



COMMUNITY ENGAGEMENT SNAPSHOT
DISTRIBUTED ENERGY RESOURCES (DER)
BATTERIES, SOLAR AND DEMAND RESPONSE

OVERVIEW

PSE strives to empower historically disenfranchised customers in the clean energy transition by providing the opportunity to co-design the next iteration of our customer programs. We are building procedural equity into our work and creating space for collaboration between customers and utilities to create inclusive, accessible clean energy programs and resources. From September 2022 through May 2023, PSE conducted community engagement on future **distributed energy resource (DER)** programs, including **batteries**, **solar installations**, and **demand response (DR)** programs.

PSE engaged over 300 residents and 61 agencies, municipalities, organizations, and tribal entities that serve the aforementioned residents. We listened in focus groups, workshops, and surveys to better understand the benefits and barriers customers may face when it comes to DER products to ensure future program design can alleviate these barriers and maximize the desired benefits.

HERE'S WHAT WE LEARNED

Participants identified the following common themes of feedback:

It's expensive

Cost is a barrier for all DER programs, and for both residential and commercial customers. Upfront costs to purchase and install equipment—along with the ongoing cost of maintenance—were consistently highlighted as problematic. There was a clear ask for financial incentives to substantially offset or entirely remove the financial barriers. We also heard that any incentives need to be applied instantly so there is not a lengthy rebate process.

Support installation and maintenance

The installation and maintenance associated with new programs like solar and batteries can feel daunting. To overcome this, PSE needs to be prepared with tailored, comprehensive, and hands-on installation and maintenance support.

Flexibility is key

Each customer's needs and interests differ, so our programs must be flexible enough to address the nuances or challenges each customer may face. For example, we heard that your geographic location and whether you rent or own your property may factor into how accessible these programs are for you.

Provide ownership options

Some customers prefer renting a product, like solar panels, while others prefer owning it themselves. Customers who prefer to rent products that PSE owns referenced being unable to afford equipment, installation, and maintenance costs. Those who prefer to own the product themselves valued the autonomy and control of ownership. To remain flexible, PSE should provide both options to meet diverse customer preferences.

Strong motivation to participate

Generally there is strong interest in participating in future DER programs. We understand that customers value energy independence, community or personal energy resilience, and reducing their energy bills.

Education is critical

DER products are new to many, so there is education and outreach to do. Without further education, uncertainty can translate into skepticism about whether DERs can deliver the promised benefits. Customers want to understand the basics about cost, environmental impacts, and community benefits to help them make informed decisions about program participation. We understand the importance of partnering with local community-based organizations to further educate customers.

FINDINGS BY CUSTOMER SEGMENT

The table below highlights specific findings for each category of customers we spoke with.

	Commercial customers	Residential customers	All customers
Batteries	<ul style="list-style-type: none"> Value reliability during outages as a more important benefit than reduced utility bills. They view themselves as future resiliency hubs for their communities Voiced cybersecurity concerns 	<ul style="list-style-type: none"> Will struggle to commit to 10-15 year project terms Question whether they can install a battery without needing other home upgrades Want to be able to opt out when PSE needs the battery's energy to support the grid 	<ul style="list-style-type: none"> Want significant energy reserves in case of an unexpected outage Want to be educated on battery safety Want to understand the environmental impacts of a battery's lifecycle Are slightly more interested in hosting a PSE-owned battery than owning their own
Solar	<ul style="list-style-type: none"> Want an economical way to install arrays larger than 100 kW 	<ul style="list-style-type: none"> Will struggle to commit to 10-15 year project terms If cost was no issue, would prefer to own the solar panels on their roof Are very interested in community solar model but would expect \$20-\$50 monthly bill credits for their participation Would prefer to enroll in local community solar projects, even if that means they receive a lower on-bill credit 	<ul style="list-style-type: none"> Want to combine solar and batteries Are not as interested in ground mounted solar as they are in rooftop solar
Demand Response	<ul style="list-style-type: none"> Provide critical community services to their community and may need energy flowing at all times or at irregular times Are skeptical that DR will save them money 	<ul style="list-style-type: none"> Have more predictable energy consumption trends Want PSE to gamify DR and show them how they are progressing towards goals Are most interested in smart water heaters and smart thermostats Want to own smart devices instead of rent them 	<ul style="list-style-type: none"> Want to start with small adjustments and shorter periods of time when their thermostats or other equipment are adjusted May find remote energy management (REM) intrusive Want to be able to opt out of adjustments to their thermostats or other equipment
All DER products	<ul style="list-style-type: none"> Don't have the staff capacity to participate in complicated and time-consuming DER products Have strict budgets that will ultimately define their actions Want PSE to prioritize equity in the project selection process 	<ul style="list-style-type: none"> Need PSE to support landlord education Want PSE to prove the benefits to them before they enroll Want PSE to promote DERs on social media platforms such as Facebook, Twitter, Instagram, TikTok, and nextdoor 	

NEXT STEPS

This report serves as part of PSE's work to continue the progress of our Clean Energy Implementation Plan (CEIP), which received approval from the Washington Utilities and Transportation Commission (WUTC) in June 2023. This information is helping us build the right combination of DER programs for our customers. PSE will continue to share the progression of our program development, regulatory approvals and program launch with all customers that were included throughout this process. We thank them for their participation.

