



Distribution System Planning Survey Results

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Objectives & Methodology

The **overall objective** of this research was to prioritize the benefits associated with cleaner energy, understand the concerns, and obtain high-level stakeholder feedback.

- Identify challenges facing the community and individuals
- Prioritize the benefits associated with clean energy
- Understand concerns associated with moving to clean energy
- Measure awareness of communications from Pacific Power and understand recall of specific messages
- Identify communication channels
- Evaluate the clarity and efficacy of communications from Pacific Power
- Measure satisfaction with Pacific Power's outreach and engagement about plans for cleaner energy
- Understand stakeholders' perceptions about DSP, their informational needs, and best practices for engagement
- Identify non-traditional stakeholder groups that should be part of the process, and understand how they can provide insight into energy equity goals

Target Audience

- Pacific Power residential and business customers in Oregon
- Pacific Power frontline customers
- Stakeholders

Methodology

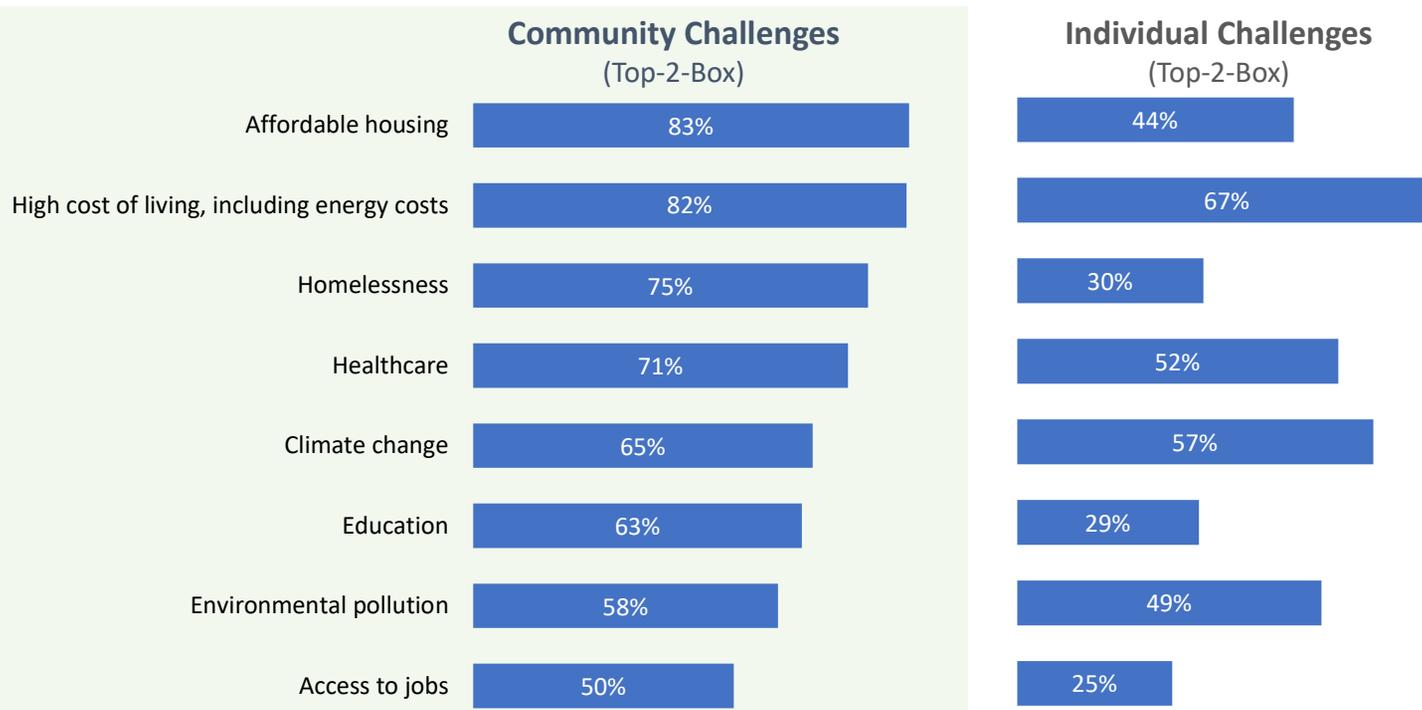
- This study was conducted using a mix of online and phone surveys and remote in-depth interviews
- Surveys available to customers in English and Spanish
- A total of 4,627 surveys, including 30 from frontline customers, were completed between February 1 and February 28, 2021
 - Phone: 130 completed surveys
 - Web: 4,497 completed surveys
 - IDI: 24 interviews completed

DSP Benefits and Concerns



Individual & Community Challenges

- When asked about challenges faced by their respective communities, respondents most commonly mention affordable housing, high cost of living, and homelessness.
- While the percentage rating each challenge as significant on a personal level than community level, the top personal challenges are high cost of living, climate change, and healthcare.



Q1 How would you rate the following challenges your community faces today? (n=4627)
Q2 How would you rate the following challenges you face today? (n=4627)
Q3 What other challenges do you or your community face today? (n=1692)

Community Challenges by Region

- Affordable housing and high cost of living are consistent concerns across regions, but perceptions of other challenges currently facing the community vary across the state.
 - Those in Portland are more likely to cite homelessness, affordable housing, climate change, environmental pollution, healthcare, and education.
 - Customers in Northeast Oregon and Willamette Valley South are more likely to mention access to jobs.

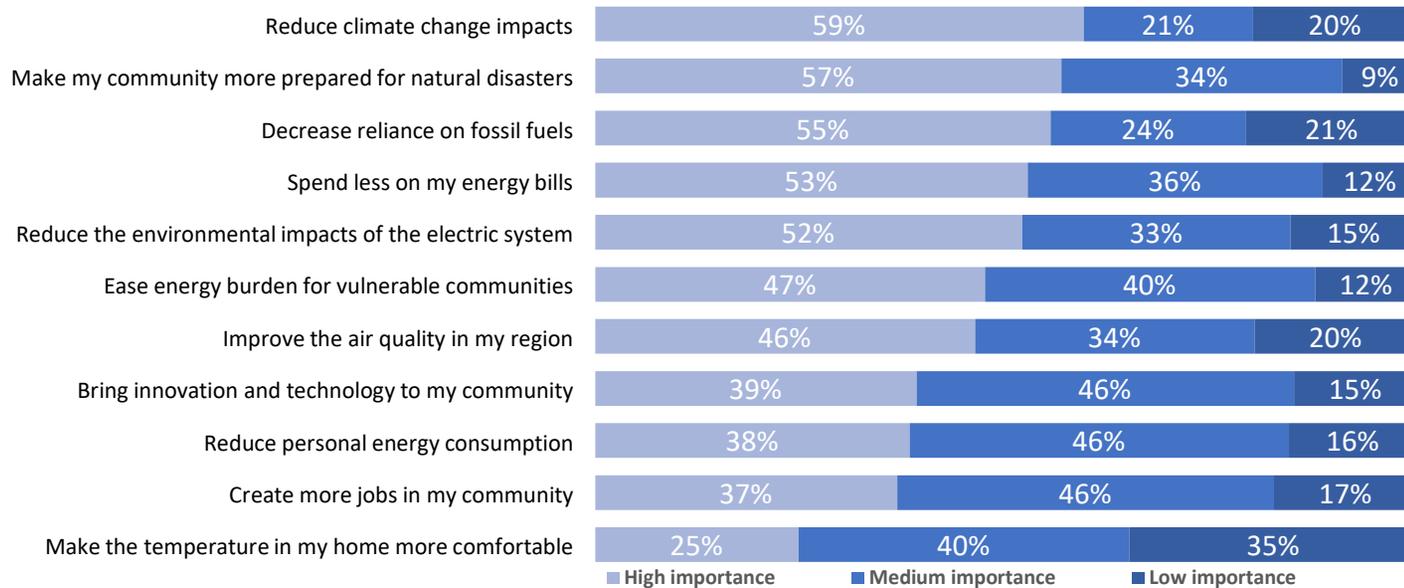
% Mentioning as Significant Community Challenge	Total (n=4,627)	Central Oregon (n=672)	Hood River (n=59)	North Coast (n=164)	Northeast Oregon (n=146)	Portland (n=783)	Southern Oregon (n=1,227)	Willamette Valley N. (n=1,066)	Willamette Valley S. (n=480)
Affordable housing	83%	86%	92%	80%	82%	90%	79%	82%	76%
High cost of living, including energy costs	82%	84%	85%	77%	84%	84%	83%	81%	79%
Homelessness	75%	77%	59%	82%	46%	93%	73%	69%	72%
Healthcare	71%	67%	73%	70%	62%	77%	70%	72%	74%
Climate change	65%	69%	83%	65%	44%	86%	58%	62%	52%
Education	63%	57%	46%	54%	62%	67%	65%	62%	63%
Environmental pollution	58%	53%	56%	57%	42%	78%	55%	56%	49%
Access to jobs	50%	44%	42%	52%	59%	46%	51%	49%	58%

■ Higher than average across all regions
■ Lower than average across all regions

Importance of Potential Clean Energy Benefits

- The most important benefits of transitioning to cleaner energy are reducing the impact of climate change, preparation for natural disasters, decreased reliance on fossil fuels, spending less on energy bills, and reducing the environmental impact of the electric system. Making the temperature inside the home more comfortable is least important.
- Female respondents and renters are more likely than males and homeowners to find all potential benefits highly important.

Importance of Potential Clean Energy Benefits



Importance of Benefits by Region

- The perceived importance of various benefits for transitioning to cleaner energy varies by region. Those in Portland are more likely to consider climate change and environmental impacts highly important, while those in other regions are more likely to find personal and economic benefits highly important.

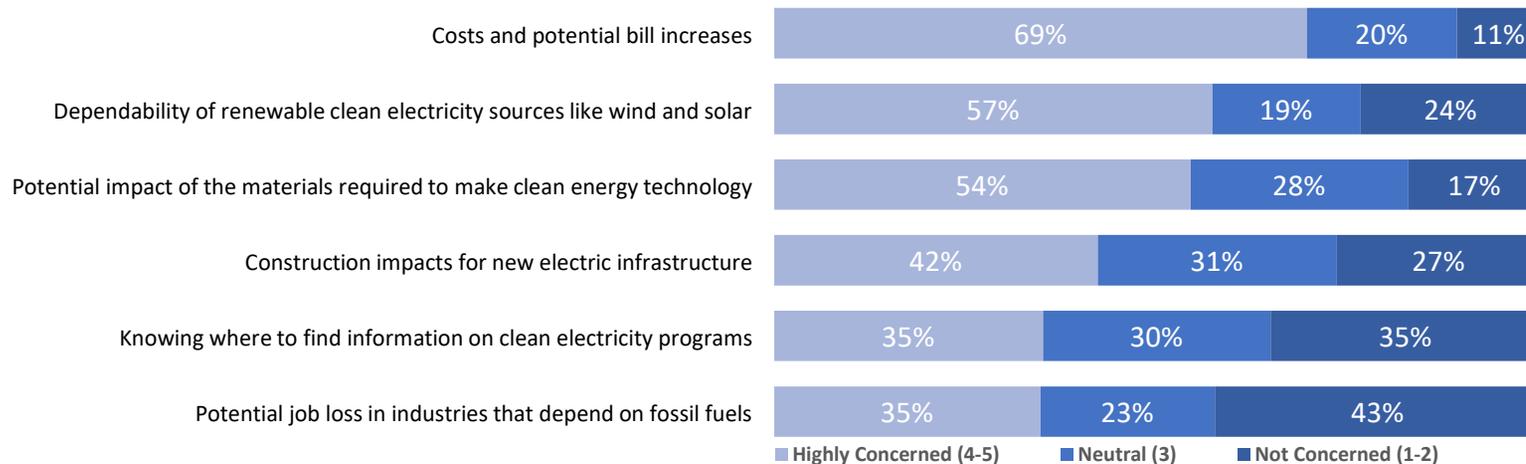
% Considering Highly Important	Total (n=4,627)	Central Oregon (n=672)	Hood River (n=59)	North Coast (n=164)	Northeast Oregon (n=146)	Portland (n=783)	Southern Oregon (n=1,227)	Willamette Valley N. (n=1,066)	Willamette Valley S. (n=480)
Reduce climate change impacts	59%	64%	75%	58%	42%	80%	52%	59%	45%
Make my community more prepared for natural disasters	57%	50%	68%	62%	44%	60%	59%	57%	53%
Decrease reliance on fossil fuels	55%	60%	71%	55%	36%	79%	45%	56%	41%
Spend less on my energy bills	53%	51%	32%	45%	61%	38%	59%	53%	63%
Reduce the environmental impacts of the electric system	52%	55%	66%	43%	36%	69%	46%	52%	41%
Ease energy burden for vulnerable communities	47%	45%	42%	48%	45%	56%	44%	46%	47%
Improve the air quality in my region	46%	44%	44%	24%	31%	63%	52%	41%	31%
Bring innovation and technology to my community	39%	40%	31%	41%	38%	36%	40%	37%	44%
Reduce personal energy consumption	38%	40%	39%	32%	34%	40%	39%	38%	35%
Create more jobs in my community	37%	29%	32%	35%	53%	31%	39%	34%	51%
Make the temperature in my home more comfortable	25%	21%	15%	20%	32%	19%	28%	26%	28%

■ Higher than average across all regions
■ Lower than average across all regions

Potential Challenges with Transition to Cleaner Energy

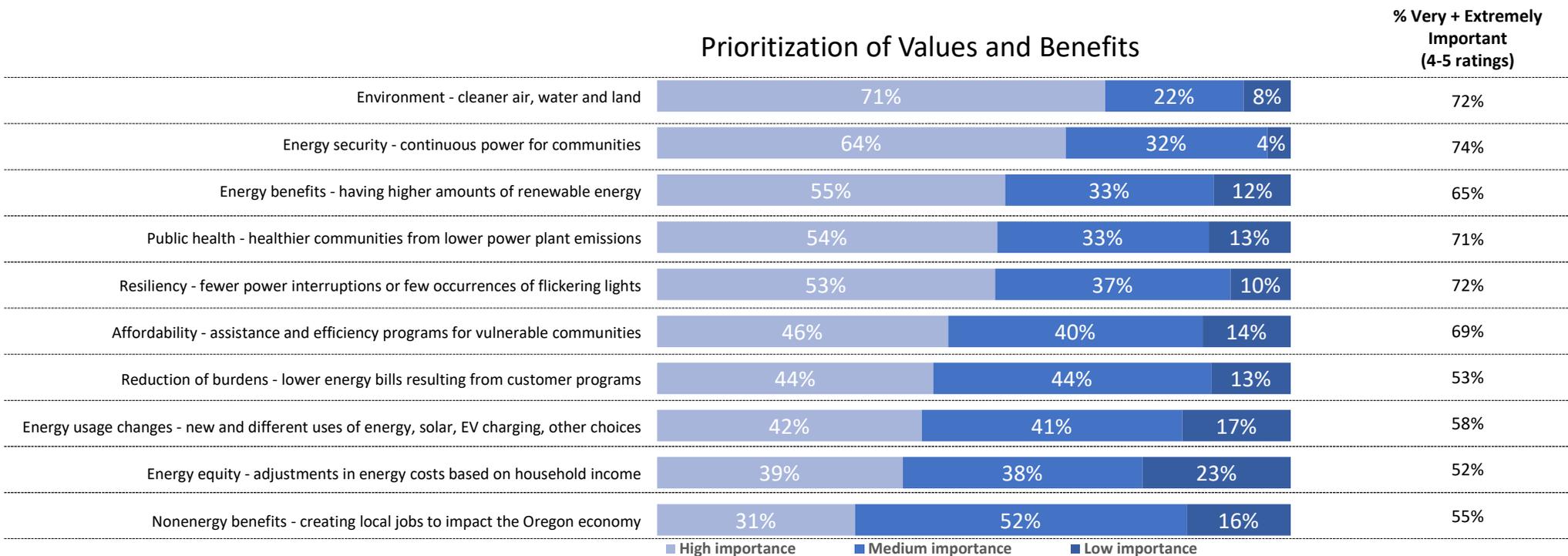
- The costs and potential bill increases are the biggest concerns customers have about the transition to cleaner energy, with two thirds highly concerned.
- More than half are concerned with the dependability of renewable clean energy sources and the potential impact of materials required to make clean energy technology.
- The following groups of customers have higher levels of concern with the potential challenges evaluated:
 - Those with medical needs
 - Those with English not as their primary language
 - Female customers
 - Customers age 45+
 - Education level lower than Bachelor’s Degree
 - Non-white customers
 - Customers outside of Portland and Hood River

Level of Concern with Potential Challenges



Importance of Values and Benefits of Cleaner Energy Future

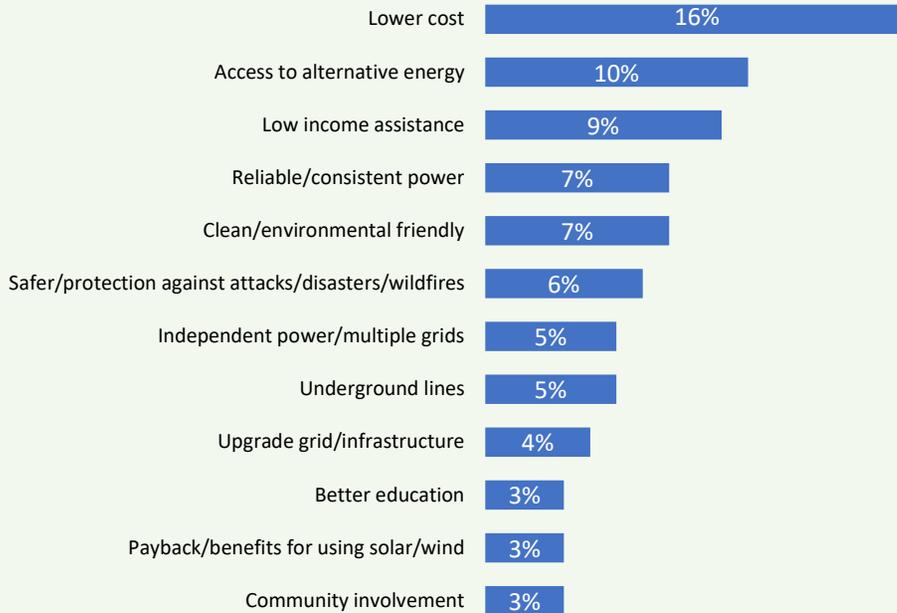
- While all are considered important, the top priority values and benefits revolve around the environment (cleaner air, water and land) and energy security (ensuring continuous power to communities).
- Female, younger respondents, renters, and those with lower incomes tend to place higher importance on most of the tested values and benefits.



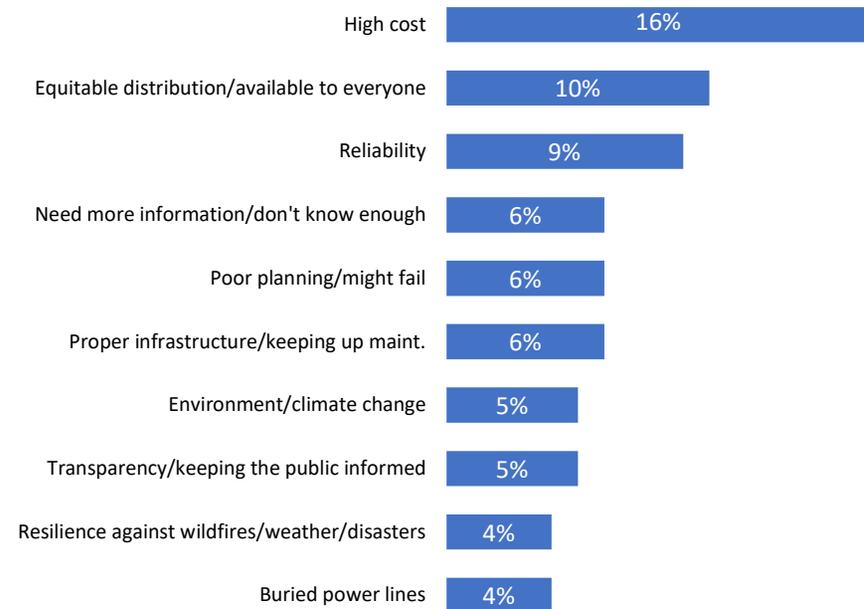
DSP Unaided Benefits and Concerns

- The most desired benefit from distribution system planning is a reduction of cost, which also aligns with respondents' most common concern – high costs.

Most Desired Benefits



Most Common Concerns



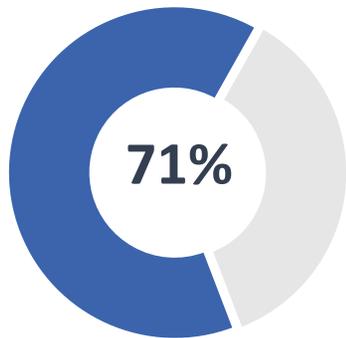
Pacific Power Communications



Communication Awareness

- Seven in ten Pacific Power customers indicated that they have seen or heard a communication from their utility within the past year.
- Of those recalling communications, nearly all report seeing messages in English and 7% reported seeing information in Spanish. Fewer than 1% mentioned seeing communications in any other language.
- Email is the most common communication channel, mentioned by two thirds of customers. The median number of emails received is 4.6.

Recall Communications



Communication Channels

(among those who recall communication)

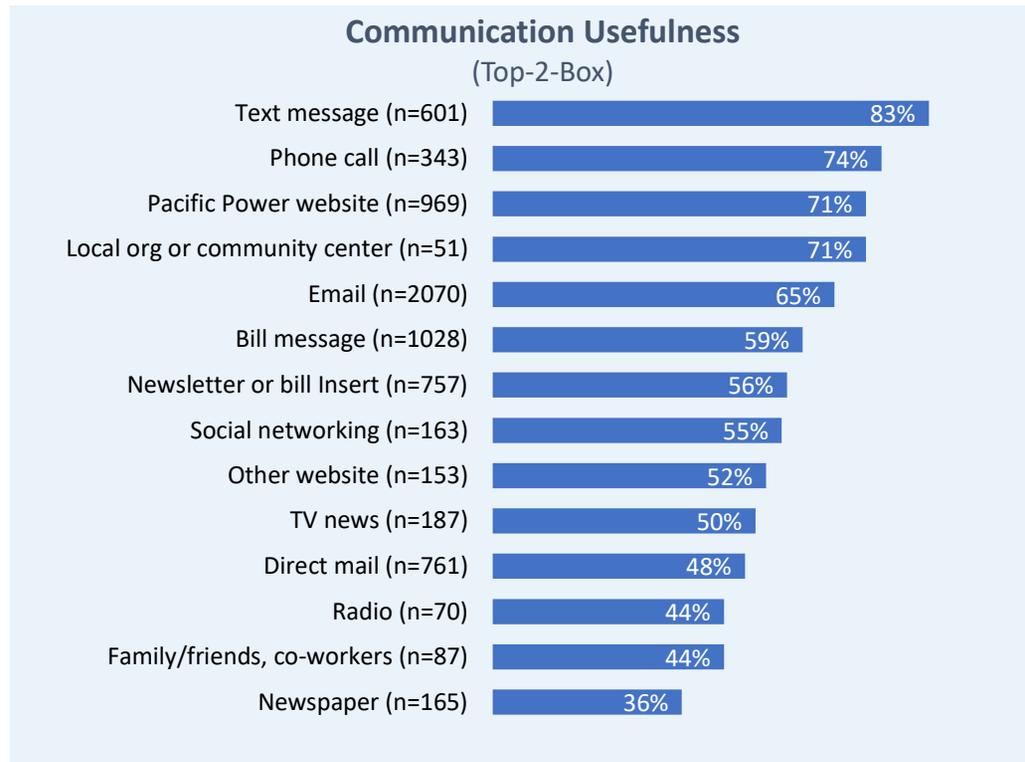
Median # Exposures

(among those who recall communication)

Communication Channel	Percentage	Median # Exposures
Email	66%	4.6
Bill message	33%	2.9
Website (Pacific Power)	31%	4.0
Newsletter or bill insert	24%	4.1
Direct mail	24%	3.0
Text message	19%	3.6
Phone call	11%	2.4
TV news	6%	3.8
Newspaper	5%	3.0
Social networking	5%	3.9
Website (other than Pacific Power)	5%	2.1
Family, friends, co-workers	3%	3.3
Radio	2%	4.5
Local org or community center	2%	2.8

Communication Usefulness

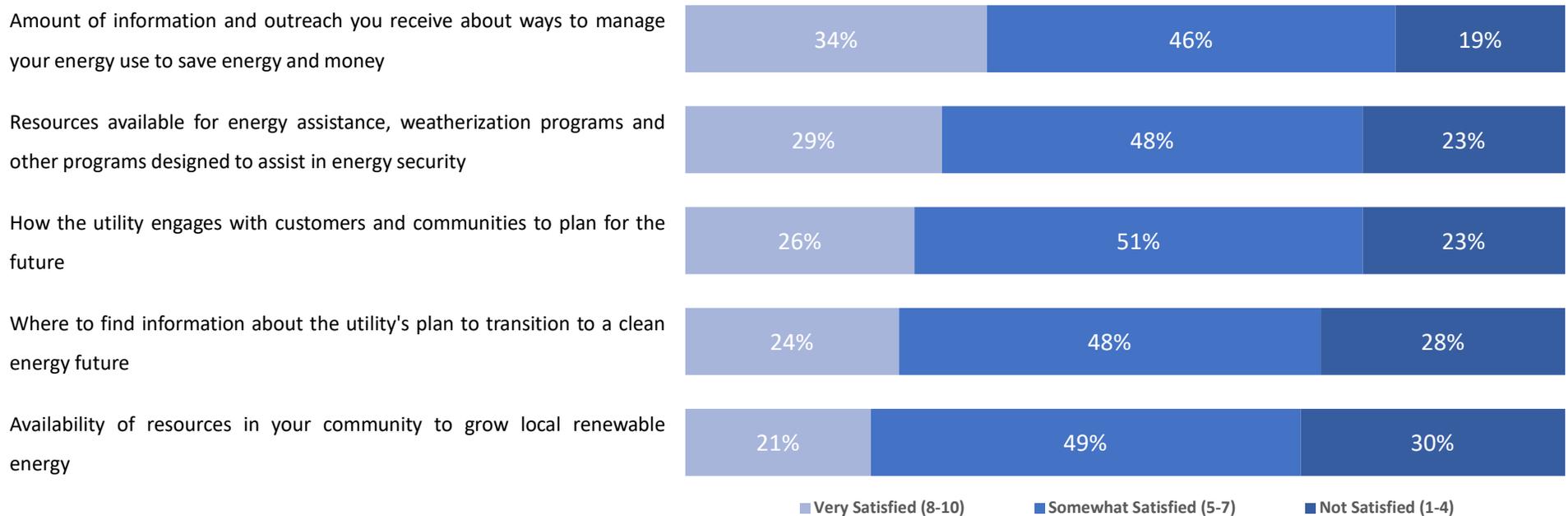
- Text messages are considered most useful, followed by phone calls, the Pacific Power website, and local organizations or community centers.
- Less than half find information via direct mail, radio, friends/family, co-workers, and the newspaper to be useful.



Satisfaction with Outreach and Engagement

- Customers are moderately satisfied with the types of outreach and engagement evaluated, with nearly half being “somewhat satisfied” (5-7 ratings).

Satisfaction with Outreach and Engagement





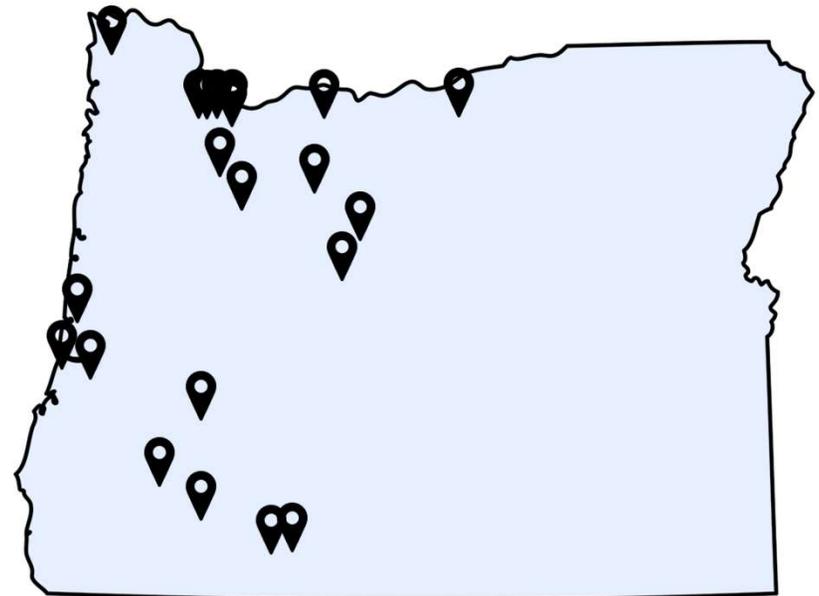
Stakeholder Interviews

Stakeholder Interviews

24 in-depth interviews were conducted with a variety of stakeholders across the Pacific Power territory.

- 8 Energy Consultants
- 6 Municipalities/Government Entities
- 4 Community-Based Organizations
- 4 Economic Development Organizations
- 2 Tribal Agencies

45 to 60-minute interviews conducted using Microsoft Teams



Challenges Facing Community



Energy

- Infrastructure for small towns/rural communities
- Transitioning to clean energy (logistics, benefits, costs)
- Reliability of power grid
- Resilience of power grid in response to natural disasters
- High or increasing energy costs



Social Justice

- Lack of affordable housing
- Homelessness
- Wealth inequality
- Environmental justice
- Inequality of energy resources
- COVID and impact



Economic

- Workforce availability
- Employment opportunities; workforce training
- Limited land or resources to support development
- Adequate electricity capacity to support development
- Development efforts to create/bring jobs



Environmental

- Climate change
- Wildfire risk and mitigation
- Drought and water resources
- Clean air and water

Items not listed in order of importance

Awareness of Plans for Cleaner and more Equitable Grid

Highly Aware

- Energy consultants, advocacy organizations or those involved in energy planning for municipalities
- Aware of legislation, with some specifically citing HB2021
- Tend to be involved in discussions and have a vested interest in having their voices heard
- Looking for increased transparency and technical details and resource planning

Generally Aware

- Municipalities, CBOs, economic development organizations
- Broadly know about plans to phase out carbon emissions over specific timeline
- Generally support the concept, but may have questions/concerns
- Want more information about the process at a simple level

Not Aware

- Municipalities, CBOs, economic development organizations
- Aware of general trend to reduce carbon emissions but not aware of any details
- Don't know enough to have opinions, but onboard with reducing carbon emissions and reliance on fossil fuels
- Want very basic information about the objectives and how it will affect the community

Items not listed in order of importance

Benefits of Cleaner and more Equitable Grid



Climate Benefits

- Reduce carbon emissions
- Mitigate risk of wildfires and/or drought
- Doing our part to mitigate climate change



Resiliency Benefits

- Potential to make the grid more resilient in the event of a natural disaster
- Keep the grid functional in the event of an outage outside the immediate area
- Shore up energy delivery to places with limited resources



Economic Benefits

- Competitive advantage to attract businesses due to offering 100% clean energy
- Re-imagined grid could provide development opportunities
- Construction/engineering jobs created during buildout of new grid
- Long-term jobs created to manage and maintain systems
- Despite initial investment, expectation that energy costs could be reduced over time

Items not listed in order of importance

Meaning of “Equitable” Energy Grid



Access to Energy for All

- All communities have access to the electricity they need
- Building out the infrastructure to coastal, tribal, and rural communities
- Electrical grid planning should ensure remote areas have access to electricity



Affordability

- Ensuring that energy costs are not a burden for those with the least ability to pay
- Ensuring that low-income households can benefit from advances in efficiency
- Evaluating tiered rates in order to spread the cost of infrastructure more equitably
- IOUs and shareholders should bear the cost for infrastructure



Supporting Frontline Communities

- Investing in historically disadvantaged communities
- Energy infrastructure has the potential to boost economic development and employment
- Investment has the potential to bring long-term cost savings

Items not listed in order of importance

Concerns About Transition

- The cost of transitioning to a cleaner and more equitable energy grid is the biggest concern. Other concerns are around transparency, incorporating community feedback, and the technical aspects of how to achieve cleaner energy while keeping it affordable for ratepayers.
 - Those involved in economic development, public planning, and ratepayer advocacy are more likely to mention the cost.
 - Stakeholders want to be sure IOUs are fully transparent with the planning process, the costs that will be passed on to ratepayers, and ensuring electricity remains affordable.

Costs

- Initial investment required
- Impact on ratepayers
- Ensuring that the investment makes sense from a cost/benefit perspective, and not overbuilding
- Potential negative impact on businesses and economic development

Job Creation

- Jobs may be temporary and consist of out-of-state workers
- Access to housing if new jobs are created
- Limited number of long-term jobs
- Investment in workforce training required

Transparency and Community Input

- Perceived lack of transparency from IOUs
- Not truly listening to community voices
- Opportunity to shore up energy delivery to places with limited resources

Technical Details

- Need more details on how it will be done, including transparency of planning process
- Need details on how 100% carbon-free energy will be achieved
- Need details on how the grid will be integrated and resilient

Items not listed in order of importance

Non-Traditional Groups to Engage

- In order for DSP to be equitable and incorporate a broad range of feedback, stakeholders recommend talking to a wide range of organizations.
 - There is not consensus about what each group will bring to the table.
 - It is important to define the objectives beyond just “hearing their voices” and ensure that groups represented understand the value they bring.
 - In addition to groups representing communities, it is important to hear from non-traditional groups who can support the efforts, including those providing technology and those producing a wide range of renewable energy on a smaller than utility scale.

Groups to Represent

- Low-income
- BIPOC
- Native American nations
- Small businesses
- Small/rural communities
- Elderly
- Homeless
- Environmental groups
- Economic development groups
- Agriculture businesses

Potential Partners to Engage

- Groups promoting energy efficiency/DSM
- Energy technology providers
- Small scale renewable energy producers

Items not listed in order of importance

How to Engage Stakeholders



Communicate Value Prop

- Explain DSP in simple and clear language
- Help organizations understand why their feedback is important and what they can offer
- Show organizations the value their participation brings
- Personal outreach demonstrates more value than mass communications



Make Participation Easy

- Go to them
- Continue to offer virtual meetings; make sure they are novice-friendly and welcoming
- One-on-one meetings would be more welcoming to people/ organizations not comfortable participating in a broad meeting



Listen to a Broad Audience

- Actively solicit feedback from a range of community-based groups
- Actively listen and internalize
- English is primary, but consider offering conversations in Spanish or other languages



Offer Compensation

- Participation may be a significant time or financial burden
- Consider providing a stipend as a “thank you”
- Consider gas cards to pay for travel expenses

Items not listed in order of importance

Conclusions



Key Findings

DSP Benefits and Concerns

- Top challenges facing the community are affordable housing and high cost of living. Primary challenges faced by individuals are high cost of living, climate change, and healthcare.
 - Those in Portland are more likely to be concerned about homelessness, affordable housing, climate change, pollution, healthcare, and education.
 - Those in Northeast Oregon and Willamette Valley South are more likely to mention access to jobs.
- The most important benefits to a cleaner energy future are reducing the impact of climate change, preparation for natural disasters, decreased reliance on fossil fuels, spending less on energy bills, and reducing the environmental impact of the electric system.
 - Those in Portland are more likely to consider the impacts of climate change and environmental issues as highly important.
 - Those in other regions are more likely to find personal and economic benefits more important.
- The costs and potential bill increases are the primary concern with the transition to cleaner energy, with dependability of renewable sources and the potential impact of materials required for clean energy technology also concerning to more than half. Customers outside Portland and Hood River are more likely to express concerns about the transition to cleaner energy.
- When looking at the specific values and benefits of cleaner energy, the environment and energy security are top priorities. When asking for the most desired benefits and concerns open-ended, lower cost was the most desired benefit and high cost was the most common concern.

Communications

- Seven in ten recall receiving communications from Pacific Power in the past year, with two thirds mentioning an email.
 - Bill messages and the Pacific Power website are the next most common sources, each mentioned by one third of customers.
 - Nearly all recall seeing messages in English, with 7% also seeing Spanish. All other languages combined are mentioned by less than 1% of customers.
- The most commonly recalled messages are related to paperless billing, outage notifications or alerts, and Blue Sky enrollment.
- Messages through all channels from Pacific Power are generally considered clear, although messages in Spanish are less clear than in English (apart from messages through local organizations or community centers).
- Text messages, phone calls, the Pacific Power website, and local organizations or community centers are most useful; less than half find messages useful from direct mail, radio, friends/family/co-workers, or newspapers.
- Satisfaction with outreach and engagement from Pacific Power is moderate regarding issues related to conserving energy, saving money, planning for the future, and renewable energy, with nearly half being “somewhat satisfied” with all attributes evaluated.



Recommendations

- Educate customers about the plans to move toward a cleaner and more equitable energy grid. Explain the rationale, planning process, and steps to be taken in clear and concise language.
- Focus education about DSP on the key desired benefits of the move toward a cleaner and more equitable energy grid: reducing the impact of climate change, preparation for natural disasters, decreased reliance on fossil fuels, spending less on energy bills, and reducing the environmental impact of the electric system.
- It will be necessary to address the primary concern about DSP: the cost of the transition and the potential impact on electric bills. This aligns with one of the primary concerns both personally and for the community: high cost of living. While customers across the state, and particularly those in Portland, broadly recognize the environmental/climate change and resiliency benefits, it will be necessary to alleviate concerns about how it will impact their monthly budget.
- The focus on transitioning to an “equitable” energy grid will require explanation. Even among stakeholders, this concept is not universally understood in the same manner, and it raises questions about what it means, how it could be done, and how much it will cost.
- Utilize a mix of communication strategies. While email is the most common by far, it is important to reach customers through a variety of means to provide access to all. Consider the Pacific Power website, direct mailings, and bill inserts (possibly directing customers to the website). While not widely utilized, local organizations and communities are perceived to provide very clear and useful information, and they could be a strong ally in achieving the equity portion of the DSP goal.
 - Based on conversations with stakeholders, focusing communications on the impact of climate change, rather than climate change itself, is more likely to resonate with all customers across the state.
 - Regardless of views, all communities are impacted by the risk of wildfires and/or drought, and efforts to mitigate those tangible concerns are more likely to be embraced.