some said their elected officials "wanted to look at solar." Others asked if they could be put in touch with someone at Energy Trust about a particular project (*"we are interested in putting hydro in our pumps"*) or that they needed the expertise of someone at Energy Trust to help them think through a project.

“This is very beneficial. Every city should have that information. Many are looking at sustainability and energy. . .but don’t have the human capital.” – Southern Oregon

4. Help from Energy Trust’s experts with energy aspects of various plans, such as energy, climate, and resiliency plans. (55%)

While the proportion of high interest ratings were lower overall, 78% of those in the High Involvement group were very interested in making use of Energy Trust’s expert staff to advise them on the energy portions of key planning documents. The higher proportion of interest in the High Involvement group may be due to this group, in general, having progressed further with these types of planning efforts.

“This would be great. . .it would ensure we would look at the energy piece. We tend to focus on structure but need resiliency with power. Engineers like structure.” – Portland Metro

Mid-Level

5. Energy audits (45%)

Those who were very interested had a variety of reasons, including that they:

- Were “always interested in doing deeper dives in buildings.”
- Thought it was the “first step to see what’s going on and what to do about it.”
- Would “like it coupled with training.”
- Would be “absolutely interested in free engineering” from Energy Trust.
- Had gotten “a lot of value out of that [before] and found a whole lot of things that could be improved, operations and maintenance staff really enjoyed it and learned a lot.”

6. Energy management training (45%)

Several respondents were already participating in the Strategic Energy Management (SEM) program, and everyone said they had gained a lot from participating in it. Some said that after a number of years, they wondered when the SEM training would no longer be needed. Others said they wished they had more capacity to work on SEM but still greatly appreciated it. For some respondents, staff responsibilities are too high, or they have too few staff, to take part in SEM training.

7. Technical and educational outreach support (45%)

Respondents were interested but some had questions about what this would entail. Several said they valued Energy Trust’s technical and communications expertise and could imagine this working in several ways. Some said outreach and community involvement was “outside their wheelhouse” and Energy Trust would need consult others in their organization.

Low-Level

8. Picture of energy use in their buildings and facilities (32%)

Quite a few respondents asked for more detail about what this service would provide and we did not have more details to give them. While some were clearly interested, others were already tracking their use or confused this service with an energy audit. Several who were interested said it would be very important to be able to easily interpret the data, or to get help or training from Energy Trust in making sense of it.

9. Support community efforts to develop energy plans (32%)

Those in the Medium/Low Involvement group were more interested than those in the High Group. Some were already in the process of preparing an energy plan and thought Energy Trust financial support or expertise would be helpful. Others were already done with their plan and didn't think they needed more help. One very interested respondent said they would like to use Energy Trust as a "third party validator" of their plan.

10. Help oversee Energy Trust Funded Projects (27%)

A few respondents said they would unilaterally welcome an extra eye on Energy Trust funded projects; this was usually the case when they had very few or no staff to take on an oversight role. Most said they had enough adequately trained staff to do the job, would hire professionals to do the work, or that they would be open to such help depending on the project.

Chapter 4: What Advice do Cities and Counties have for Energy Trust?

Toward the end of the interview (and often short on time), we asked respondents to tell us about any others energy-related organizations that they work with and to advise Energy Trust on the best way to approach and talk with their organizations about the services and benefits of working with Energy Trust.

Other Energy Related Organizations

Most cities and counties did have other partners they worked with on energy projects. Some worked with non-profits and grass-roots local organizations on a regular basis and hired them to manage projects and deliver services. We interviewed three of those organizations and found them very insightful and helpful. And connected! In one case, the director of a non-profit connected us on the spot, via email, with three or four contacts to interview, several of which resulted in interviews.

Advice to Energy Trust

This section combines both conclusions and recommendations since it is based upon advice respondents gave to Energy Trust in how to best approach and serve them.

1. Keep doing what you're doing: Don't hold your light under a bushel basket.

Those who know Energy Trust highly regard their staff and services. Several respondents went out of their way to compliment Energy Trust, saying that the staff they work with have got a "lot of good expertise, and even if they don't know something, they will help them figure it out...they are very approachable." Another said "we hold Energy Trust in high esteem around here. They communicate that they want to roll up their sleeves or provide training and we can jump to that because we have a long relationship." A third said "they are already doing a good job and my relationship with Energy Trust is phenomenal."

2. Use Benefits Messaging: Show me the money and then everything else.

The strongest benefits are financial: incentives, lowering upfront costs (and payback for businesses); saving money over time; lowering utility bills; making homes and businesses more affordable, freeing up money for other uses, creating jobs, and spurring the economy.

Non-financial benefits are also persuasive, including helping communities preserve quality of life, keeping people in their homes, and improving comfort, resiliency, and independence.

Most respondents said that using the term "climate change" is usually acceptable but tread carefully in more rural or conservative areas.

3. Focus on Relationship Building: Find out more about the community and audience.

Before approaching local government contacts, learn more about how their organization is structured what their community values, and what they've been doing lately that might relate to energy efficiency and renewable energy. Use Energy Trust's local representatives and the city and county websites to help with this.

Use that intelligence to help build connections during initial and ongoing conversations. Listen to the stories that your contacts tell and connect them to what Energy Trust can offer. For instance, several respondents told "origin stories" about their towns, such as that they are rooted in timber and ranching, or that they "are not your grandpa's ag town."

4. Use Multiple Points of Entry: Start at manager and director levels, develop relationships with more than one contact, and ask about presentations to upper management and elected officials.

The director and manager level respondents interviewed for this research appear to be a good place to foster relationships: they are the ones most likely to have a stake in energy efficiency and renewable energy projects. If possible, develop multiple points of contact to become more embedded in organizational memory.

Many of these respondents also suggested Energy Trust work through them to determine if informational sessions for upper management and elected officials would be useful. Several noted that these groups would benefit from knowing more about Energy Trust, especially since they often needed to approve projects. They advised including a peer-level person from Energy Trust in these presentations to convey the importance of the relationship to Energy Trust.

5. Communicate: Stay in regular touch (but not too often)

Several respondents suggested meeting with them regularly (1-4 times a year) to ensure clients know the services available from Energy Trust and that Energy Trust knows about upcoming opportunities to provide services. These interviews, for instance, turned up several potential projects and requests.

Several respondents said they wished they had a more shorthand way to connect with the services Energy Trust offers. Consider whether a display-worthy directory with key links could be developed to help these clients find the resources they need.

6. Use Influencers: Let others work on your behalf.

Respondents indicated that they rely upon and are in touch with their peers for support and guidance: In particular, several public works directors, wastewater treatment facility operators, and town managers said they talk regularly with one another. Cities and counties also rely upon state, regional, and local non-profits (for instance, Solar Oregon and The Environmental Center); schools and

universities (for instance, the Oregon Institute of Technology); and local chapters of national organizations (for instance, the Oregon Association of Clean Water Agencies [ORACWA]), to provide information and do projects.

Energy Trust should take advantage of these peer networks and support professional associations to get energy more regularly on the agenda.

Chapter 5: Conclusions and Recommendations

This chapter offers conclusions and recommendations based on the findings presented throughout the report and mirrors those presented in the executive summary.

Differences Between the Groups

Respondents in High and Medium/Low Involvement groups were qualitatively different in two key respects:

- High Involvement respondents tended to be in or near Oregon's larger cities, while the Medium/Low Involvement respondents tended to be in more remote areas.
- High Involvement respondents had energy on their minds more often than those in the Medium/Low Involvement group. When asked about fourteen energy-related activities, more respondents in the High Involvement group had engaged in each of them, often by a margin of twenty-five points or more, as shown in Figure 1.

Energy Trust actions likely influenced both differences. The first difference coincides with respondent perceptions in this and other research that Energy Trust is city-centric and needs to further its reach, something the organization is already working on.

The second difference suggests high involvement with Energy Trust is related to local governments taking desired energy-related steps beyond specific projects. Notably more High Involvement respondents reported they do the following:

- Work with their utilities on energy efficiency and renewable energy issues, including collaborating on projects and programs, serving on advisory boards, and discussing carbon reduction.
- Educate citizens and staff on energy-related topics, including hosting events, publicizing accomplishments, and training workers.
- Develop plans for a clean energy future, including energy and resiliency plans.

Top Issues for Cities and Counties

Four areas emerged as the top issues cities and counties will focus on in the next three to five years (*See Figure 2 Top Issues*):

- **Lack of affordable communities, especially related to housing costs**, is the top area of focus. Every respondent participating in this study included it as one of their top three issues.
- **The need to improve infrastructure** is a second area of focus and is more salient for Medium/Low Involvement respondents who tended to be from smaller, more remote communities with fewer resources.
- **Building the workforce and economy** is a third area of focus, which again looms larger for Medium/Low Involvement respondents.
- **Climate change and resiliency** is a fourth area of focus and will likely to be more salient in communities that already have High Involvement with Energy Trust.

More detail about these issues, barriers to solving them, and the potential for energy-related solutions, can be found in Chapter 2.

Recommendation

Energy Trust should frame its program and service offerings for cities and counties around these issues:

- **How to achieve more affordable housing**, using energy efficiency and renewable energy sources. Services should address new and existing, owned and rented, single and multifamily homes.
- **How to improve infrastructure**, using energy efficiency and renewable energy sources, including those for water and wastewater treatment plants, public buildings, and, if possible, transportation.
- **How to be more resilient to climate change**, including increased temperatures and other weather events, and wildfires.

We do not suggest framing program and service offerings with workforce and economy themes because Energy Trust has limited ability to support direct activities in these areas. However, the workforce and economic benefits of working with Energy Trust on these issues should be woven in wherever possible.

Top Products and Services

Four products and services, out of ten discussed, received the highest level of interest from respondents. *See Figure 3 Level of “High Interest” in Ten Product and Services*

1. Incentives for investing in energy efficiency and renewable energy (100%).

Respondents said incentives had made the difference in getting a project accomplished. They said it was a “*huge priority*” to obtain them because it was the “*best way to get a project to “pencil out.”*” Respondents emphasized that the incentives reduce two key barriers to completing projects: paybacks that are too long and upfront costs that are too high.

2. Connection to other sources of funding for energy-related projects. (77%)

Over three-quarters of respondents thought that help with identifying further funding sources for energy projects would benefit them. Some envisioned it as a “one-stop shop” or clearinghouse that would help them evaluate options and determine “if the money is worth going for” given its reporting and other requirements. Many cited good past experiences with Energy Trust, with one saying staff are “very easy to work with and the paperwork is not difficult (*Willamette Valley*).” One respondent from a rural town suggested Energy Trust should help them develop projects, “*not just funding advice.*”

3. Assessment of renewable energy opportunities. (73%)

Respondent enthusiasm for exploring renewable energy opportunities was palpable. Some said their elected officials “wanted to look at solar.” Others asked if they could speak with someone at Energy Trust about a particular project or with specific expertise to help them think through a project.

“This is very beneficial. Every city should have that information. Many are looking at sustainability and energy. . .but don’t have the human capital.” – Southern Oregon

4. Expert help for energy-related plans, such as energy, climate, and resiliency plans. (55%)

While the high interest ratings for this service were lower overall, 78% of those in the High Involvement group were very interested in using Energy Trust’s expert staff to advise them on the energy portions of key planning documents. This group’s higher interest reflects their positive past experiences receiving expert help from Energy Trust staff – experience that those in the Medium/Low Involvement group did not have.

“This would be great. . .it would ensure we would look at the energy piece. We tend to focus on structure but need resiliency with power. Engineers like structure.” – Portland Metro

Recommendation

Based on these findings, Energy Trust has some analytic and developmental work to do, including:

1. Analyzing how current products and services can best be used to help address the top three issues for cities and counties (housing, infrastructure, climate change).
2. Identifying and fleshing out new products and services that should be developed to help cities and counties address these issues. The development of new offerings should keep respondent product and service preferences in mind (incentives, funding clearinghouse, renewable energy opportunities, expert help). It should also include research on city and county-based programs that might offer opportunities for collaboration.
3. Identifying which staff can serve as experts on each of the three key issues.
4. Developing a targeted menu of products and services for each key issue.
5. Communicating with cities and counties about the new “issue-based menus,” including how to easily access them. An early step in communicating with these audiences would be to send out a summary of this research to all respondents, since all were interested in seeing the results.
6. Assessing the results of this new approach.

Advice to Energy Trust

This section summarizes the advice respondents gave to Energy Trust in how to best approach and serve them. More detail on their advice can be found in Chapter 4.

1. Keep doing what you’re doing: Don’t hold your light under a bushel basket.
2. Use Benefits Messaging: Show me the money and then everything else.
3. Focus on Relationship Building: Find out more about the community and audience.
4. Use Multiple Points of Entry: Start at manager and director levels, develop relationships with more than one contact, and ask about presentations to upper management and elected officials.
5. Communicate: Stay in regular touch (but not too often)

6. Use Influencers: Let others work on your behalf.

Appendix A: Interview Guide

Energy Trust of Oregon

Final Municipal Energy Planning Research Interview Guide

7-14-2021 [Interviewer: Fill in background information about respondent below]

Name *Organization*

Date *Telephone* *Email*

Table 2 Correspondence Table of Research Topics, Questions, and Interview Items

Project Goal: To discover how well the high priority needs of the targeted organizations align with the resources available from Energy Trust

Research Topics	Research Question (these are high-level questions, not exact questions that will be asked)	Interview Items
6. What are the most important issues that local governments face?	Who is speaking? What are the community's highest priority issues? Why?	1 2
7. What are the key barriers to solving their high priority issues?	What are the biggest challenges municipalities face in addressing their high priority issues? Are these challenges present? (team assumptions): <i>Lack of time/resources; inability to convene the right entities; lack of policy; departmental siloes; rising energy costs</i>	3 4
8. How do local governments think about energy improvements (including energy efficiency and renewable energy) as a strategy to help them address high priority issues?	Do municipalities view energy improvements as part of the solution to some of their high priority issues? How? What connections can respondents make between energy improvements and high priority issues? What energy improvements have they previously taken? Are they planning any further efforts?	6 7 8
9. How can Energy Trust services help local governments?	How interested are municipalities in services and/or programs from Energy Trust? Why or why not?	9 10 11 12 13 14
10. How can Energy Trust best work with communities to pursue energy improvements?	What advice do municipalities have for Energy Trust to work with them effectively? Would they like someone to contact them about services?	15 16 17 18

Introduction

Hi. Thank you for taking the time to talk with me today. As I mentioned, I'm an independent consultant working with Energy Trust of Oregon. We are interviewing representatives of about 20 municipalities across Oregon to learn more about community priorities and challenges for the next few years and how Energy Trust might help better serve your community.

I have a series of questions to ask you. If you have any questions of me as we go along, please ask. If you don't know the answers to any question, just let me know, and we will move on. Also feel free to refer me to others in your organization who may have more to add about any topic we discuss.

Our talk will take 45-60 minutes; your name will not be used in any reporting. To thank you, we are offering all participants a summary of our findings about the priorities and challenges Oregon communities are facing, and the services Energy Trust can offer. Would you be interested in receiving a summary?

I'll be taking notes as we talk, but I'd like to record this conversation to ensure my notes are accurate. Is that okay with you?

Do you have any questions for me before we get started?

Part 1: Community Priorities and Energy Improvements

1. First, please briefly tell me your title and your job responsibilities.
2. Like most communities I'm sure yours has struggled, and still struggles with, the fall-out from the Covid-19 pandemic. Today I'd like you look ahead and tell me about the **top three issues** or concerns your (town/city/county/area) will likely **focus on the most** in the next three to five years. (*Note: Steer them away from short-term Pandemic-specific issues. **Probe:** Can you prioritize those issues for me – first, second, and third? Why are these issues so important to the future of your community? Probe for specifics. Listen or prompt for Diversity, Equity and Inclusion concerns*)

3. What are the biggest roadblocks to making progress on [first issue]? (*Probe as needed: Lack of time/resources; inability to convene the right entities; lack of policy; departmental siloes; rising energy costs*).
 - a. To what extent could energy improvements – such as making businesses, homes, and municipal buildings and facilities more energy efficient, or developing renewable energy resources like solar power – be part of solving [first issue]?
 4. What are the biggest roadblocks to making progress on [second issue]? (*Probe as needed: Lack of time/resources; inability to convene the right entities; lack of policy; departmental siloes; rising energy costs*).
 - a. To what extent could energy improvements – such as making businesses, homes, and municipal buildings and facilities more energy efficient, or developing renewable energy resources like solar power – be part of solving [second issue]?
 5. What are the biggest roadblocks to making progress on [third issue]? (*Probe as needed: Lack of time/resources; inability to convene the right entities; lack of policy; departmental siloes; rising energy costs*).
 - a. To what extent could energy improvements – such as making businesses, homes, and municipal buildings and facilities more energy efficient, or developing renewable energy resources like solar power – be part of solving [third issue]?
 6. Has your organization been involved with any of these energy-related activities in the past five years for your own buildings and facilities – including water and wastewater treatment plants? (*Probe for specifics – why, who, outcomes?*)
 - a. Conducted studies of to see if your buildings and facilities could reduce energy use or install renewable energy?
 - b. Publicized any efforts your organization has made to reduce energy use or install renewable energy?
 - c. Hosted events in your community about sustainability, energy efficiency, or renewable energy?
 - d. Worked with any utilities in your community to promote or help customers learn more energy efficiency or renewable energy options?
 - e. Included any stories in your newsletters or other community communications about energy efficiency or renewable energy?
 7. Has your organization in the past five years participated in or supported any of these other activities related to managing energy use in your community? (*Probe for specifics – what, why, who, outcomes?*)
 - a. Had the staff at your building or facilities attend training to help them better manage energy use and costs?
 - b. Upgraded your buildings or facilities to be more energy efficient or to run on renewable energy?
-

- c. Improved the fuel efficiency of your fleets or converted fleets to cleaner fuels?
 - d. Upgraded the energy efficiency codes for buildings and facilities?
 - e. Created a plan to address climate change?
 - f. Developed an energy plan?
 - g. Created a FEMA Hazard Mitigation Plan?
 - h. Developed a plan to address resiliency?
 - i. Created an economic development plan?
 - j. Created a plan to address affordable housing in your community?
 - k. Undertaken any other type of planning effort that includes components related to energy use? _____
8. What energy-related efforts, if any, does your organization plan to undertake within the next three to five years?

Part 2: Energy Trust Services and Resources

Energy Trust of Oregon wants to understand the types of energy-related support that would best meet your community's needs. I'd like to run some ideas by you about support and services Energy Trust offers now or *may offer* in the future. These *potential* services are in four areas: Planning; Training and Education; Assessment services; and Financial.

9. First, planning. How interested are you in having Energy Trust . . . (*Probes: Why do you give that rating? Would you like someone to follow up with you about this service?*)
- a. Provide you with a picture of the energy use across your own buildings and facilities, (Very, somewhat, not too, not at all)
 - b. Support community-wide efforts to create an energy vision, goals, and plan, including help to engage and coordinate stakeholders and creating the plan? (Very, somewhat, not too, not at all)
 - c. Help you with the energy aspects of other planning efforts, such as plans to address resiliency, climate change, economic development, or affordable housing? (Very, somewhat, not too, not at all)
10. Second, training and education. How interested are you in...? (*Probes: Why do you give that rating? Would you like someone to follow up with you about this service?*)
- a. Technical experts and educational materials to help with outreach to schools, homes, and businesses about energy-saving or renewable energy opportunities? (Very, somewhat, not too, not at all)

- b. Training for your building facilities staff to better track and manage energy use, and to recognize and prioritize energy efficiency/renewable energy projects? (Very, somewhat, not too, not at all)
- 11. Third, assessment services. How interested are you in... (*Probes: Why do you give that rating? Would you like someone to follow up with you about this service?*)
 - a. Energy audits that show you where the best opportunities are to reduce energy use in your buildings and facilities, including water and wastewater treatment plants? (Very, somewhat, not too, not at all)
 - b. Assessments of renewable energy opportunities, such as solar plus storage, biopower at water resource recovery facilities, or hydropower production at a drinking water treatment plant. (Very, somewhat, not too, not at all)
- 12. Fourth, financial support. How interested are you in these types of services?
 - a. Helping you obtain Energy Trust incentives to offset some costs of energy efficiency and renewable energy improvements? (Very, somewhat, not too, not at all)
 - b. Helping you oversee projects that receive Energy Trust incentives? (Very, somewhat, not too, not at all)
 - c. Helping your organization connect to other funding sources for energy improvements? (Very, somewhat, not too, not at all)
- 13. Based on your ratings, it looks like your highest rated services were (X, Y, Z) – is that accurate? Why are these services highest on your list?
- 14. Are there any other types of support or services you would like to receive from Energy Trust that we haven't talked about?

Part 3. Partnering with Outside Organizations

- 15. In what ways has your organization coordinated with your [electric] [gas] utility on issues related to energy planning and use?
- 16. Are there any other organizations that you work with on energy planning and use?

17. What advice do you have for Energy Trust in approaching your organization with potential services like the ones we've just discussed? Who should be contacted? What types of benefits or words would get their positive attention? (*Probe: Are there words they should avoid?*)
18. Would you be interested in having someone from Energy Trust contact you **(or others in your organization)** about the services and resources they can offer, especially those where you have the greatest interest?

Thank you so much!