

Clean Energy Implementation Plan (CEIP) Engagement Series

August 2023 Meeting Notes

Friday, August 31, 2023, 12:30 -2:00 pm Pacific Time

These notes were synthesized and summarized by E Source, PacifiCorp's meeting facilitation partner.

Executive Summary

There were 40 people in attendance, including members of the public and PacifiCorp representatives, at the first iteration of the Clean Energy Implementation Plan Engagement Series meeting. The virtual meeting, which was hosted via the Zoom platform, provided a holistic overview of the planning and components of the Clean Energy Implementation Plan and a discussion on the biennial update. To maximize accessibility, the meeting was recorded for those who could not attend and Spanish and ASL interpretation / translation was provided.

The following is a summary of the content and feedback received during the 1.5-hour public meeting.

Session Objectives

1. Clean Energy Implementation Plan (CEIP) Overview & Update
2. Deepen understanding of:
 - How integrated Resource Planning is used to develop the Clean Energy Implementation Plan
 - Interim and Specific Targets included in the CEIP
 - Customer Benefit Indicators (CBIs)
 - Engagement and Public Participation
3. Discussion on Biennial Update

Opening

PacifiCorp's Stephanie Meeks welcomed participants to the meeting and handed it off to E Source's Morgan Westberry, who covered meeting logistics and introduced the agenda.

Washington Clean Energy Implementation Plan Engagement

Pacific Power's Matt McVee provided an overview of where the Clean Energy Implementation Plan currently stands, starting with an overview of who Pacific Power is, the service area and how customers are served.

Currently Pacific Power serves 1.9 million customers across 6 states. This included Rocky Mountain Power, serving Utah, Idaho, and Wyoming. Pacific Power, serving Oregon, Washington, and California. Pacific Power in Washington, serving approximately 137,000 customers throughout Benton, Columbia, Garfield, Kittitas, Yakima, and Walla Walla counties. Pacific Power is proud to serve a diverse across the Washington service area.

Having a large service area, serving customers across 6 states allows for advantages.

How Do We Serve You?



Our **geographic diversity** means that we can provide access to **low-cost renewable energy** where it is most productive throughout the Western United States – decarbonizing our grid and prioritizing affordability.



Wind facilities located in the highest-producing areas such as Eastern Wyoming, Eastern Oregon, Eastern Washington, and Montana.



Solar and energy storage facilities in the highest producing areas such as Utah and Oregon.



With over 16,900 line-miles of **high-voltage transmission** spanning 10 states and a range of climate zones.



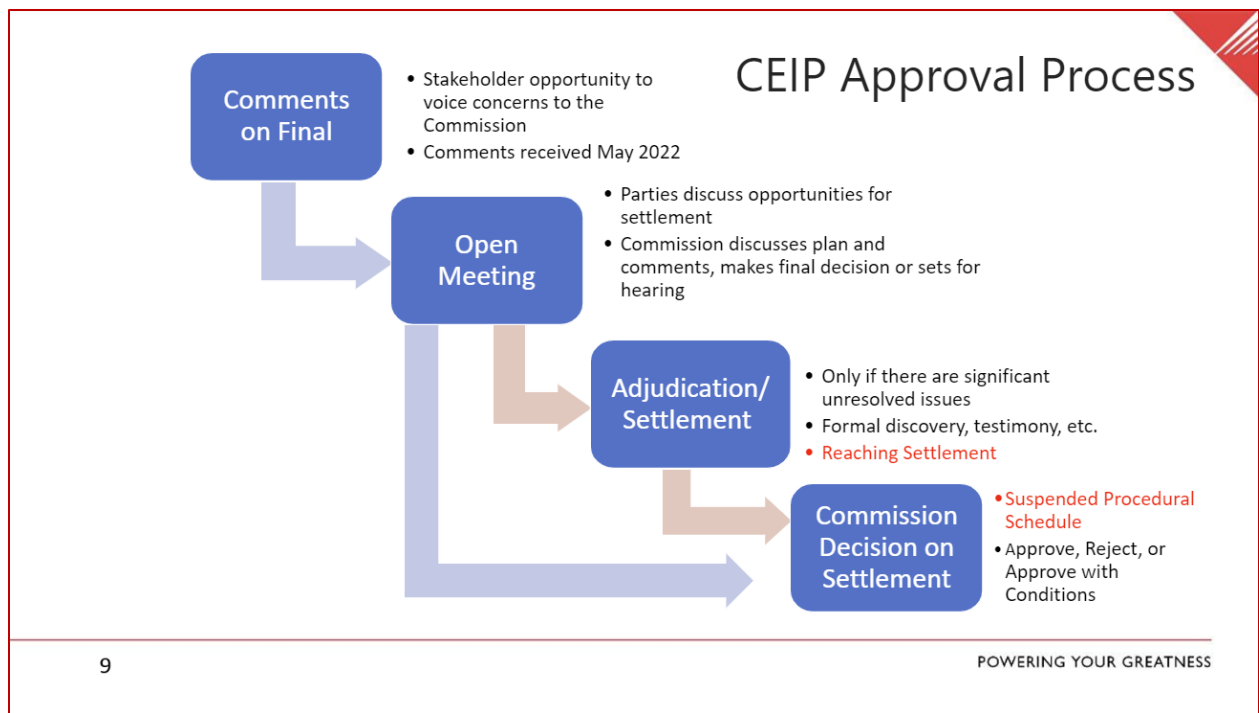
In Washington, Pacific Power has **programs** that help offset the cost of electricity for customers and that provide weatherization and energy efficiency services.

The goal of the Clean Energy Transformation Act in Washington is to move towards serving customers with energy generated from renewable and non-emitting resources by 2045. The idea is to have 100% of the energy generated from those resources to serve customers. As the transition to a cleaner grid occurs, utilities will prioritize an equitable distribution of benefits. Each utility made a Clean Energy Action Plan (CEAP) and a Clean Energy Implementation Plan (CEIP) to outline these plans.

The Clean Energy Transformation Act has a few measurable targets:

- By the end of 2025, each utility must remove coal-fired resources from its allocation of electricity to Washington retail electric customers.
- Beginning in 2030, each utility must ensure all retail sales of electricity to Washington electric customers are greenhouse gas neutral.
- Beginning in 2045, each utility must ensure that non-emitting electric generation and electricity from renewable resources supply 100% of all retail sales of electricity to Washington electric customers.

The CEIP was filed in December of 2021, with a revised filing in March of 2023. Continuing to move the CEIP forward will follow this approval process.



For those looking to participate, the commission will be holding a public comment hearing for the Clean Energy Implementation Plan on Thursday, September 28, 2023. Pacific Power also has a general rate case on Monday, November 20, 2023.

WA Utility and Transportation Commission Public Comment Hearings

Clean Energy Implementation Plan	General Rate Case
<p>Thursday, September 28, 2023, at 6:00 p.m.</p> <p>https://utc-wa-gov.zoom.us/j/84731079057?pwd=OEdVZDVjdjROWkk0NElsUThxOHZMQT09</p> <p>Dial by your location +1-253-215-8782 Meeting ID: 847 3107 9057 Passcode: 301516.</p>	<p>Monday, November 20, 2023, at 6:00 p.m.</p> <p>https://utc-wa-gov.zoom.us/j/84788961145?pwd=ejRBNUoyYi9Qc2h1czVwZUNNTkZvUT09</p> <p>Dial by your location +1 253 215 8782 US (Tacoma) Meeting ID: 847 8896 1145 Passcode: 492613</p>

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Pacific Power will be filing the Biennial Update on the CEIP in November 2023. Originally filed in 2021, the 4-year period for the CEIP includes 2024 and 2025. The original filing was based on the 2021 IRP. Pacific

Power's update adjusts targets based on the 2023 IRP, filed on May 31, 2023. With this there were several changed factors that were identified:

- Delay in reaching agreement on a new allocation methodology.
 - CEIP assumed there would be a new methodology by 2024.
- The rate impact of continuing high energy market prices.
 - Pacific Power forecasts customer savings of \$72 million from using the Jim Bridger and Colstrip generation until the CETA coal deadline.
- Resource repricing during procurement
 - 2020 AS RFP COVID/Supply Chain issues resulted in bid repricing and a limited number of new resources for 2024/2025

Integrated Resource Planning and the CEIP

Pacific Power's Randy Baker discussed the relationship between the Integrated Resource Plan (IRP) and the Clean Energy Implementation Plan (CEIP).

The 2023 IRP was filed in the state of Washington as its 2-year progress report to the 2021 IRP. The 2023 IRP was developed using the Plexos Long-Term (LT) planning model, Medium-Term (MT) schedule and Short-Term (ST) Model to optimally develop a range of least-cost least-risk portfolios under various policy and cost environments. The policy and cost scenarios include:

- Low, medium, and high natural gas prices
- Zero, medium and high carbon dioxide prices
- And additional scenario including the social cost of greenhouse gasses (SC)

The CEIP is informed by the IRP portfolio developed under the SCGHG price policy and is developed to meet the requirements of RCW 19.405.040 and 19.405.050. W-10 CETA was the resulting CETA-compliant portfolio that layered additional incremental renewable resources for Washington customers on top of P-SC to meet the interim compliance targets in 2030 through 2045. The portfolio is optimized and dispatched under the social cost of greenhouse gases price policy.

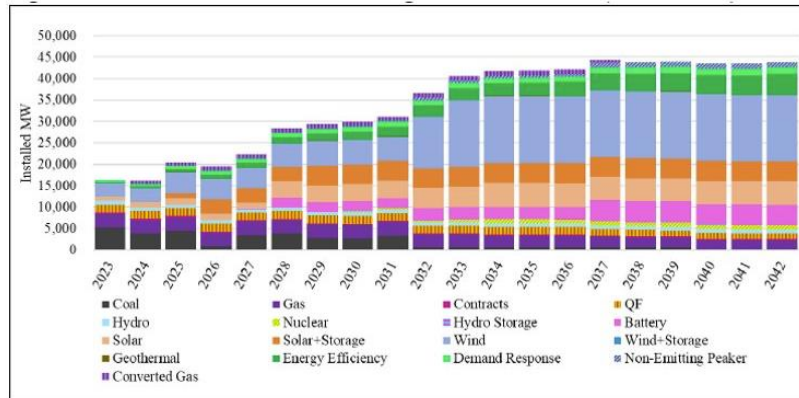
Taking a narrower focus on the development of a CETA-compliant portfolio:

1. Develop a systemwide portfolio optimized under the social cost of greenhouse gas price policy.
2. Washington-allocated generation outcomes are analyzed relative to CETA clean energy targets (2030 and 2045) and goals (no coal after 2024).
3. Final CETA-compliant portfolio is developed and identified, called W-10 CETA in the 2023 IRP and becomes the CEIP Portfolio.

Looking at Integrated Resource Planning and the CEIP from the perspective of where it currently stands. This graph shows the results of the W-10 CETA systemwide portfolio. Following each year of the 20-year plan, it gives an idea of what resources are being added to the system per the W-10 CETA case.

Integrated Resource Planning and the CEIP

All Portfolio Resources: W-10 CETA (systemwide)



On the discussion of updated IRP modeling and interim targets, the updates and assumptions that go into model inputs when creating a new study. The primary things that need to be updated are:

- Load forecasts
- Price curves
- 2020 All-Source Request for Proposals
- Other contracts
- Post-modeling state allocation assumptions

The modeling in the IRP group leads to these updated capacity expansion and dispatch outcomes:

- CEIP targets are energy based – any change to the optimal hourly dispatch order changes the annual forecast of renewable and non-emitting energy available to serve Washington retail sales.
- Decrease in forecasted targets for 2024-2025, resulting from higher loads, less renewable contracts, and state resource allocations.

Pacific Power's Rohini Ghosh lead the discussion on interim and specific targets. The Washington IRP 2-year progress report filed in March 2023 included an updated estimate for the incremental cost of CETA-Compliance for 2023-2025. There are no substantial changes in modeled incremental costs for the CEIP planning window, and there were no estimated changes in non-modeled incremental costs, which will be reviewed again in the Biennial Update.

Taking a high-level look at what goes into the incremental cost calculation, the 2023 IRP estimated incremental cost of CETA-compliance over the four-year period is about \$2.13 million on average per year.

Updated IRP modeling and the Incremental Cost

- From the 2023 IRP the estimated incremental cost of CETA-compliance over the four-year period is about \$2.13 million on average per year.
 - Non-modeled costs are still being evaluated for the Biennial update
 - Modeled costs have changed by a negligible amount due to model noise only
 - There are no incremental actions due to compliance shortfalls during this window

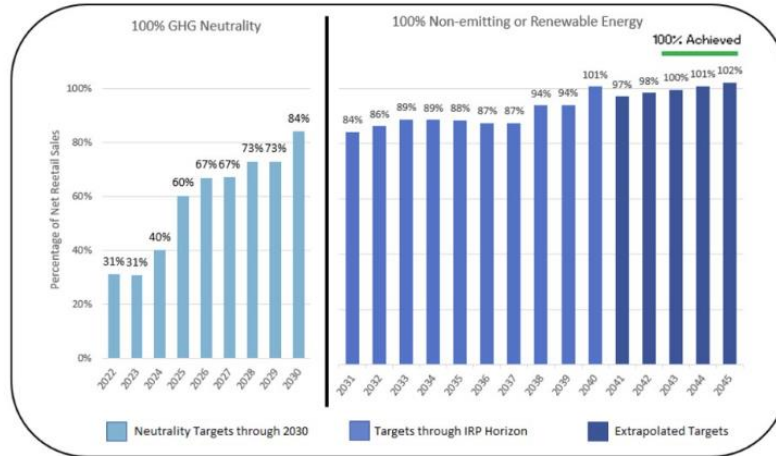
\$-Millions	Compliance Year			
	2022	2023	2024	2025
Revenue Requirement				
Fixed Costs ¹	-	-	(0.00)	0.00
Variable Costs				
Fuel Costs	-	(0.03)	0.03	(0.68)
Variable O&M	-	0.00	0.01	0.04
Energy Efficiency	-	-	0.00	-
Net Market Purchase	-	(0.04)	(0.12)	(3.11)
Emissions	-	0.54	0.10	2.16
Deficiency	-	-	(0.07)	(0.06)
Total Variable Costs	-	0.47	(0.04)	(1.64)
Administrative & General				
DSM Program Costs	1.24	1.26	1.29	1.32
Outreach Costs	0.40	0.37	0.38	0.39
Materials	0.01	0.01	0.01	0.01
Staffing	0.56	0.57	0.59	0.60
Data Support	0.17	0.17	0.18	0.18
Total Revenue Requirement ²	2.38	2.86	2.40	0.86
Average Revenue Requirement	2.13			

Per WAS 480-100-640, a Clean Energy Implementation Plan should include both interim targets and specific targets. Interim targets demonstrate how the utility will make reasonable progress towards meeting clean energy standards. Interim targets are expressed as a percentage of forecasted retail sales of electricity supplied by non-emitting and renewable resources prior to 2030, and from 2030 to 2045. Specific targets are proposed for energy efficiency, demand response, and renewable energy for the CEIP planning period.

Washington Clean Energy Implementation Plan – Interim Targets

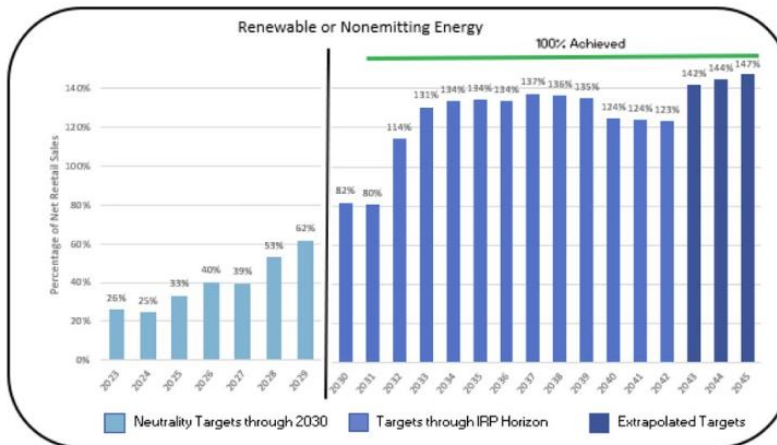
To get a full view of the progress towards the GHG neutral supply of Washington retail sales by 2030, it is helpful to review the proposed trajectory of the 2021 CEIP interim targets as compared to the 2023 Biennial CEIP Update on interim targets.

2021 CEIP Interim Targets



2021 CEIP Interim Targets from March, 2023 Refile

2023 Biennial CEIP Update Interim Targets



2023 Biennial CEIP Updated Interim Targets (from 2023 IRP Filing)

Washington Clean Energy Implementation Plan – Specific Targets

Pacific Power’s Peter Schaffer talked through the specific targets for demand side resources, starting the conversation with the demand response resources. In the 2021 CEIP, the identified DR target is 37.4 MW by the end of the 2025 period. Pacific Power has launched 3 programs that will help reach this target:

Irrigation Load Control, Commercial & Industrial Curtailment, and Optimal Time Rewards (residential). Irrigation Load Control was approved in 2022, and the C&I Curtailment and Optimal Time Rewards programs were approved this year. Demand Response is new in the state, and many unknowns remain. There is a heavy focus on continuing to expand and maintain participation throughout the biennial period. Currently new demand response programs are being evaluated and worked on, such as an electric vehicle managed charging and customer battery dispatch.

Energy Efficiency target setting is an ongoing process separate from the CEIP. The energy efficiency targets are based on the Energy Independence Act (EIA) targets used in the biennial conservation plan conducted every two years. Savings in the 2021 CEIP were originally characterized at the generator, but consistent with EIA and Demand Response targets in CEIP they should be characterized at site which is what is being proposed in the CEIP update

CEIP Specific Targets – Energy Efficiency

Prior CEIP Target

Category MWh at Generation	2022	2023	2024	2025
Washington - first year Energy Efficiency from the IRP Preferred Portfolio	34,003	37,231	39,530	45,254
Behavioral Programs (HER)	4,414	(182)	4,414	(182)
RTF adjustments (total)	335	407	486	558
Adjusted Energy Efficiency Forecast - annual	38,752	37,456	44,431	40,579
Adjusted Energy Efficiency Forecast - Pro-rata	50,579	50,579	50,579	50,579
Co-Generation	-	-	-	-
Decoupling commitment - five percent	2,529	2,529	2,529	2,529
Annual Target	53,108	53,108	53,108	53,108
2022-2025 target				212,431

Updated CEIP Target

Category MWh at Site	2022	2023	2024	2025
Washington - first year Energy Efficiency from the IRP Preferred Portfolio	31,871	34,651	37,517	43,803
Behavioral Programs (HER)	4,100	(169)	4,212	3,742
RTF adjustments (total)	313	378	(2,223)	(2,331)
Adjusted Energy Efficiency Forecast - annual	36,284	34,860	39,506	45,214
Adjusted Energy Efficiency Forecast - Pro-rata	47,089	47,089	40,613	40,613
Co-Generation	-	-	12	12
Decoupling commitment - five percent	1,814	1,743	1,976	2,261
Annual Target	48,903	48,832	41,493	47,487
2022-2025 target				186,714

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Clean Energy Implementation Plan Annual Progress Report: Customer Benefit Indicators

Pacific Power's Laura James provided the CEIP Annual Progress Report focusing on Customer Benefit Indicators. Developed as part of the original 2021 filing, working with stakeholders, and conducting

customer surveys to better understand clean energy and equity priorities, these 6 customer benefit indicators and metrics were developed to track progress.

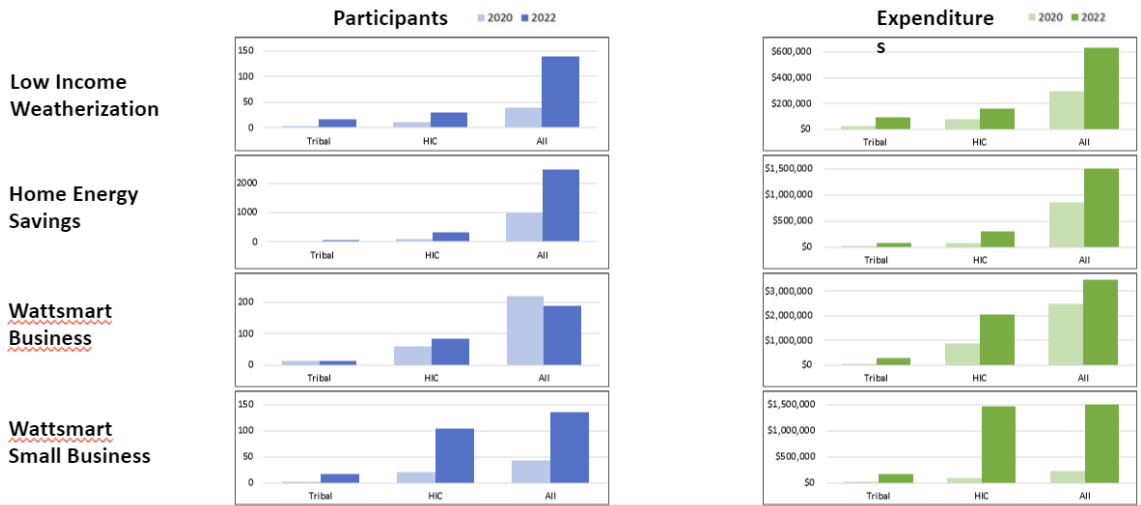
PacifiCorp Customer Benefit Indicators		
CBI	Metric(s)	
1	Increase culturally and linguistically responsive outreach and program communication	<ul style="list-style-type: none"> • Outreach in non-English languages • Percentage of responses to surveys in Spanish
2	Increase community-focused efforts and investments	<ul style="list-style-type: none"> • Workshops on energy related programs • Headcount of staff supporting program delivery in Washington who are woman, minority, or can show disadvantage for energy efficiency programs with exception to low income • Number of public charging stations in named communities
3	Increase participation in company energy and efficiency programs and billing assistance programs	<ul style="list-style-type: none"> • Number of households/businesses, including named communities, who participate in company energy/efficiency programs • Percentage of households that participate in billing assistance programs • Number of households/businesses who participate/enroll in demand response, load management, and behavioral programs
4	Improve efficiency of housing stock and small businesses, including low-income housing	<ul style="list-style-type: none"> • Number of households and small businesses that participate in company energy/efficiency programs • Energy efficiency expenditures
5	Increase renewable energy resources and emissions	<ul style="list-style-type: none"> • Amount of renewables/non-emitting resources serving Washington • Washington allocated greenhouse gas emission from Washington allocated resources • Number of public charging stations in named communities
6	Decrease households experiencing high energy burden	<ul style="list-style-type: none"> • Number of customers suffering from high energy burden by: highly impacted communities, vulnerable populations, low-income bill assistance (LIBA) and Low-Income Weatherization participants, and other residential customers
7	Improve indoor air quality	<ul style="list-style-type: none"> • Number of households using wood as primary or secondary heating
8	Reduce frequency and duration of energy outages	<ul style="list-style-type: none"> • System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI) at area level including and excluding major events
9	Reduce residential customer disconnections	<ul style="list-style-type: none"> • Number of residential customer disconnections including disconnections within named communities
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Pacific Power is committed to proactively increasing access and better communicating with the 30.7% of Spanish speaking households within its' Washington service area. There has been a significant increase in the number of channels used for Spanish language outreach. These channels include purchased media, such as ads, cable and radio spots, print media, and social media ads, and owned media, such as website, social media posts, direct mail, and email blasts. There has also been steady improvement in getting back feedback from Spanish-speaking customer on company surveys.

In working to increase community-focused efforts, Pacific Power hosted a significantly greater number of workshops, including more workshops accessible to customers in HIC areas. Pacific Power is also tracking the number of EV chargers in our service area. While there was an increase from 2021 to 2023, this was not yet due to Pacific Power activity. During 2022, Pacific Power developed a portfolio of numerous EV-related programs, which was filed and acknowledged in 2023. These programs are expected to be up and running by Q3 of this year.

There were significant resources put into energy efficiency programs during 2021 and 2022, including increased incentives, creating new incentives, and introducing new modes of communication and outreach. From 2020 to 2022 there has been a corresponding increase in participation. Many of the changes made were focused on getting more of the incentives and savings from these programs into highly impacted communities and vulnerable population groups. As a result, both participation and expenditure to customers on Tribal lands and in other highly impacted communities saw a sharp increase over the period.

Energy & Efficiency Program Participation/ Efficiency of Buildings

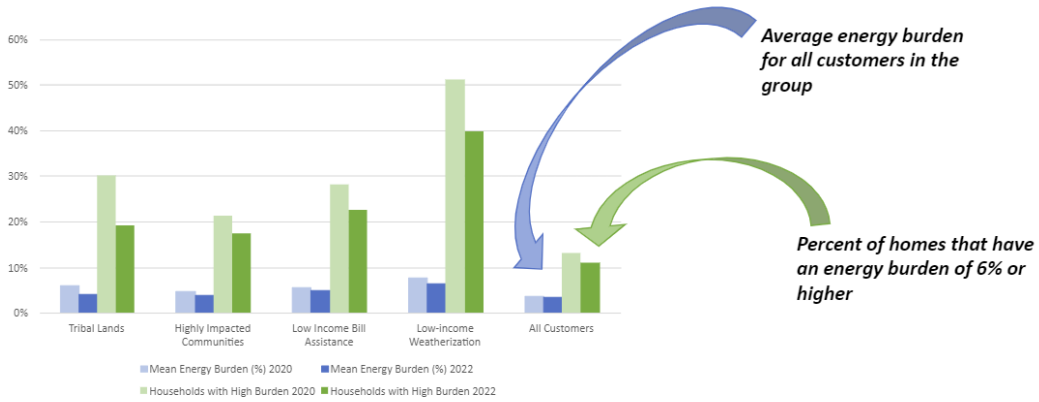


Retail sales served by renewable and non-emitting energy resources saw an increase from 2020 to 2022. This increase is attributed to Washington customers being allocated more of Pacific Power’s system renewables due to a change in cost allocation methodology that went into effect in 2021. Greenhouse gas emissions also saw a slight increase from 2020 to 2021 because there was more generation from thermal resources allocated to Washington. While these changes are largely accounting adjustments, Pacific Power does show in the latest IRP a plan to rapidly decarbonize the power delivered to Washington customers.

Pacific Power is tracking the energy burden in its service area as an indicator of community benefit. Looking at two different aspects related to energy burden, the blue columns show the average level of energy burden in the customer group in 2020 and 2022. The green columns show the percentage of households experiencing high energy burden in 2020 and 2022. Both metrics decreased for all groups from 2020 to 2022.

High Energy Burden

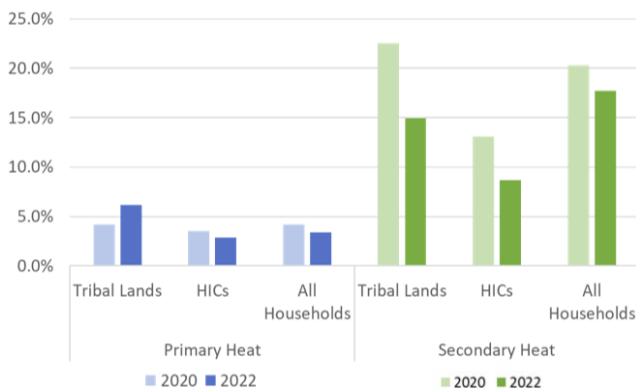
Mean Energy Burden and Percentage of Households with High Burden, by Customer Segment



Pacific Power is tracking the number of customers switching away from wood fuel as one aspect of improving air quality in our service area. From 2021 to 2023, the percentage of homes using wood as a primary fuel decreased for most customers, with the exception of customers on Tribal lands. The percentage using wood as a secondary fuel decreased for all groups. Pacific Power added incentives to the Home Energy Savings Program for switching from non-electric and non-gas heating equipment to electric in 2022. The measure had no participants in that year but moving forward Pacific Power plans to increase the incentives for customers in high impact communities to increase the rate of decommissioning for wood heating equipment in these communities.

Indoor Air Quality

The Indoor Air Quality CBI evaluates the number of households using wood as primary or secondary heating



From 2020 to 2022, Pacific Power has increased access to alternative heating across nearly all customer segments.







Community Engagement

Pacific Power's Kimberly Alejandro's portion on community engagement was skipped in the effort of time, though the content is worth sharing.

There are many contributors in the Washington clean energy planning space:

- Environmental & Justice Groups
- Equity Advisory Groups
- Demand Side Management (DSM) Advisory Group
- Low-Income Advisory Group
- Utility Industry
- Regulators
- Public Customer Engagement
- Integrated Resource Plan Stakeholder Group

External Engagement Approach

-  Foster shared understanding
-  Maintain a public participation process that is open, transparent, and accessible
-  Inspire new tools and approaches for how we communicate and expand our outreach
-  Building new partnerships and amplifying opportunities for collaboration
-  Input shapes how we deliver programs and information on them
-  Community voices inform how we think about planning

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Additionally Pacific Power has launched its first ever earned media multiculture campaign in Washington, covering the topics of Wattsmart Residential and Small Business (Energy Efficiency). The goal is to increase awareness and participation in Pacific Power's Wattsmart energy efficiency programs among Spanish-speaking Washington customers.

Public Comment

There was no public comment