

WASHINGTON  
2023  
Clean Energy  
Implementation Plan  
— PROGRESS REPORT —

# PACIFICORP

## 2023 CLEAN ENERGY IMPLEMENTATION PLAN

### PROGRESS REPORT

---

#### Table of Contents

- I. Introduction.....2
- II. 2023 Annual Clean Energy Progress Report .....3
  - A. WAC 480-100-650(3) Requirements ..... 3
  - B. WAC 480-100-650(4) Requirements ..... 6
- III. Additional Annual Reporting.....10
  - A. Analysis of Customer Benefit Indicators ..... 10
    - i. Updates to Key Inputs and Metric Tables..... 10
    - ii. 2022 Results..... 15
  - B. Specific Actions ..... 32
    - i. Supply-Side Resource Actions ..... 32
    - ii. Demand-Side Resource Actions ..... 33
  - C. Incremental Cost..... 39
  - D. Public Participation ..... 40
- IV. Appendix 1. Supporting Detail for CBI Metrics.....45

## I. Introduction

In 2019 Washington passed the Clean Energy Transformation Act (CETA), which combines directives for utilities to pursue a clean energy future with assurances that benefits from a transformation to clean power are equitably distributed among all Washingtonians.<sup>1</sup> CETA requires investor-owned utilities to submit a Clean Energy Implementation Plan (CEIP) every four years to the Washington Utilities and Transportation Commission (WUTC or Commission) that describes the utility’s plan to meet CETA’s ambitious clean energy targets. Utilities are required to submit annual clean energy progress reports that update the Commission on the utility’s CEIP beginning in 2023.

In accordance with WAC 480-100-650(3) and (4), PacifiCorp respectfully submits its annual clean energy progress report for the Commission’s consideration. As indicated in Table 1 below, PacifiCorp has achieved its interim goal of serving at least 31 percent of Washington retail electric sales with non-emitting and renewable resources in 2022. Additional reporting information regarding WAC 480-100-650 can be found in Section II. The Company also includes additional annual reporting consistent with representations from the Company’s Initial and Revised CEIPs in Section III, and the Appendix in Section IV.<sup>2</sup>

**Table 1 – PacifiCorp’s Annual CEIP Report Summary**

<b>PacifiCorp CEIP Interim Goal for 2022</b>	<b>31%<sup>3</sup></b>	
	<b>MWh</b>	<b>% of Retail Sales</b>
Washington Retail Sales	4,181,079	
Washington PURPA Qualifying Facilities	5,152	
Retail Sales (QF Adjusted)	4,175,928	
Washington Allocated Renewable Energy and RECs	1,010,278	24.2%
Washington Allocated PacifiCorp System RECs	260,078	6.2%
Washington Allocated BPA Renewable Energy	22,228	0.5%
Washington Allocated BPA Non-Emitting Energy	2,887	0.1%
<b>Total electricity supplied by non-emitting and renewable resources in 2022</b>	<b>1,295,471</b>	<b>31.0%</b>

<sup>1</sup> 2019 WA Laws Ch. 288.

<sup>2</sup> While the Company does not have an approved CEIP at this time, the Company provides this additional CEIP-related information for the Commission’s review.

<sup>3</sup> Revised 2021 CEIP, Docket UE-210829 (filed Mar. 13, 2023) (establishes 31% goal for 2022; however, the Company has requested the ability to update or correct the assumptions, methods, calculations, and forecasted information that informs these interim targets to reflect current information and operational realities at the appropriate time).

## II. 2023 Annual Clean Energy Progress Report

This section includes the Company’s annual clean energy progress report for 2022, as required by WAC 480-100-650(3) and (4).

### A. WAC 480-100-650(3) Requirements

The Company’s responses to the reporting requirements of WAC 480-100-650(3)(a)-(l) are discussed below.

**(3) Annual clean energy progress reports.** On or before July 1st of each year beginning in 2023, other than in a year in which the utility files a clean energy compliance report, the utility must file with the commission, in the same docket as its most recently filed CEIP, an informational annual clean energy progress report regarding its progress in meeting its targets during the preceding year. The annual clean energy progress report must include, but is not limited to:

(a) Beginning July 1, 2027, and each year thereafter, an attestation for the previous calendar year that the utility did not use any coal-fired resource as defined in this chapter to serve Washington retail electric customer load.

This is not applicable for filing in 2023.

(b) Conservation achievement in megawatts, first-year megawatt-hour savings, and projected cumulative lifetime megawatt-hour savings.

Conservation achievements for 2022 are provided in PacifiCorp’s 2022 Annual Report on Conservation Acquisition filed on June 1, 2023, in Docket UE-210830.<sup>4</sup> The table below reproduces Table 2 from the annual report, which includes savings acquired from PacifiCorp energy efficiency programs, distribution efficiency and PacifiCorp’s share of Northwest Energy Efficiency Alliance savings. There is additional detail in the annual report on the energy efficiency program and significant challenges in 2022 resulting from the COVID-19 pandemic and its lingering effects.

**Table 2 - 2022 Conservation Achievement**

Description	Value
First year Energy Efficiency program MWh savings acquired during 2022 (@ Generator)	40,191
Conversion factor: Coincident MW/MWh	0.000167664
Estimated coincident peak MW contribution of 2022 Energy Efficiency acquisitions	6.74
Estimated Lifecycle Energy Efficiency program MWh savings from savings acquired in 2022 (@ Generator)	426,632

<sup>4</sup> [UTC Case Docket UE-210830 | UTC \(wa.gov\)](#)

(c) Demand response program achievement and demand response capability in megawatts and megawatt hours.

Since PacifiCorp had just begun filing and launching demand response programs in 2022, there was zero (0) MW and MWh of capacity achieved in 2022. As of filing this progress report in 2023, there are new participants across the approved programs and the Company anticipates reporting demand response capacity in the next progress report.

(d) Renewable resource capacity in megawatts, and renewable energy usage in megawatt hours and as a percentage of electricity supplied by renewable resources.

Please see attachment 210829-PAC-WPC -2023-CEIP-Progress-Rpt-3(d)-3(e)-3(g)-4(b)(ii)-4(c) for renewable resource capacity in megawatts, renewable energy usage in megawatt hours, and the calculation showing percentage of electricity supplied by renewable resources.

Renewable energy usage is supported by energy and renewable energy credits (RECs) allocated to Washington from PacifiCorp system consistent with WIJAM and reflects renewable and non-emitting energy portions of purchases from Bonneville Power Administration (BPA).

PacifiCorp system RECs include those purchased as bundled energy and RECs under the same transaction on PacifiCorp's system, but where Washington is not allocated the energy as part of its cost allocation under the Company's Washington Inter-Jurisdictional Allocation Methodology (WIJAM). A cost recovery mechanism for these RECs will need to be established if these RECs are retired at the end of the 2022-2026 compliance period to demonstrate compliance with Washington's interim targets.

(e) All renewable energy credits and the program or obligation for which they were used (e.g., voluntary renewable programs, renewable portfolio standard, clean energy transformation standards).

Information on renewable energy credits and the program or obligation for which they are used are detailed in 210829-PAC-WPC-2023-CEIP-Progress-Rpt-3(d)-3(e)-3(g)-4(b)(ii)-4(c). The "DetailC – WA CEIP 2022 (CONF)" tab, Columns G indicates whether the renewable energy credit usage is for the renewable portfolio standard, clean energy transformation act or voluntary Blue Sky program.

(f) Verification and documentation of the retirement of renewable energy credits for all electricity from renewable resources used to comply with the requirements of RCW [19.405.040](#), [19.405.050](#), a specific target, or an interim target, except for electricity purchased from Bonneville Power Administration, which may be used to comply with these requirements without a renewable energy credit until January 1, 2029, as long as the nonpower attributes of the renewable energy are tracked through contract language.

Please refer to the Company's 2023 Annual Renewable Portfolio Standard Report for the updated WREGIS report showing 2022 RECs held for retirement in compliance with the 2022 Renewable Portfolio Standard (UE-230415).<sup>5</sup> Additionally, refer to attachments 210829-PAC-

---

<sup>5</sup> [2023 Annual Renewable Portfolio Standard Report](#)

WPC-2023-CEIP-Progress-Rpt-3(f)-WREGIS-Hydro-Resources and “210829-PAC-WPC-2023-CEIP-Progress-Rpt-3(f)-WREGIS-2022-East-Side-Resources” for WREGIS reports showing RECs held in PacifiCorp’s WREGIS sub-account for CETA compliance to be retired at the end of the 2022-2025 compliance period.

(g) Non-emitting resource capacity in megawatts, and non-emitting energy usage in megawatt hours and as a percentage of total electricity supplied by non-emitting energy.

Non-emitting energy reported for 2022 is from Washington’s allocation of Bonneville Power Administration (BPA) purchases. Non-emitting share of BPA purchases is from nuclear energy reported in BPA’s 2022 fuel mix,<sup>6</sup> while the renewable portion of BPA’s fuel mix is accounted for under section (d). The total number of megawatt hours from BPA Nuclear mix is 2,887 megawatt hours which is 0.1 % of Washington retail sales. For details see attachment, 210829-PAC-WPC-2023-CEIP-Progress-Rpt-3(d)-3(e)-3(g)-4(b)(ii)-4(c).

(h) The utility’s greenhouse gas content calculation pursuant to RCW [19.405.070](#).

The fuel mix disclosure reporting has not been initiated by Washington State Department of Commerce as of the date of this filing.

(i) An electronic link to the utility's most recently filed fuel mix disclosure report as required by RCW [19.29A.140](#).

PacifiCorp’s most recently filed fuel mix disclosure report is for calendar year 2021 and is available on the Washington State Department of Commerce website.<sup>7</sup> Similar to WAC 480-100-650(3)(h), the fuel mix disclosure reporting for calendar year 2022 has not been initiated by Washington State Department of Commerce as of the date of this filing.

(j) Total greenhouse gas emissions in metric tons of CO<sub>2</sub>e.

Total greenhouse gas emission for 2022 is calculated as part of fuel mix disclosure reporting to Washington State Department of Commerce. The fuel mix disclosure reporting has not been initiated by Washington State Department of Commerce as of the date of this filing.

(k) Demonstration of ownership of nonpower attributes for non-emitting generation using attestations of ownership and transfer by properly authorized representatives of the generating facility, all intermediate owners of the non-emitting electric generation, and an appropriate company executive of the utility; the utility may not transfer ownership of the nonpower attributes after claiming them in any compliance report.

This section is not applicable for 2022.

(l) Other information the company agreed to or was ordered to report in the most recently approved CEIP or biennial CEIP update.

---

<sup>6</sup>[2022-bpa-fuel-mix.pdf](#)

<sup>7</sup>[UtilityFuelMixMarketSummary \(wa.gov\)](#)

See Chapter III Additional Annual Reporting.

## B. WAC 480-100-650(4) Requirements

The Company's responses to the reporting requirements of WAC 480-100-650(4)(a)-(d) are discussed below.

**(4) Data and contract reporting.** Each utility must file its annual clean energy progress report based on an analysis that identifies and considers the source and characteristics of the electricity a utility claims to meet compliance obligations under WAC 480-100-610, including electricity that is produced, purchased, sold, or exchanged.

(a) Unless otherwise ordered by the commission, the analysis and supporting data provided in the filing must include data in an hourly format for:

(i) Total Washington retail sales.

Per Order 01 in docket UE-210829, the Company is not required to report hourly Washington retail sales. Please see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(i)-Washington-2022-Retail-Sales reporting monthly retail sales.

(ii) Retail sales for customers participating in a voluntary renewable energy purchase program in alignment with RCW 19.405.020 (36)(b).

The Company's Blue Sky participants in Washington for 2022 included 7,214 Residential and 235 Nonresidential customers. The total MWh for Blue Sky in WA for 2022 was 17,458 MWh.

Currently, there are no voluntary renewable energy purchase program options in Washington. Although bundled deals are allowed under schedule 73,<sup>8</sup> there are no customers currently participating in this type of agreement.

(iii) Total electricity production for all renewable and non-emitting generation owned, contracted, or controlled by the utility.

For non-QF electricity production meeting the above criteria see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(iii)-Renewable-and-Nonemitting-Generation. For QF electricity production meeting the above criteria see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(iv)-WA-QF-Generation(Yakima-Tieton). The data in these files shows the total company hourly MW for energy production from resources and contracts allocated to Washington under the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

(iv) Generation from qualifying facilities as described in RCW 19.405.020 (36)(a).

---

<sup>8</sup> [073 Renewable Energy Rider Optional Bulk Purchase Option.pdf \(pacificpower.net\)](#)

For generation from qualifying facilities meeting the above criteria see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(iv)-WA-QF-Generation(Yakima-Tieton). The data in these files shows the total company hourly MW for energy production from resources and contracts allocated to Washington under the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

(v) All electricity sold or transferred for all bundled sales of electricity from renewable and non-emitting sources. For the purposes of this subsection, bundled electricity is electricity that is sold with all its nonpower attributes in the same transaction.

For bundled energy sales of electricity from renewables and nonemitting sources see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(v)-Bundled-Sales-CC-491-Hydro. The data in this file shows the total company hourly MW for energy production from resources and contracts allocated to Washington under the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

(vi) All electricity sales in which the electricity was sold by that utility in a wholesale market sale without its associated nonpower attributes.

For sales without associated nonpower attributes see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(a)(vi)-Sales-CC-491. The data in this file shows the total company hourly MW for energy production from resources and contracts allocated to Washington under the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

(b) Unless otherwise ordered by the commission, the utility must include in its filing the following:

(i) Total monthly megawatt-hours of sales, purchases, and exchanges by counter party of electricity sales in which the electricity was sold by that utility in a wholesale market sale without its associated nonpower attributes. Any contract in which the utility sells electricity in a wholesale market sale without its associated nonpower attributes must include terms stating the seller is not transferring any of the nonpower attributes and the buyer may not represent in any form that the electricity has any nonpower attributes associated with it and that the buyer must include such provision in any sale of the electricity in any subsequent sale it makes.

For sales without nonpower attributes see response to question 4(a)(vi). For purchases without nonpower attributes see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(b)(i)-Monthly-Purchases-Without-Assoc-NonPower-Attributes. The data in this file shows the total company hourly MW for energy production from resources and contracts allocated to Washington under the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

For exchanges without nonpower attributes see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-4(b)(i)-4(b)(ii)-Monthly-Exchanges. The data in this file shows the total company hourly MW for energy production from resources and contracts allocated to Washington under



the WIJAM allocation methodology. To convert the total company MWh to Washington's share multiply by the appropriate 2022 allocation factor.

(ii) Total monthly megawatt-hours of sales, purchases, and exchanges of bundled electricity from renewable or non-emitting generation. For the purposes of this subsection, bundled electricity is electricity that is sold with all of its nonpower attributes in the same transaction.

Please see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-3(d)-3(e)-3(g)-4(b)(ii)-4(c) for monthly megawatt-hours of purchase and sales of bundled electricity from renewable or non-emitting generation. There are no exchanges of bundled renewable or non-emitting generation. There are no exchanges that include all nonpower attributes.

Bundled renewable energy claims reflect cost allocation of system energy under WIJAM<sup>9</sup> and allocation of RECs to Washington. RECs used for compliance are not otherwise claimed by any other state on PacifiCorp's system, claimed under customer renewable tariffs or associated with electricity delivered, reported, or claimed as a zero-emission specified source or assigned the emissions rate of the renewable generating facility under a greenhouse gas (GHG) program.

(iii) All purchase contracts longer than one month that source the electricity delivered from coal fueled generation.

There are no contracts that are responsive to this requirement.

(iv) Beginning January 1, 2026, all existing or new purchase contracts longer than one month with documentation that none of the electricity delivered is sourced from coal fueled generation.

This is not required at the time of this filing in 2023.

(v) Any data provided to the Western power pool's resource adequacy program or its successor.

FERC approved the WPP's Western Resource Adequacy Program on February 10, 2023. Given this progress report is for 2022, the Company does not have relevant information to provide at this time.

(c) A utility may use an unbundled REC as an alternative compliance option, as provided in RCW 19.405.040 (1)(b), only if the utility demonstrates that there is no double counting of any nonpower attribute associated with that REC. This subsection sets only the minimum requirements necessary to demonstrate that no double counting has occurred. The commission may require the utility to produce other evidence or take specific actions as the commission determines necessary to ensure that there is no double counting of nonpower attributes.

(i) Except as provided in (c)(iii) of this subsection, a utility may use an unbundled REC for alternative compliance only if the utility demonstrates:

(A) The associated electricity was sold, delivered, or transferred without fuel sources or nonpower attributes and under a contract or transaction term expressly stating the fuel source or nonpower attributes are not included; and

---

<sup>9</sup> See [UE-230482](#), Power Cost Adjustment Mechanism (PCAM) filing June 15, 2023.

(B) The associated electricity was not delivered, reported, or claimed as a zero-emission specified source or assigned the emissions rate of the renewable generating facility under a greenhouse gas (GHG) program.

(ii) A utility's demonstration under this section may be met by documentation that the entity providing the unbundled REC:

(A) Provides contract, confirmation, or other transaction terms that comply with the requirements of (c)(i)(A) and (B) of this subsection;

(B) Was a party to or otherwise has knowledge of the transaction in which the associated electricity was sold or transferred and attests to (c)(i)(A) and (B) of this subsection; or

(C) Obtained the unbundled REC from an entity that attests that it and all previous owners of the REC transferred the REC using transaction terms complying with the requirements of (c)(ii)(A) or (B) of this subsection.

(iii) To claim and retire an unbundled REC for alternative compliance where the Washington-eligible RECs were created by renewable electricity marketed by the Bonneville Power Administration a utility must demonstrate the REC was not associated with electricity from a system sale from the Bonneville Power Administration directly into a state with a GHG program and to an entity regulated by the state greenhouse gas program. The RECs are calculated based on the same vintage year as the year in which the electricity was imported to the state with the greenhouse gas program.

(iv) For the purposes of (c) of this subsection, "greenhouse gas program" includes any governmental program outside of Washington that caps or limits greenhouse gas emissions or requires the purchase, surrender, or retirement of greenhouse gas allowances if the scope of the greenhouse gas program includes electricity imported from outside the governmental jurisdiction and does not require the retirement of RECs for such imported electricity.

Please see attachment 210829-PAC-WPC-2023-CEIP-Progress-Rpt-3(d)-3(e)-4(b)(ii)-4(c) for 2022 generated PacifiCorp system RECs the company has set aside in a WREGIS sub-account for alternative compliance with 2022-2025 Interim Targets. While the electricity associated with these RECs may have been sold with all of its nonpower attributes in the same transaction to PacifiCorp, only when the associated energy is cost-allocated under WIJAM<sup>10</sup> are RECs considered bundled and eligible for CETA compliance.

(d) For the purposes of reporting and compliance, the storage of electricity has the following impacts:

(i) The eligibility of renewable or nonemitting electricity is not affected by the use of storage resources.

(ii) Except for storage resources located on the customer side of a retail meter, any electrical consumption or loss resulting from the charging, holding, and discharging of storage resources is not considered retail electric load as defined in RCW 19.405.020(36).

(iii) Any electrical consumption or loss resulting from the charging, holding, and discharging of storage resources located on the customer side of a retail meter is considered retail electric load for the purpose of compliance with chapter 19.405 RCW.

There are no storage resources to report for compliance for 2022.

---

<sup>10</sup> See [UE-230482](#), PCAM filing June 15, 2023

### III. Additional Annual Reporting

While the Commission has not approved the Company's 2021 Revised CEIP, nor a biennial CEIP update, the Company nonetheless provides this additional annual reporting consistent with the Company's commitments included in its 2021 Initial and Revised CEIPs. This includes additional discussion regarding the Analysis of Community Benefit Indicators, Specific Actions, Incremental Cost, and Public Participation. Additional supporting details for CBI metrics can be found in Appendix 1.

#### A. Analysis of Customer Benefit Indicators

Consistent with Chapter 6 of PacifiCorp's 2021 Draft Clean Energy Implementation Plan, this section provides updates on the metrics for its Customer Benefit Indicators (CBIs). Through a stakeholder-oriented process, the Company adopted nine CBIs and identified 17 associated metrics to track progress for each CBI. In 2021, PacifiCorp provided baseline values for each metric. As PacifiCorp moves forward with the specific actions identified in its draft CEIP, it expects that continued periodic evaluation of the identified metrics will demonstrate that the Company is achieving the CBIs.

##### i. Updates to Key Inputs and Metric Tables

Two key resources that underlie many of the metric values presented in this report include the Washington Department of Health (WDOH) determination of HIC census tracts and PacifiCorp's CEIP survey targeted to residential customers in Washington. The methodology related to both of these data sources has been updated since PacifiCorp's draft CEIP filing in 2021, which affects the evaluation of CBI metrics. The WDOH's changes to its identification of highly impacted communities (HIC) required PacifiCorp to update its own HIC and non HIC baseline metrics, to enable equivalent comparison to future values. And PacifiCorp adopted EAG recommendations for updates to its 2023 CEIP survey, to collect a more representative sample. Although the impacts of the change are difficult to measure, the new approach likely allows for more accurate demographic analysis. In addition, feedback from the EAG led PacifiCorp to restructure some metrics tables to provide greater transparency for activity on tribal lands. PacifiCorp provides more detailed descriptions of these updates in the sections below.

#### *Washington Department of Health Environmental Health Disparities (EHD) Map*

PacifiCorp identifies census tracts in its service area as HIC or non-HIC using the designation published by the WDOH. The WDOH methodology identifies an area as HIC if it meets at least one of two criteria:

- The census tract is covered or partially covered by "Indian Country" as defined and designated by statute (RCW 19.405.020), or
- The census tract ranks a nine or ten on the Washington Tracking Network Environmental Health Disparities (EHD) Map, as designated by the WDOH.

PacifiCorp included a detailed discussion in its 2021 CEIP filing of the identification of HIC census tracts in its service area, using the information from the WDOH.<sup>11</sup>

Following the filing of PacifiCorp’s draft CEIP, the DOH released an update to the Washington Health Disparities Scores in January 2022.<sup>12</sup> In July 2022, the DOH published the Washington Environmental Health Disparities Map, version 2.0, which incorporates new indicators and updated methodology.<sup>13</sup> The new EHD scores changed the HIC status of several census tracts served by PacifiCorp. The number of census tracts with an EHD score of 9 or 10 in the Yakima area changed from 19 to 18, and the number of census tracts with an overall EHD score of 9 or 10 in the Walla Walla area changed from 0 to 1. The number of census tracts overlapping Tribal lands did not change from 2021 to 2022, remaining at 6 in the Yakima area and none in the Walla Walla area. A census tract requires an EHD score of 9 or 10 to be considered an HIC, except if the census tract is on Tribal Lands as stated in the WDOH methodology above. PacifiCorp has one census tract in the Company’s service territory with an EHD score less than 9 and is located in “Indian Country”, which results in this census tract as being considered as an HIC.

Overall, the total number of HIC census tracts in the service area increased from 19 to 20, and the percentage of Pacific Power’s Washington customer base in an HIC changed from 27.1% in 2021 to 27.2% in 2022. Figure 1 shows the EHD scores for census tracts in Pacific Power’s Washington service area based on the original EHD Map. Figure 2 shows the updated 2022 EHD scores for the same area, based on the EHD Map, version 2.0.

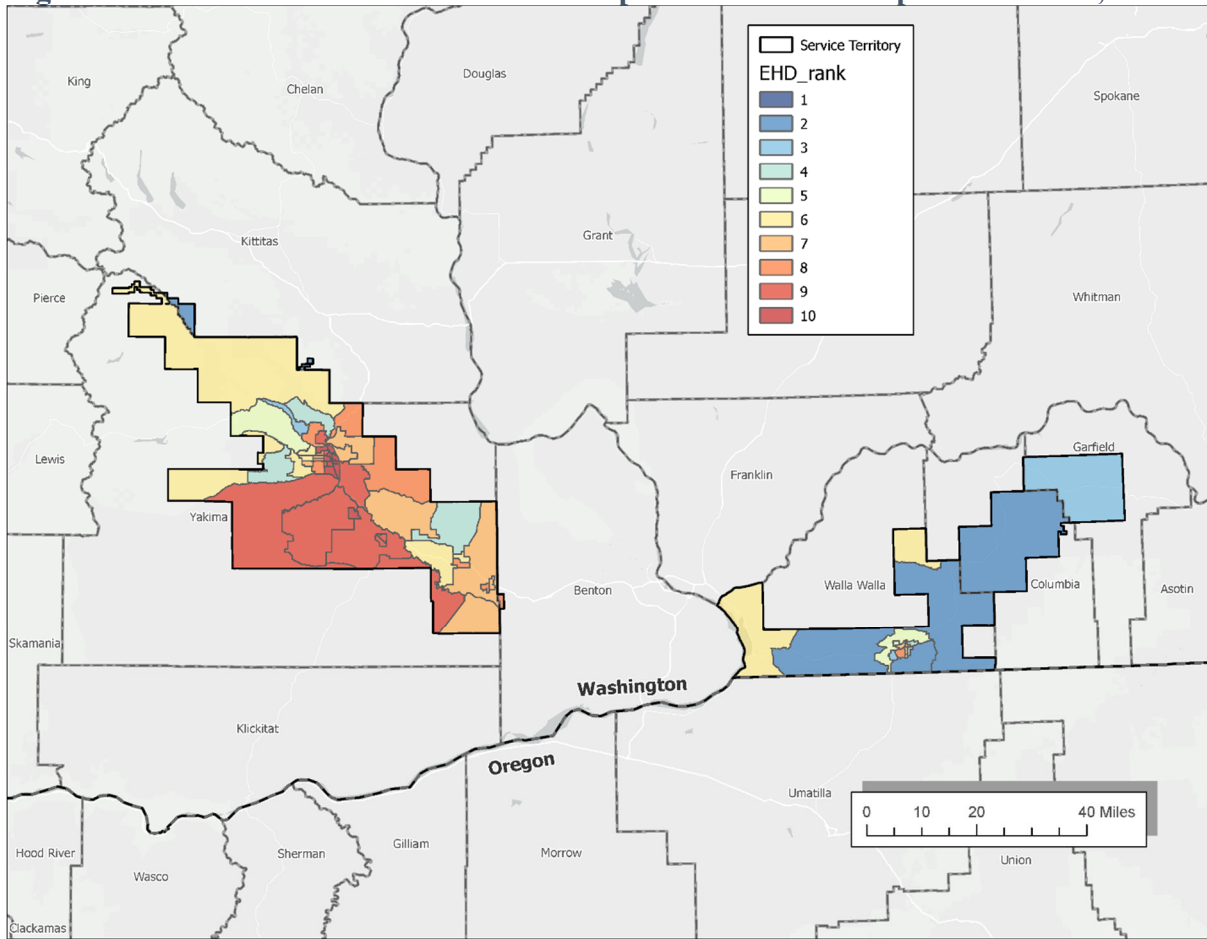
---

<sup>11</sup> PacifiCorp 2021 Draft Clean Energy Implementation Plan. Available online: [https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/ceip/PAC-CEIP-12-30-21\\_with\\_Appx.pdf](https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/ceip/PAC-CEIP-12-30-21_with_Appx.pdf)

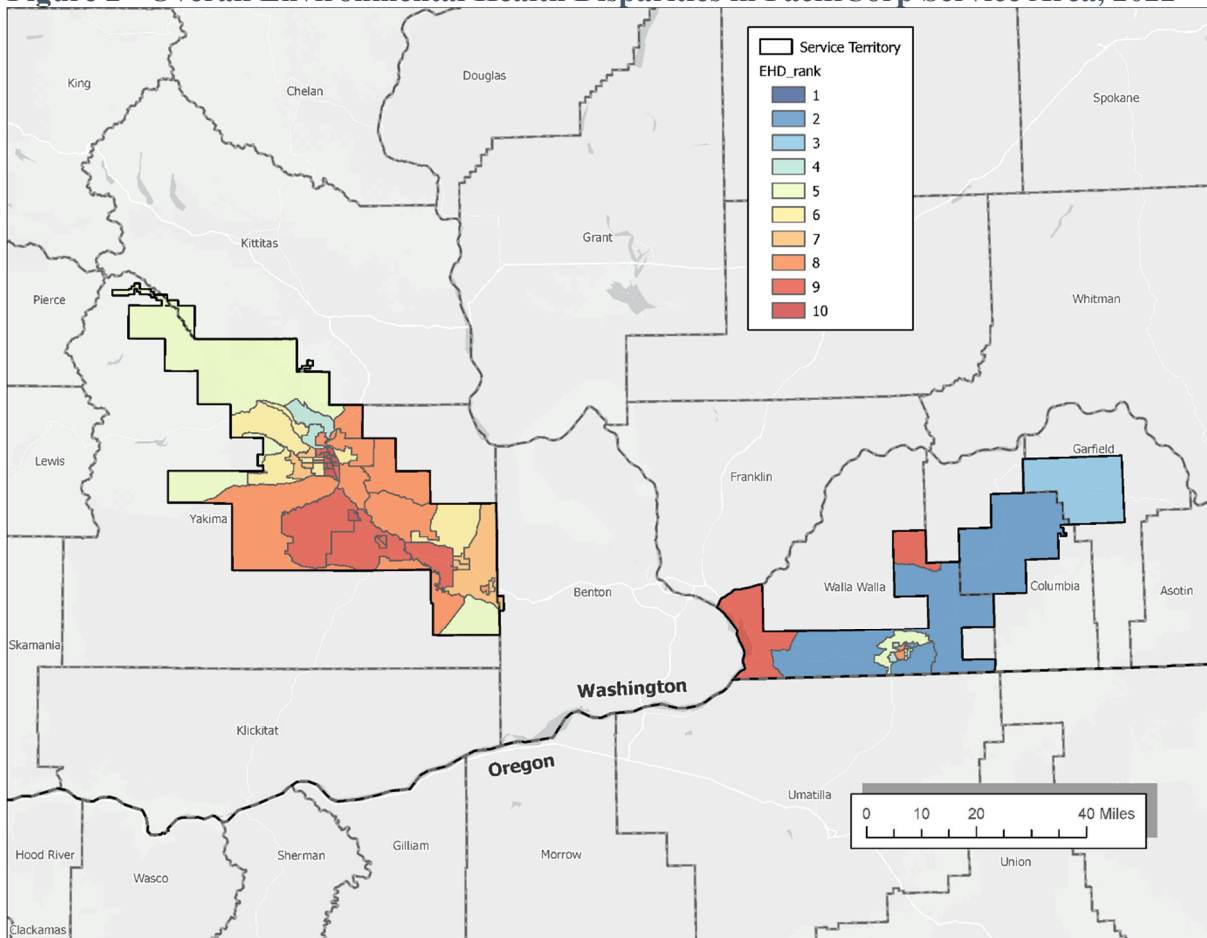
<sup>12</sup> [https://doh.wa.gov/sites/default/files/2022-07/311-011-EHD-Map-Tech-Report\\_0.pdf?uid=634dcf4aec2b5](https://doh.wa.gov/sites/default/files/2022-07/311-011-EHD-Map-Tech-Report_0.pdf?uid=634dcf4aec2b5)

<sup>13</sup> [https://doh.wa.gov/sites/default/files/2022-07/311-011-EHD-Map-Tech-Report\\_0.pdf?uid=634dcf4aec2b5](https://doh.wa.gov/sites/default/files/2022-07/311-011-EHD-Map-Tech-Report_0.pdf?uid=634dcf4aec2b5)

**Figure 1 - Overall Environmental Health Disparities in PacifiCorp Service Area, 2021**



**Figure 2 - Overall Environmental Health Disparities in PacifiCorp Service Area, 2022**



To enable evaluation of metric changes over time, PacifiCorp updated its analysis of most HIC and non-HIC baseline values using the updated designations from the WDOH. For this reason, some metric values in this progress report do not match the values presented in the draft CEIP filing.

### *Activity on Tribal Lands*

PacifiCorp’s draft CEIP filing provides several baseline metrics for named communities, which include HICs and 22 vulnerable populations. Metrics are also provided for all Washington customers. This granularity is intended to track the distribution of benefits across the named communities cited in the CETA legislation. The EAG provided feedback that, although Tribal lands are included as a subset of HICs, reporting DSM participation and expenditures specifically for Tribal lands would provide valuable transparency.

In response to this EAG input, PacifiCorp modified its metrics tables for DSM participation and expenditures to show activity on Tribal lands as a separate category. Where readily available, PacifiCorp provided this same granularity in other tables. It’s important to note that “Tribal lands” does not equate to Tribal member participation. Calculation of these metrics are based on

whether customers are located within the Yakama Indian Reservation and not based on customer specific demographic information. PacifiCorp will continue to work with our EAG and other stakeholders to improve the presentation of our CBI metrics.

***CEIP Customer Survey***

PacifiCorp uses data from a survey of its residential customers to calculate metric values for vulnerable population groups that are not identified in its customer database or other data resources. Ahead of the 2023 Survey, PacifiCorp reviewed its survey methodology with its EAG to identify opportunities to achieve better representation of hard-to-reach customer groups in the survey sample. The EAG suggested several modifications to the survey implementation approach, which PacifiCorp adopted. These changes, summarized in Table 3, included:

- Incorporating phone surveys for customers that did not have an email address;
- Adding a small financial incentive (entry into a drawing for one of five \$100 VISA gift cards); and
- Using email and social media to notify customers about the survey before issuing the survey invitation.

**Table 3 – Summary of Survey Methodology Changes from 2021 to 2023**

	<b>2021 Survey</b>	<b>2023 Survey</b>
<b>Modes</b>	<ul style="list-style-type: none"> <li>▪ Online</li> </ul>	<ul style="list-style-type: none"> <li>▪ Online</li> <li>▪ Phone</li> </ul>
<b>Language</b>	<ul style="list-style-type: none"> <li>▪ English</li> <li>▪ Spanish</li> </ul>	<ul style="list-style-type: none"> <li>▪ English</li> <li>▪ Spanish</li> </ul>
<b>Recruitment</b>	<ul style="list-style-type: none"> <li>▪ Email survey invite</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pre-notice email and social media posts</li> <li>▪ Email survey invite</li> <li>▪ Phone survey invite</li> </ul>
<b>Incentive</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>	<ul style="list-style-type: none"> <li>▪ Drawing for \$100 VISA gift cards (5)</li> </ul>
<b>Responses</b>	<ul style="list-style-type: none"> <li>▪ 3,591</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3,750 (3,450 online and 300 phone)</li> </ul>

While the impacts of these methodological changes are difficult to measure, survey results provide some indication that these changes were effective. For example, the proportion of Hispanic or Latino respondents to the 2021 Survey was 14.8%, whereas for the 2023 Survey it was 19.9%.

Though PacifiCorp achieved better representation of Hispanic or Latino groups in 2023 than in prior years, the income distribution of survey respondents continued to indicate oversampling of higher-income customers. As in 2021, PacifiCorp weighted survey results by income to reflect the income distribution in our service territory from the ACS. In addition, PacifiCorp weighted responses according to survey mode (online or phone) to account for the stratified sampling for customers with email addresses (invited to the online survey) and customers without (included in the sample for the phone survey).

ii. 2022 Results

PacifiCorp’s interim CBIs and metrics are shown in Table 4. To improve the clarity of the CBIs, the Company has added the intended directionality to the wording of each CBI. Following the table are the 2022 results for each CBI and metric, and a comparison to the baseline results.

**Table 4 - PacifiCorp Interim CBIs and Metrics**

<b>CBI</b>	<b>Benefit Categories</b>	<b>Metric(s)</b>
Increase culturally and linguistically responsive outreach and program communication	<ul style="list-style-type: none"> <li>▪ Reduction of burdens</li> <li>▪ Non-energy benefit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Outreach in non-English languages</li> <li>▪ Percentage of responses to surveys in Spanish</li> </ul>
Increase community-focused efforts and investments	<ul style="list-style-type: none"> <li>▪ Non-energy benefit</li> <li>▪ Reduction of burden</li> <li>▪ Public health</li> </ul>	<ul style="list-style-type: none"> <li>▪ Workshops on energy related programs</li> <li>▪ Headcount of staff supporting program delivery in Washington who are women, minorities, and/or can show disadvantage<sup>14</sup></li> <li>▪ Number of public charging stations in named communities</li> </ul>
Increase participation in company energy and efficiency programs and billing assistance programs	<ul style="list-style-type: none"> <li>▪ Cost reduction</li> <li>▪ Reduction of burden</li> <li>▪ Non-energy benefit</li> <li>▪ Energy benefit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of households/businesses, including named communities, who participate in company energy/efficiency programs</li> <li>▪ Percentage of households that participate in billing assistance programs</li> <li>▪ Number of households/businesses who participate/enroll in demand response, load management, and behavioral programs</li> </ul>
Improve efficiency of housing stock and small businesses, including low-income housing	<ul style="list-style-type: none"> <li>▪ Energy benefit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of households and small businesses that participate in company energy/efficiency programs</li> <li>▪ Energy efficiency expenditures<sup>15</sup></li> </ul>
	<ul style="list-style-type: none"> <li>▪ Environmental</li> </ul>	<ul style="list-style-type: none"> <li>▪ Amount of renewables/non-emitting resources serving Washington</li> </ul>

<sup>14</sup> In this metric, program delivery is defined as related to energy efficiency programs, with exception to the LIWX program

<sup>15</sup> Energy efficiency expenditures include customer, partner, and direct install incentive payments and exclude all other administrative or program costs.



Increase renewable energy resources and emissions		<ul style="list-style-type: none"> <li>Washington allocated greenhouse gas emission from Washington allocated resources</li> </ul>
Decrease households experiencing high energy burden	<ul style="list-style-type: none"> <li>Cost Reduction</li> <li>Reduction of burden</li> </ul>	<ul style="list-style-type: none"> <li>Number of customers experiencing high energy burden by: highly impacted communities, vulnerable populations, low-income bill assistance (LIBA) and Low-Income Weatherization (LIWX) participants, and other residential customers</li> </ul>
Improve indoor air quality	<ul style="list-style-type: none"> <li>Public health</li> <li>Non-energy benefit</li> </ul>	<ul style="list-style-type: none"> <li>Number of households using wood as primary or secondary heating</li> <li>Non-electric to electric conversions for LIWX program</li> </ul>
Reduce frequency and duration of energy outages	<ul style="list-style-type: none"> <li>Energy resiliency</li> <li>Risk reduction</li> <li>Energy benefit</li> </ul>	<ul style="list-style-type: none"> <li>SAIDI, SAIFI, and CAIDI* at area level including and excluding major events</li> </ul>
Reduce residential customer disconnections	<ul style="list-style-type: none"> <li>Energy security</li> </ul>	<ul style="list-style-type: none"> <li>Number of residential customer disconnections including disconnections within named communities</li> </ul>

\*System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), Customer Average Interruption Duration Index (CAIDI)

### *Increase culturally and Linguistically Responsive Outreach and Program Communication*

The purpose of this CBI is to more appropriately engage with customers to reduce burdens and increase non-energy benefits for Washington customers. For this CBI, PacifiCorp is tracking outreach in non-English languages and the percentage of PacifiCorp survey responses received in Spanish. These metrics capture the breadth and effectiveness of our outreach in languages other than English and our ability to receive feedback from customers that prefer languages other than English.

Table 5 shows the programs and topics for which PacifiCorp conducted outreach in a non-English language in 2020 and 2022, with the number of communication channels used for each. Several topics were addressed through non-English communications in 2020. PacifiCorp added two additional topics in 2022 – translating the Energy Resource Center page on our website and providing outreach on our CEIP activity in Spanish. In addition, PacifiCorp increased the number of different channels used to communicate to Spanish-language speakers for most topics. All non-English outreach in both years was communicated in Spanish.

**Table 5 – Non-English Communication Channels Used, by Program or Topic**

<b>Program or Topic</b>	<b>Language</b>	<b>2020</b>	<b>2022</b>
Billing Options / Customer Service	Spanish	4	1
Energy Assistance (LIBA)	Spanish	5	10
Wattsmart Residential	Spanish	3	9
Wattsmart Business	Spanish	3	9
Energy Efficiency Education	Spanish	1	1
Wildfire Safety/Resilience	Spanish	1	3
Safety/Preparedness	Spanish	1	3
Planning for the Future (Brand Assurance)	Spanish	2	4
Energy Resource Center	Spanish	0	1
Regulatory/CEIP	Spanish	0	2
<b>Total</b>		<b>17</b>	<b>43</b>

PacifiCorp also tracked impressions, or similar units, for our advertising and promotion activity for energy efficiency programs (not including LIWX) by channel, as shown in Table 6. Since 2020, the Company has expanded the types of communication channels, as well as the specific placements within each channel. For example, radio selections in 2022 included NPR live reads, and advertisements on Spanish-language channels, rather than only primarily placing advertisements on English-language channels. These changes make it challenging to track the reach (i.e., impressions, spots, emails, etc.) of each channel in a consistent way over time. However, it is likely that for several channels the total number of impressions from DSM advertisements has decreased since some newer placements, such as Spanish radio stations, have a smaller audience than previous placements. PacifiCorp considers this decrease acceptable since it accompanies a strategy to extend outreach to customer groups that may not have been well-served by previous communication strategies.

**Table 6 – Energy Efficiency Program Communications Impressions**

<b>Channel</b>	<b>2020</b>	<b>2022</b>
Social media ads (Facebook, Instagram, and/or Twitter)	4,442,397 impressions	1,891,133 impressions
Online advertising or digital display	7,378,735 impressions	3,533,851 impressions
Television	971,646 impressions	450 spots
Radio	8,617,814 impressions	825 target rating points
Newspaper/Magazine	854,312 impressions	200,000 readers and 7,000 subscribers
Email	115,165 emails	300,000 emails
Direct mail	5,142 pieces	5,000 pieces
Cinema screens	<i>Not used</i>	12 screens
Bill Inserts	<i>Not used</i>	60,000 pieces

PacifiCorp has consistently improved engagement with Spanish-speaking customers and customers in HICs for Company survey activities since 2019, as shown in Table 7. These improvements have occurred as PacifiCorp has improved its outreach approach by issuing email invitations conducting pre-survey notifications in Spanish via email and social media, conducting surveys over the phone and online in English and Spanish, and adding incentives to encourage broader participation.

**Table 7 - Percentage of Spanish Version Respondents to PacifiCorp Surveys**

Year	Survey Title	HIC <sup>[1]</sup>		All Customers	
		Count	Percent	Count	Percent
2019	Residential Survey, Spanish Version	18	2.9%	42	1.2%
2021	Residential Survey, Spanish Version	31	5.2%	68	1.9%
	CETA Public Survey, Spanish Version	Unknown	Unknown	133	6.2%
2023	CETA Public Survey, Spanish Version	72	10.7%	126	3.4%

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

***Increase Community-Focused Efforts and Investment***

The purpose of this CBI is to focus on clean energy investments, so communities more equitably receive benefits. To evaluate this CBI, PacifiCorp tracks three metrics:

- The number of program workshops delivered, and the proportion of those workshops delivered in HICs.
- The number of staff offering our energy efficiency programs that are disadvantaged
- The number of public electric-vehicle (EV) chargers in Pacific Power’s Washington service area and proportion in HICs.

Table 8 shows the number of workshops PacifiCorp or its contractors delivered in HIC and non-HIC locations for 2020 and 2022. Similar to 2020, workshops delivered in 2022 included two annual Wattsmart Business vendor program trainings. However, in 2022, PacifiCorp expanded the number and subject of workshops it offered. The 2022 workshops also included Clean Building Accelerator training workshops (a series of four for a defined cohort of businesses), Clean Building Accelerator informational “coffee chats” (seven), a presentation at a Clean Buildings Roundtable hosted by the Yakima County Development Association (one), and workshops on residential program offerings for employees at fruit packing plants (five). The Clean Building Accelerator workshops and coffee chats were hosted online, with participants reporting they attended from both HIC and non-HIC locations. (See Table 20 in Appendix 1 for workshop details.)

**Table 8 - Workshops on Energy Related Programs in Washington**

<b>Location</b>	<b>2020</b>	<b>2022 <sup>[1]</sup></b>
HIC Location	1	13
Non-HIC Location	1	17
<b>Total</b>	<b>2</b>	<b>19</b>

<sup>[1]</sup> In 2022, Pacific Power hosted 11 online workshops that were counted as both HIC and non-HIC locations, based on the location of the participants.

In addition to tracking workshops, PacifiCorp also tracked the number of staff from disadvantaged groups supporting program delivery for Home Energy Savings and Wattsmart Business energy efficiency programs in Washington. The headcounts are based on third-party program delivery staff who are customer and vendor/trade ally-facing (either in person, via email/mail, web meeting, or phone) and are focused on engaging customers in outreach, technical and back-office functions. Programs experienced a decrease of two employees characterized as disadvantaged over the 2020 – 2022 timeframe.

**Table 9 - Number of Staff from Disadvantaged Groups Supporting Program Delivery in Washington**

<b>Disadvantaged Group</b>	<b>All Employees/ Staff</b>	
	<b>2020</b>	<b>2022</b>
Women	17	15
Minority	3	3
Can show disadvantage in some other way	1	1
<b>Total</b>	<b>21</b>	<b>19</b>

Table 10 shows the number of public EV chargers in the Company’s Washington service area in 2020 and 2022, broken out by census tracts on Tribal lands (a subset of HIC tracts), census tracts designated HIC or non-HIC, and for all service area. The Company has made significant progress in the development of EV programs; however, the small increase in 2022 does not yet reflect Pacific Power EV program activity. During 2022 and 2023, the Company developed a Transportation Electrification Plan (TEP) consisting of a portfolio of programs that address multiple customer segments and barriers to EV adoption. The TEP is designed to enable a rapid transition to EVs and to distribute benefits equitably across all customer segments. The TEP was acknowledged in October 2022 and the Company anticipates programs will launch in third quarter of 2023.

**Table 10 - Public Charging Stations in Washington Service Area<sup>16</sup>**

<b>Area</b>	<b>October 2021</b>	<b>May 2023</b>
All HIC <sup>[1]</sup>	4	10
Tribal Lands	0	3
Non-HIC	37	40
<b>Total Service Area</b>	<b>41</b>	<b>50</b>

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

***Increase Participation in Company Energy and Efficiency Programs and Billing Assistance Programs***

PacifiCorp has existing programs designed to lower customer energy costs and reduce energy burden, and they also provide energy and non-energy benefits. In its draft CEIP, PacifiCorp committed to several actions such as increasing funding or expanding programs to address issues raised by the EAG, such as the availability of repair funding under the LIWX Program. Since filing its draft CEIP, all energy program-related actions are either completed or ongoing (see Specific Actions, Chapter 3). The 2022 results for PacifiCorp’s metrics under this CBI show significant increase in most cases, which is an indicator that PacifiCorp’s activity is driving greater participation in energy programs and investment in named communities.

As shown in Table 11, from 2020 to 2022, participation in each of PacifiCorp’s energy efficiency programs increased in almost all cases, especially among HIC customers. Table 12 shows the program expenditures, calculated as the incentives to customers and participating vendors, which also increased substantially year over year. Participation by all customers in Wattsmart Business is the only participation metric that decreased from 2020 to 2022. However, the total expenditures from Wattsmart Business increased for all three groups – Tribal customers, all HIC customers, and all customers.

**Table 11 - Number of Households and Businesses Who Participate in Energy Efficiency Programs<sup>a</sup>**

<b>Energy / Efficiency Program</b>	<b>Tribal Lands</b>		<b>All HIC</b>		<b>All Customers</b>	
	<b>2020</b>	<b>2022</b>	<b>2020</b>	<b>2022</b>	<b>2020</b>	<b>2022</b>
LIWX	4	16	11	29	40	140
Home Energy Savings <sup>b</sup>	27	48	103	317	976	2,499
Wattsmart Business <sup>c</sup>	13	13	61	86	221	189
Wattsmart Small Business	1	18	22	105	43	137
“Very small”: <30,000 annual kWh	0	4	10	37	19	45
“Small”: 30,000- 145,000 annual kWh	0	12	12	58	24	75

<sup>16</sup> Source: US. Department of Energy, Alternative Fuels Data Center, Alternative Fuels Data Center: Electric Vehicle Charging Station Locations (energy.gov). May 2023.

“Small”: 145,000 - 200,000 annual kWh	N/A	2	N/A	10	N/A	17
<b>Total</b>	<b>45</b>	<b>95</b>	<b>197</b>	<b>537</b>	<b>1,280</b>	<b>2,965</b>

<sup>a</sup> This number represents the count of unique participants at the site-level.

<sup>b</sup> Includes all installed measure categories except for energy kits and the lighting buy-down.

<sup>c</sup> The Wattsmart Business program listed includes midstream lighting (Lighting Instant Incentive).

**Table 12 – Amount of Expenditures from Energy Efficiency Programs<sup>a</sup>**

Energy / Efficiency Program	Tribal Lands		All HIC		All Customers	
	2020	2022	2020	2022	2020	2022
Low-Income Weatherization	\$23,805	\$89,449	\$78,756	\$160,076	\$295,907	\$637,517
Home Energy Savings <sup>a</sup>	\$5,350	\$88,647	\$83,968	\$305,915	\$855,941	\$1,619,949
Wattsmart Business <sup>b</sup>	\$22,392	\$279,391	\$892,458	\$2,048,657	\$2,485,993	\$3,455,821
Wattsmart Small Business	\$1,400	\$179,212	\$105,182	\$1,462,492	\$228,158	\$1,827,348
“Very small”: <30,000 annual kWh	N/A	\$22,380	N/A	\$213,674	N/A	\$263,234
“Small”: 30,000-145,000 annual kWh	N/A	\$124,594	N/A	\$833,304	N/A	\$996,981
“Small”: 145,000 - 200,000 annual kWh	N/A	\$32,238	N/A	\$415,515	N/A	\$567,133
<b>Total</b>	<b>\$52,947</b>	<b>\$636,699</b>	<b>\$1,160,364</b>	<b>\$3,977,141</b>	<b>\$3,865,999</b>	<b>\$7,540,635</b>

<sup>a</sup> This number represents the count of unique participants at the site-level.

<sup>b</sup> Includes all installed measure categories except for energy kits and the lighting buy-down.

<sup>c</sup> The Wattsmart Business program listed includes midstream lighting (Lighting Instant Incentive).

Table 13 shows participation results for behavioral programs, and demand response and load management programs. Participation in the Home Energy Reports program (HER), PacifiCorp’s residential behavioral program, decreased slightly from 2020 to 2022, for both HIC customers and overall. This modest decline represents normal attrition over time as customers move or drop out of the program. To protect the statistical rigor of the program, new participants must be added in structured waves of treatment (participant) and control (nonparticipant) groups. PacifiCorp is planning a new wave in 2023, for which it is targeting 20,000 customers in Washington. This is intended to back fill attrition since the last wave in 2021 and expand participation above the original participant count. Because HER does not offer customer incentives, the expenditures from the program remained at \$0 for both years.

There were two participants and zero incentives expended in load management and demand response programs in 2022. From 2020 to 2022, the Company made substantial progress in this area. The WUTC approved the Irrigation Load Control program on August 25, 2022, and the Commercial and Industrial Demand Response program on January 16, 2023. Both programs had launched and begun signing up participants as of this filing. In addition, the Company submitted

a filing for a residential demand response program on May 19, 2023, with an anticipated effective date in 2023.

**Table 13 - Number of Households and Businesses Who Participate in Demand Response, Load Management, and Behavioral Programs**

Program	Unit	HIC		All	
		2020 <sup>[1]</sup>	2022	2020	2022
Behavioral (Home Energy Reports) <sup>[2]</sup>	Count	14,859	13,187	53,102	48,518
	Expenditures	n/a	n/a	n/a	n/a
Demand Response / Load Management	Count	0	0	0	2
	Expenditures	\$0	\$0	\$0	\$0

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

<sup>[2]</sup> The Home Energy Reports program does not offer direct customer incentives.

PacifiCorp’s proposed modifications to the eligibility requirements and benefits for LIBA went into effect in August 2021. Changes included removing the enrollment cap and applying the discount rate to the total net amount billed, rather than only usage in excess of 600 kWh. As shown in Table 14, participation in LIBA increased substantially from 2020 to 2022. The estimated percentage of eligible households that participated in 2022 showed a corresponding increase, ranging from 9 to 14 percentage points across the three groups.

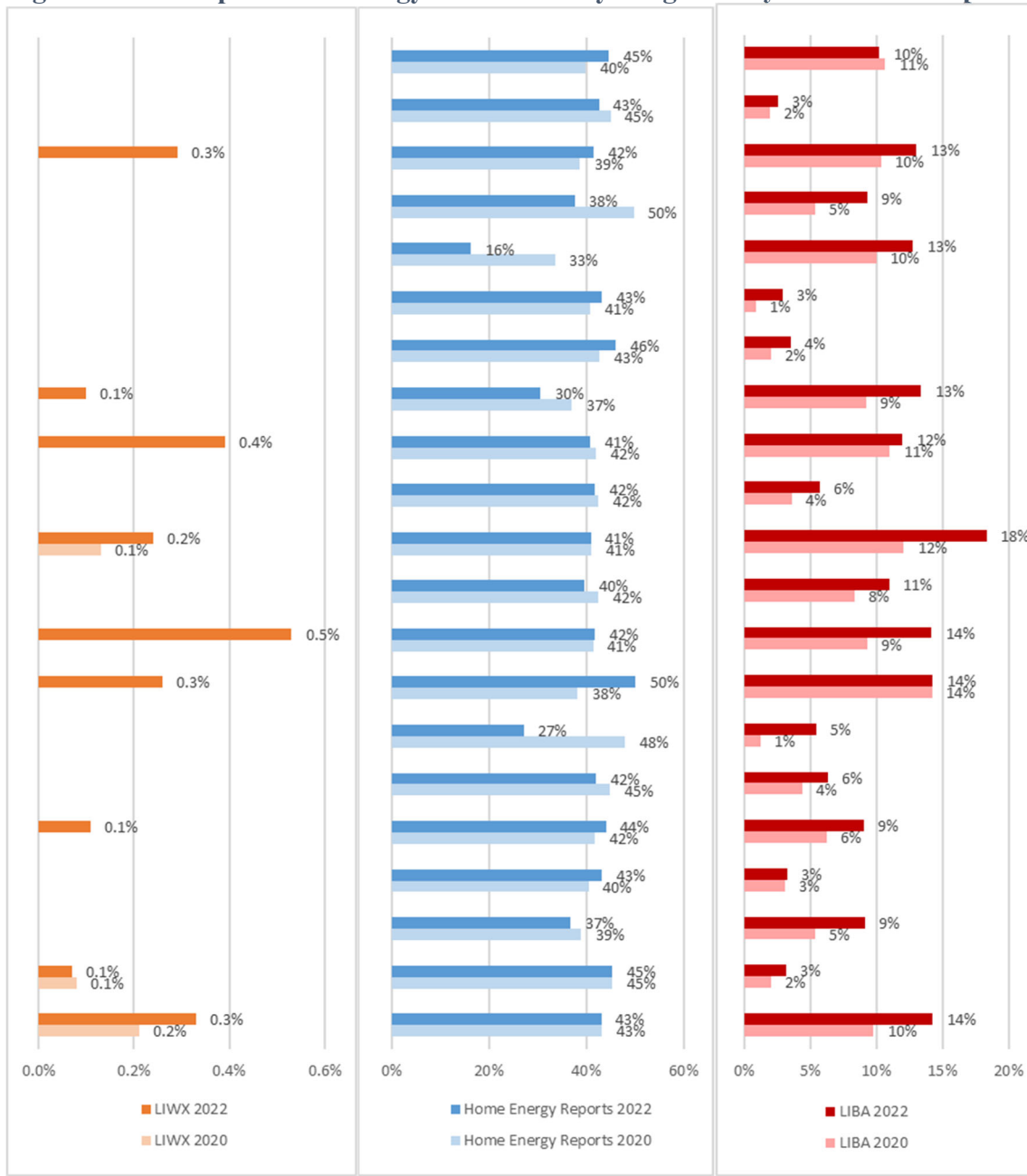
**Table 14 - Percentage of Households Who Participate in LIBA**

	Tribal Lands		All HIC		All	
	2020	2022	2020 <sup>[1]</sup>	2022	2020	2022
Participating Households	686	875	2,739	4,358	5,954	9,103
Percent of Eligible Households	25.5%	35.0%	21.3%	35.3%	20.2%	30.9%

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

**Error! Reference source not found.** shows energy efficiency and bill assistance participation by vulnerable population. These results are based on survey responses that identify members of specific vulnerable populations, merged with program tracking data to determine the proportion of each population that participated in a specific program. The 2020 to 2022 trends among vulnerable populations generally corresponded to trends among all customers, showing increasing participation by most groups in each program. Of note, low response rates can produce unreliable results for vulnerable populations with small sample sizes. As such, analysis for LIWX participation is unreliable due to the low response rate in the 2023 CETA survey (1 of 3,750 respondents (0.1%)). As a comparison, the HES response rate is higher (179 of 3,750 respondents (4.8%)).

**Figure 3 - Participation in Energy and Efficiency Programs by Vulnerable Populations, 2020 and 2022<sup>[1]</sup>**



<sup>[1]</sup> Vulnerable Population People Living in Different Land Statuses have been excluded from Figure 1 given unavailability of data.



*Improve Efficiency of Housing Stock and Small Businesses, including Low-Income Housing*

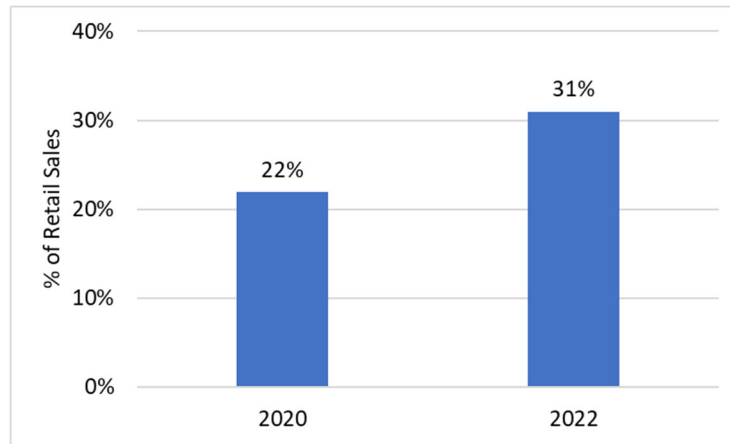
Energy efficiency is an important non-emitting resource available to PacifiCorp, allowing customers to lower bills and gain non-energy benefits, such as a more comfortable home environment. In addition to program participation rates, PacifiCorp is tracking program incentive expenditures for HIC and all customers, to monitor this CBI. See Table 11 and Table 12 above.

*Increase Renewable Energy Resources and Emissions*

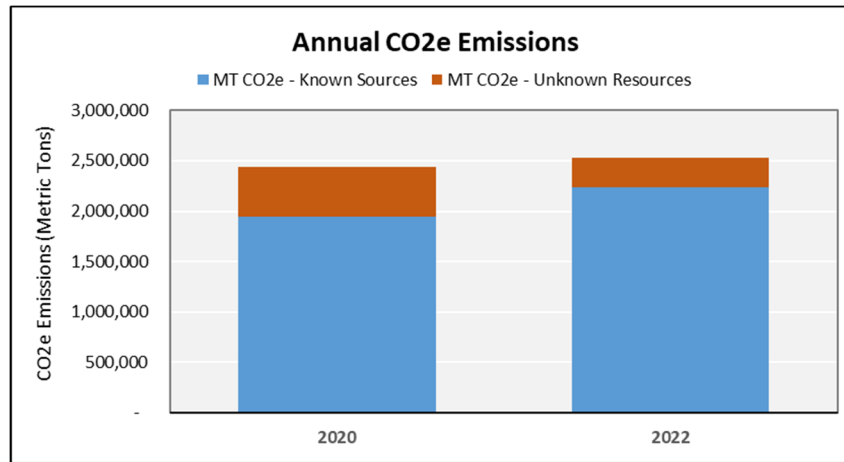
As shown in Figure 4, PacifiCorp’s renewable and non-emitting electricity as a percentage of Washington retail sales increased from 22% in 2020 to 31% in 2022. This increase is attributed to Washington customers being allocated more of PacifiCorp’s system renewables as the result of a change in cost allocation methodology that was effective 2021.

Although counter intuitive, emissions increased slightly from 2020 to 2022 by three percent even though the proportion of Washington retail sales served by renewables increased. The emissions are directly related to the thermal resources cost allocated to Washington which has not changed under the WIJAM but the allocation of renewables to Washington has increased.

**Figure 4 - Washington Percentage of Retail Sales Served by Renewable and Non-Emitting Energy Resources**



**Figure 5 - Washington Allocated Greenhouse Gas Emission from Washington Allocated Resources Per RCW 19.405.070 and WAC 194-40-060**



***Decrease Households Experiencing High Energy Burden***

According to the American Council for an Energy-Efficient Economy (ACEEE), households with high energy burden are those that spend a disproportionate amount of their income, six percent or more, on home energy costs.<sup>17</sup> Energy burden is calculated as the average annual housing energy costs divided by the average annual household income. PacifiCorp relied on survey data and census data to estimate energy burden for different subgroups of customers. In aggregating these results and aligning them with our service area, PacifiCorp excluded natural gas expenditures.

Table 15 shows the mean energy burden, and the number and percent of customers experiencing high energy burden (energy burden above 6 percent) among customers living in HICs, customers living on Tribal lands, LIBA participants, LIWX participants and all customers, in 2020 and 2022. For all groups, both the mean energy burden and the percentage of customers with high energy burden decreased from 2020 to 2022. This change is correlated with increasing participation in PacifiCorp programs designed to increase efficiency, reduce energy usage, and reduce energy bills. Figure 6 shows the number and percentage of customers within each vulnerable population experiencing high energy burden in 2020 and 2022. Trends within vulnerable populations are more varied. Of 21 vulnerable populations PacifiCorp was able to track, 12 exhibited declines in the number and percent of customers experiencing high energy burden (See Table 21 in Appendix 1 for additional detail for vulnerable populations).

<sup>17</sup> Drenhobl, Ariel, Ross, Lauren, and Ayala, Roxana. How High Are Household Energy Burdens?: An Assessment of National and Metropolitan Energy Burden across the United States. ACEEE: September 2020. Available online: <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>

**Table 15 – Customers Experiencing High Energy Burden for Washington Service Area<sup>[1]</sup>**

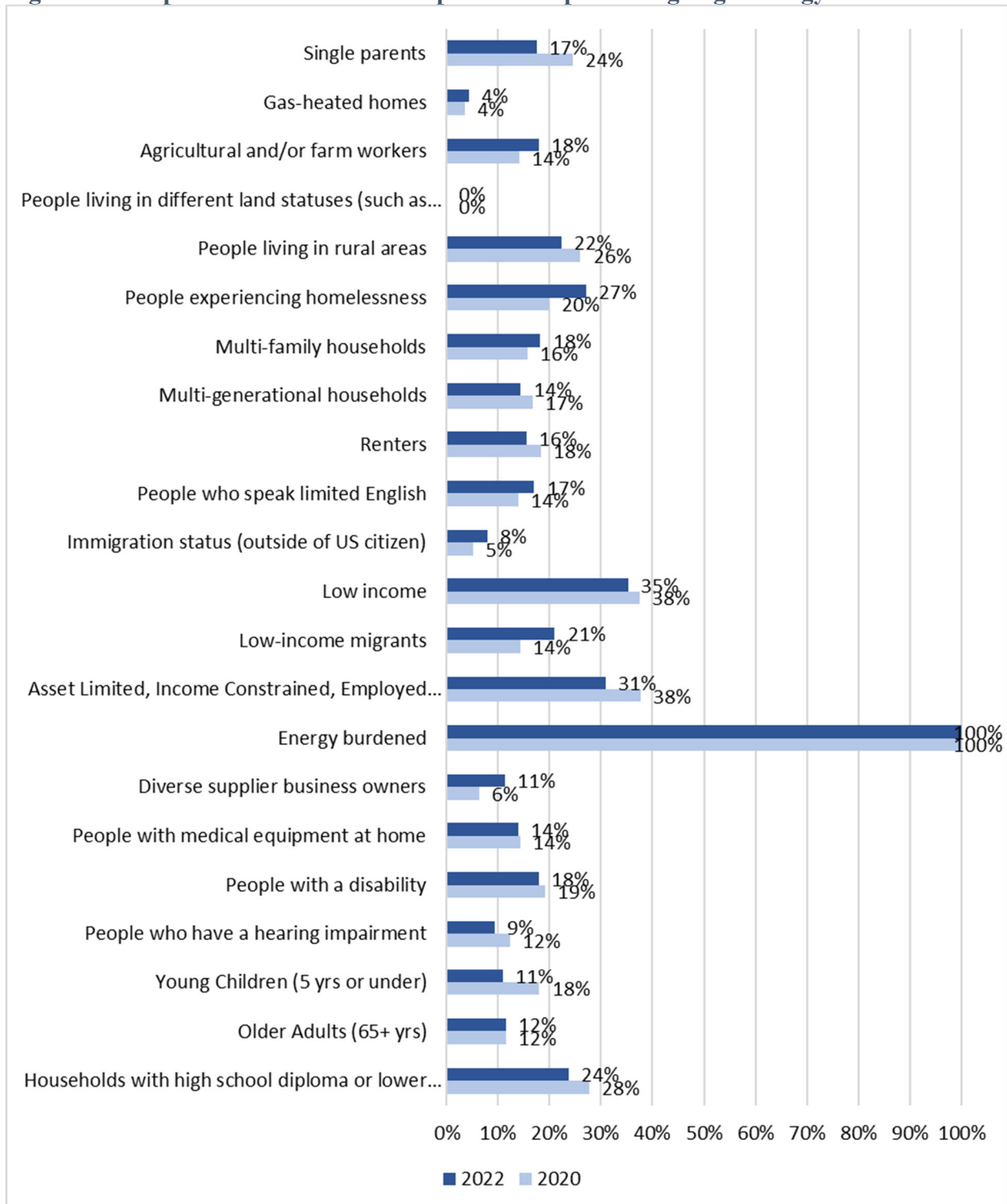
Population	2020			2022		
	Mean Energy Burden (%)	Number	Percent	Mean Energy Burden (%)	Number	Percent
All HIC <sup>[1][2]</sup>	4.7%	6,471	21.3%	4.0%	5,368	17.4%
Tribal Lands	6.1%	2,103	30.0%	4.1%	1,356	19.1%
LIBA Participants <sup>[3]</sup>	5.7%	1,676	28.1%	4.9%	2,054	22.6%
LIWX Participants <sup>[3]</sup>	7.8%	20	51.2%	6.4%	56	39.7%
All Customers	3.7%	14,750	13.2%	3.4%	12,445	11.0%

<sup>[1]</sup> Sources: PacifiCorp Residential Survey (2021) and CETA Public Survey (2023) for self-reported household income; customer billing records from 2020 and 2022.

<sup>[2]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EDH in July 2022.

<sup>[3]</sup> Implementation agencies for LIBA and LIWX provided PacifiCorp with a sample of verified household income levels for 2020 participants and 2022 participants. PacifiCorp also used customer billing records from 2020 and 2022.

**Figure 6 – Proportion of Vulnerable Population Experiencing High Energy Burden<sup>[1]</sup>**



<sup>[1]</sup> Vulnerable population People Living in Different Land Status excluded due to unavailability of data.

*Improve Indoor Air Quality*

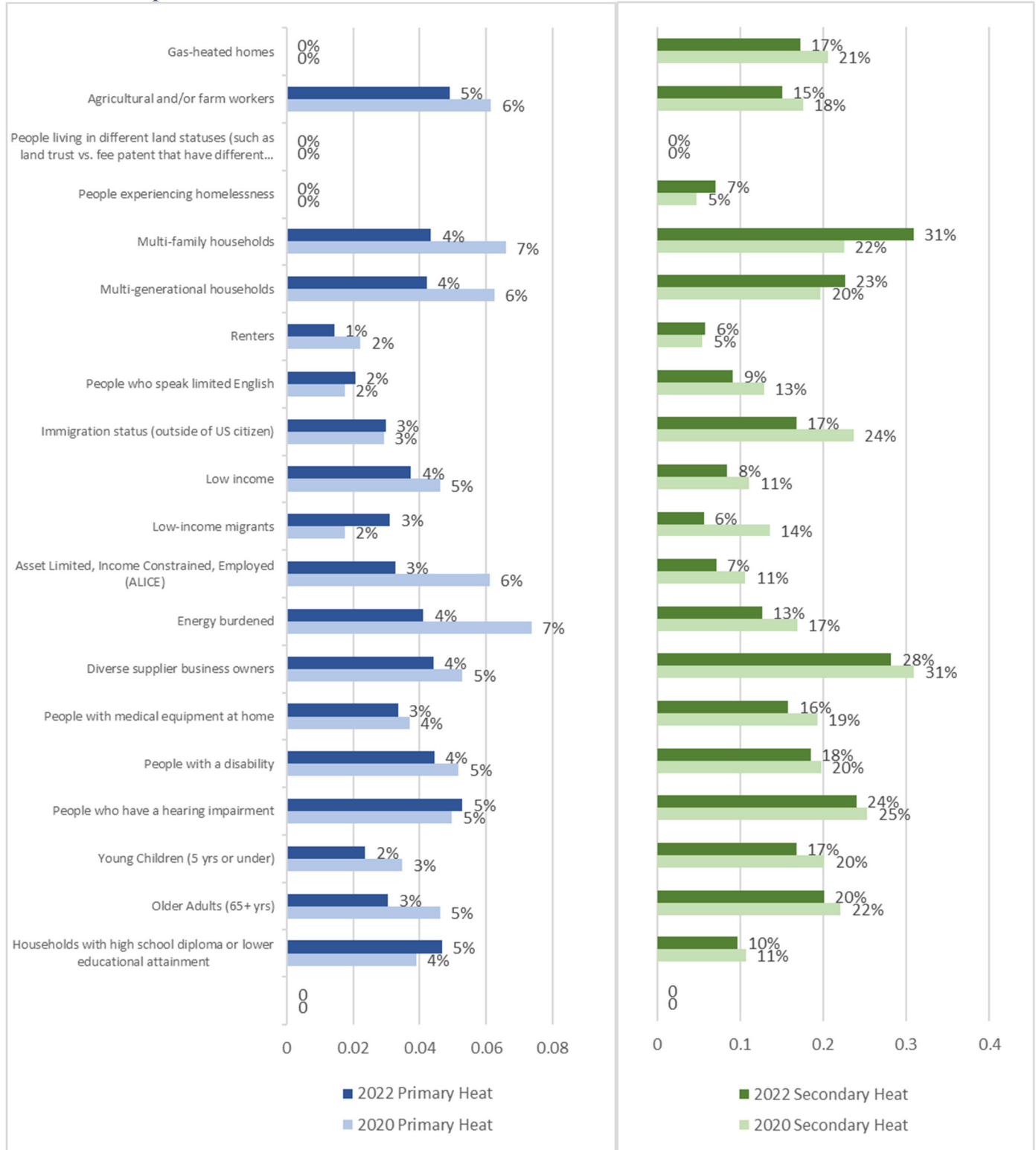
PacifiCorp identified wood heating, and its associated indoor air quality impacts, as a public health threat for vulnerable populations in the Washington service area. Table 16 shows that, at the level of HICs and all households, use of wood as either a primary or secondary heating fuel dropped from 2020 to 2022. For households on Tribal lands, the percentage of homes using wood as a primary fuel increased, but the percentage using wood as a secondary fuel declined.

As with other metrics, vulnerable populations exhibited mixed results. As shown in Figure 7, use of wood as a primary heating fuel decreased for 13 of the 21 vulnerable populations. Use of wood as a secondary fuel decreased for 17 of 21 vulnerable populations. Although PacifiCorp 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. Going forward, PacifiCorp plans to increase the incentive for customers in HICs to increase the rate of decommissioning for wood heating equipment in these communities. (Additional detail for this metric is shown in Table 22, in Appendix 1.)

**Table 16 - Number of Households Using Wood as Primary or Secondary Heating Source**

Segment	2020			2022		
	Pop.	Primary Heat	Secondary Heat	Pop.	Primary Heat	Secondary Heat
HICs	30,450	3.6%	13.1%	30,815	2.9%	8.7%
Tribal Lands	7,003	4.2%	22.5%	7,087	6.2%	15.0%
All Households	112,000	4.2%	20.3%	113,342	3.4%	17.7%

**Figure 7 – Percentage of Households Using Wood as Primary or Secondary Heating Source, by Vulnerable Populations<sup>[1]</sup>**



<sup>[1]</sup> Vulnerable Population People Living in Different Land Statuses has been excluded given unavailability of data.

The Company is also tracking the number of homes that are converted from heating with non-regulated combustion fuels such as propane, oil or wood, to electric heat through the LIWX Program. In 2020, customers with non-electric heating did not qualify for a heating system conversion under Schedule 114, which controls the eligible measures through the program. In February 2022, Schedule 114 was modified to allow this conversion. As shown in Table 17, no projects were completed by the end of 2022. At the time of this filing, the Company has two potential projects that are being assessed and depending on project specifics, could be completed in 2023.

**Table 17 - Non-Electric to Electric Heating Conversion for LIWX Program**

	Tribal Lands		All HIC		All	
	2020	2022	2020	2022	2020	2022
Number of Households Converted	0	0	0	0	0	0
Percent of Households Converted	0%	0%	0%	0%	0%	0%

***Reduce Frequency and Duration of Energy Outages***

The frequency and duration of energy outages can signify the resilience and quality of the electricity system. To measure this, PacifiCorp will use existing industry measurements:

- **System Average Interruption Duration Index (SAIDI):** The average outage duration for each customer served
- **System Average Interruption Frequency Index (SAIFI):** The average number of interruptions a customer may experience
- **Customer Average Interruption Duration Index (CAIDI):** The average outage duration any given customer would experience

PacifiCorp calculated these metrics for both High Impact Communities (HIC) and non-High-Impact Communities (non-HIC), both including major events (ME) and excluding ME in Washington. Typically, including MEs can indicate the system’s resilience while excluding MEs can indicate reliability. PacifiCorp calculated these metrics over an extended timeframe to measure resilience and reliability over a long period of time to account for weather and other miscellaneous events that can skew values. PacifiCorp compared a rolling 7-year average for each metric, both including and excluding MEs, as shown in Table 20. PacifiCorp calculated these metrics for each census tract in Washington at the transformer level. This data was aggregated to each tract using geospatial software and total customer minutes interrupted (CMI) and customers interrupted (CI) were calculated for each tract. Once aggregated, PacifiCorp calculated SAIDI, SAIFI, and CAIDI on an annual basis for HIC and non-HIC census tracts. In addition, a state-wide average was calculated per year to gauge the performance of HIC versus non-HIC tracts against the state.

Deviations in scores provided in Table 20 are a result of the annual variations in reliability attributable to changes in weather and other outage drivers.

Of note, PacifiCorp has updated its methodology for calculating SAIDI, SAIFI and CAIDI metrics within this filing from its draft 2021 CEIP filing. PacifiCorp updated its methodology to be consistent with reliability metric calculations in Oregon for the Clean Energy Plan (CEP). As a result, values for the average from 2014-2020 may be different from equivalent values in the draft CEIP filing.

**Table 18. SAIDI, SAIFI, and CAIDI Seven-Year Averages**

Score	Non-HIC			HIC			WA		
	Avg. 2014-2020	Avg. 2016-2022	Change	Avg. 2014-2020 <sup>[1]</sup>	Avg. 2016-2022	Change	Avg. 2014-2020	Avg. 2016-2022	Change
SAIDI ME Included	197.38	200.84	3.46	182.06	163.60	-18.46	193.07	190.37	-2.70
SAIDI ME Excluded	119.30	124.37	5.06	114.03	102.24	-11.79	117.82	118.15	0.33
SAIFI ME Included	1.26	1.32	0.06	1.30	1.24	-0.06	1.27	1.30	0.03
SAIFI ME Excluded	0.87	0.90	0.03	0.95	0.88	-0.07	0.90	0.90	0.00
CAIDI ME Included	153.20	148.00	-5.20	140.20	127.53	-12.67	150.32	143.68	-6.64
CAIDI ME Excluded	135.36	136.25	0.89	123.59	119.15	-4.44	131.33	131.46	0.13

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

### *Decrease Residential Customer Disconnections*

In the draft CEIP filing, PacifiCorp provided 2019 disconnections as a baseline rather than 2020, which was due to the unusual circumstances related to the COVID-19 pandemic. These same factors continued to influence disconnections through 2022. The COVID-19 disconnection moratorium continued through September 30, 2021. Following the moratorium, due to concern about continuing impacts from the pandemic, the Commission instituted processes to provide additional review prior to disconnection. In addition, the Company implemented its standard



winter moratoriums for qualified low-income customers for the 2021-2022 and 2022-2023 winter seasons. PacifiCorp has been in discussions with stakeholders regarding the Company’s disconnection reduction plan as well as the ongoing rulemaking on disconnection practices. PacifiCorp anticipates that the number of disconnections will increase from the abnormally low 2022 levels in 2023.

**Table 19 - Washington Residential Customers Experiencing a Disconnection<sup>[1]</sup>**

	Tribal Lands		HIC		All Customers	
	2019	2022	2019	2022	2019	2022
Number of Residential Disconnections	157	0	657	1	1,375	9
Percent of Customers Experiencing a Disconnection	2.27%	0.00%	2.19%	0.00%	1.24%	0.01%

<sup>[1]</sup> Baseline values updated since 2021 draft CEIP to account for WDOH update to EHD in July 2022.

## B. Specific Actions

This section provides updates on the Company’s supply- and demand-side resource actions taken over the past two-year period. As discussed below, the Company has procured substantial non-emitting and renewable resources and taken significant steps to improve or expand its demand side resource programs and opportunities.

### i. Supply-Side Resource Actions

The 2020AS RFP has concluded with the procurement of 1,792 MW of wind resources, 495 MW of solar additions, and 200 MW of battery storage capacity paired with solar. All of these resources have 2024 or 2025 CODs and will contribute to PacifiCorp’s renewable energy and carbon reduction goals. PacifiCorp procures for its system needs across its six-state territory. Prior to the passage of CETA and with the 2020 procurement effort, there were no cost-competitive Washington bids and therefore limited alignment with the CBIs that resulted from a 2021 stakeholder engagement process.

Following the 2021 IRP filing, PacifiCorp issued its first request for proposal to take into consideration the requirements of CETA. The ongoing 2022 all source request for proposals (2022AS RFP) was filed in Washington and received approval in three states after a lengthy stakeholder process. It was subsequently issued to the market on April 29, 2022. PacifiCorp hired an independent evaluator (IE) to oversee the process, with the oversight of the Washington Commission. In December 2022, PacifiCorp bid twelve eligible self-build (benchmark) resources into the 2022AS RFP, and on March 14, 2023, PacifiCorp received 302 bids from 74 developers and 93 different projects sites across six states. A final shortlist is expected to be released by late

Q2 2023 or early Q3 2023, with resources contracted by the end of Q4 2023. PacifiCorp will consider its Washington CBIs before making a final shortlist decision.

## ii. Demand-Side Resource Actions

Since the original CEIP filing, PacifiCorp has made the following changes and updates to demand side resource programs to help increase benefits to named communities and achieve goals informed by our Equity Advisory Group (EAG):<sup>18</sup>

Below are the Incremental Energy Efficiency Program Utility Actions from the Clean Energy Implementation Plan<sup>18</sup> and the 2022-2023 DSM Business Plan (both filed in 2021) **with status updates for 2022 in bold italics font.**<sup>19</sup> All were either completed in 2022 and/or ongoing.

### *Communications:*

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and Clean Energy Implementation Plan (both filed in 2021) are either complete or continuing:

Utility Actions from the CEIP filed in 2021:

Through the programs identified in the 2021 IRP preferred portfolio – including energy efficiency and demand response – PacifiCorp can deliver programs with an increased equity focus utilizing more effective communication strategies to reach its Named Communities.

- Improve culturally and linguistically responsive outreach and marketing to increase awareness of energy and conservation programs.
- Expand in-language services across written, spoken, and visual services.
  - o As appropriate, include Spanish versions of collateral and/or posters at community events where Pacific Power is sponsoring. Have interpreters and translated materials at public meetings.

*The above utility actions are ongoing. PacifiCorp is working to address cultural barriers and embrace cultural differences by obtaining a deeper understanding of the communities within its service area. PacifiCorp's EAG has advised that the company needs to further its understanding of different communities so that we can refine and enhance our mechanisms for outreach and communication, which is why we are exploring new advertising channels to better reach Spanish-speaking customers more directly in their communities. For example, PacifiCorp is launching a pilot program to increase awareness and participation in Pacific Power's Wattsmart energy efficiency programs. For this initiative, the Company is working closely with a multi-cultural marketing agency to develop an earned media plan that will connect, resonate and strengthen media and customer relationships to reach the Hispanic community using culturally relevant messaging and content. Through contacts with community organizations, we are continually learning and working toward accommodating cultural differences. Along with continuing to nurture relationships with local chambers of commerce to better reach communities.*

---

<sup>18</sup> Found on pages 74-77 of the CEIP filed in 2021 - [PAC-CEIP-12-30-21\\_with\\_Appx.pdf \(pacificorp.com\)](#)

<sup>19</sup> These updates were reported in the 2022 Annual Conservation Report filed 6/1/2023 in Docket UE-210830.

## ***Residential:***

### Home Energy Savings:

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and Clean Energy Implementation Plan (both filed in 2021) are either complete or continuing:

Utility Actions from the CEIP filed in 2021:

- Enhanced incentives for windows in multi-family units were added to the program in 2022. Initial focus will be on buildings in Highly Impacted Communities.
  - o ***The enhanced incentives were added to the program effective 1/1/2022; there were no incentives paid in 2022. This utility action is ongoing.***
- Continue direct install residential lighting in multi-family units. Continue focus on Highly Impacted Communities.
  - o ***The direct-install lighting implementer installed 510 screw-in LED bulbs and LED T-8 lamps to upgrade the lighting of apartment units and common areas of four apartment buildings achieving 15,960 kWh in savings in 2022. This utility action is ongoing with changes for 2023.***
- Maintain and expand if possible general-purpose lamp buydown in “dollar stores” in Highly Impacted Communities. This will be the only retail lighting buy down offer.
  - o ***Ongoing: Discounted lighting was available only at approved value retailers located in Highly Impacted Communities. Retailers at 20 locations who participated in the lamp buydown in 2022 included True Value, Ace Hardware, Dollar Store, Goodwill, and Habitat for Humanity.***
- Continue manufactured home direct install duct sealing and lighting. Continue focus on Highly Impacted Communities.
  - o ***Ongoing efforts to provide direct install duct sealing and lighting to manufactured homes with a focus on Highly Impacted Communities. In 2022, served 415 customers with duct sealing achieving 278,899 kWh in energy efficiency savings through this program offering. Direct install lighting accounted for 46,222 kWh in energy savings.***
- Continue promoting new construction offerings for multifamily and single-family units. Continue focus on Highly Impacted Communities.
  - o ***Ongoing effort to recruit and engage builders and raters with a focus on Highly Impacted Communities. Program had two new home projects in 2022, but they were not located in Highly Impacted Communities.***
- Non-Electric, Non-Natural Gas Upgrades in Named Communities. ***(Ongoing with changes for 2023.)***
  - o Serve named community residential customers who use non-electric and non-natural gas fuel sources in their primary heating systems by decommissioning these systems and installing ductless heat pumps. This measure will be offered at the same incentive rate as the typical ductless heat pumps measure, and will be available in single family, manufactured homes, and multi-family residences. Customers in Highly Impacted Communities will be eligible for this incentive

and customer eligibility criteria will be available on the program website. The standard ductless heat pump measure replacing electric forced air furnace or zonal electric primary heating systems is still available for all residential customers.

- ***There were no completed ductless heat pump projects in 2022 involving decommissioning of non-electric or non-natural gas heating. Incentives for 2023 will be higher for this measure for residential customers located in highly impacted communities than for customers who do not reside in a highly impacted community.***
- The program will use RTF deemed values for ductless heat pump installations that assume a zonal electric resistance baseline since RTF does not have any measures for alternative fuel source replacement or conversions. Highly impacted community determination will be included in customer data provided by Pacific Power.

### ***Low Income Weatherization:***

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and Clean Energy Implementation Plan (both filed in 2021) are either complete or continuing:

Utility Actions from the CEIP filed in 2021:

- Increase funds available for repairs from 15 percent to 30 percent.
- Permit installation of electric heat to replace permanently installed electric heat, space heaters or any fuel source except natural gas with adequate combustion air as determined by the Agency. The changes are designed to promote the installation of electric heat and minimize use of wood heat, solid fuels or natural draft equipment in specific applications where combustion safety (and indoor air quality) cannot be maintained.
- Changes to Schedule 114 are required to implement these changes. Amended tariff sheets will be filed with the Commission to enable these changes.

***To implement the above utility actions, the company submitted a filing with the Commission on December 21, 2021, to make changes to Schedule 114 and received approval for the following effective February 1, 2022:***

- ***Increase funds available for repairs from 15 percent to 30 percent.***
- ***Permit installation of electric heat to replace permanently installed electric heat, space heaters or any fuel source except natural gas with adequate combustion air as determined by the Agency. The changes are designed to promote the installation of electric heat and minimize use of wood heat, solid fuels, or natural draft equipment in specific applications where combustion safety (and indoor air quality) cannot be maintained.***

***In 2022, the combined total annual reimbursement on repair cost was 5 percent of the annual reimbursement on energy efficient measures installed by the four weatherization partner***

*agencies. There were no installations of ductless heat pumps to replace any non-electric fuel source.*

### ***Non-residential:***

#### Wattsmart Business

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and Clean Energy Implementation Plan (both filed in 2021) are either complete or continuing:

Utility Actions from the CEIP filed in 2021:

Increase outreach and participation for small businesses and named community small businesses identified by census tract and rate schedule.

- Create a new offer within the current small business enhanced incentive offer targeting the smallest businesses using less than 30,000 kilowatt-hours per year and Named Community small businesses on Schedule 24. *(This was implemented with the program changes effective January 1, 2022. The CBI metrics data shows the increase in number of small businesses who completed a project both in highly impacted communities and overall compared to 2020)*
  - Offer a higher incentive and increase the incentive cap for this new offer from 90 percent to 100 percent of project costs to reduce the customer out-of-pocket cost barrier.
    - *This was implemented with the program changes effective January 1, 2022. Incentives for very small businesses and small businesses located in highly impacted communities were set higher than the regular small business lighting incentives. The incentive cap for very small businesses and small businesses located in Highly Impacted Communities is 100% of project costs rather than the 90% cap for the regular small business offer. This reduced the out-of-pocket cost for lighting retrofits and made it easier for customers to move forward with vendor project proposals.*
- Target a portion of company initiated proactive outreach to small businesses located in Highly Impacted Communities. Continue to tie proactive outreach to approved small business vendor capacity to respond to customer inquiries.
  - *Continued the postcard campaign in 2022 that focused on hard-to-reach small business customers. Approved Small Business Lighting Vendors who signed a non-disclosure agreement were provided with customer lists (containing business name, address, phone number only) to allow them to connect with customers who received a postcard from Pacific Power containing an introduction to the program and an approved vendor. Of the 108 postcards sent in 2022, 85 went to customers located in a highly impacted community. The intent is to improve efficiency of the approved vendors sales processes and boost small business participation. In addition, co-branded shirts are made available to vendors who participated in the postcard campaign. These shirts help in promoting vendor credibility with small business customers. In addition to the mailed postcards, the program also*

*offered co-branded leave-behind postcards to share with customers that included a QR Code for information in English and Spanish.*

- Offer approved small business lighting vendors a higher vendor incentive for completed lighting retrofit projects with small businesses located in Highly Impacted Communities.
  - *This was implemented in 2022. Vendor incentives of \$500 per project were paid in 2022 for 63 completed small business lighting retrofits for small businesses located in Highly Impacted Communities. The \$500 per project vendor incentive was also available for completed lighting projects for very small businesses. The vendor incentive for completed lighting projects for other small businesses (not very small and not in a Highly Impacted Community) was \$300 per completed project.*

### ***Participation Tracking and Reporting:***

***The participation tracking improvements have been implemented and will continue. In addition, the Highly Impacted Community tracking will also include tracking for participants located on Tribal Lands (based on census tract data).***

Utility Actions from the CEIP filed in 2021:

Track program participation for the following and include in annual reports starting in 2022 (noting 2022 will be a transition year as applications are revised to collect additional information).

- Low Income Weatherization
  - Participants located in a Highly Impacted Community
  - Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
  - Participants who rent or lease rather than own
  - Participants living in a manufactured home
  
- Home Energy Savings
  - Participants located in a Highly Impacted Community
  - Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
  - Participants who rent or lease rather than own
  - Participants living in a manufactured home
  - Participants living in a multi-family unit
  
- Wattsmart Business (except midstream)
  - Participants located in a Highly Impacted Community

- Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
- Participants who rent or lease rather than own
- Participants who are smaller businesses (e.g., account associated with project receives electric service on Schedule 24)

The 2023 Annual Conservation Plan filed November 15, 2022, in Docket UE-210830<sup>20</sup> includes updates to the Utility Actions for 2023.

Specific to energy efficiency targets, PacifiCorp filed its 2023 Annual Conservation Plan on November 15, 2022 (Docket UE-210830). This plan includes an updated forecast for 2022-2023 which indicates a shortfall<sup>21</sup> relative to the two-year target established via the process for target setting established by the Energy Independence Act (WAC 480-109-100). The results for 2022-2023 will be in PacifiCorp’s Biennial Conservation Report due June 1, 2024. On November 1, 2023, PacifiCorp will file its Biennial Conservation Plan with the targets for 2024-2025. Those targets will be based on updated information relative to the CEIP and will align with those accepted from the ongoing two-year Energy Independence Act target setting process.

PacifiCorp has also taken actions to develop demand response resources to work towards stated interim targets. Since the original CEIP, PacifiCorp received approval for Schedule 106, which is an enabling demand response tariff that supports multiple market driven programs. Schedule 106 provides a regulatory framework that includes a fast and flexible change process while at the same time enabling transparent customer information for the benefit of all stakeholders. Each new demand response program will use Schedule 106 for enablement, communication, and tracking. The Company has taken the following program-specific demand response actions in Washington:

### **Commercial and Industrial Curtailment**

The WUTC approved the Commercial and Industrial Demand Response program on January 16, 2023. The program focuses on enrolling connected end use loads available during various dispatch periods. Event communication and control occurs through a Program Administrator-provided, two-way communications device (communicating via cellular signals) installed at the customer site.

### **Irrigation Load Control**

The WUTC approved the Irrigation Load Control program on August 25, 2022. It focuses on enrolling agricultural irrigation pumps with the highest connected loads during the available dispatch hours in the summer during the irrigation season with incentives differentiated based on dispatch notification option. The program relies on field-installed direct load control (DLC)

---

<sup>20</sup> [UTC Docket UE-210830](#)

<sup>21</sup> The plan explains the shortfall is due to several prevalent challenges for program delivery stemming from and/or exacerbated by the COVID-19 pandemic that are expected to continue/evolve in 2023.

devices to send signals to pumping equipment for reduction of irrigation loads for participating customers. Initial outreach began after the program was approved and two customers enrolled in the program before the end of 2022. In 2023 year to date, approximately 12 additional pumps have enrolled as outreach continues.,

### **Bring your own Thermostat and Water Heater Direct Load Control**

On May 19, 2023, the company filed for approval, a program to deliver curtailable end-use loads from residential HVAC equipment communicating through customers' web-enabled thermostats and electric water heaters via Wi-Fi enabled communication devices. The Company is currently estimating an effective date of June 2023 for this program.

### **Batteries**

This program is under consideration and is currently in the preliminary stages of planning. The program would potentially target residential – and possibly commercial – customers who have Wi-Fi connection to incentivize the use of individual batteries for system wide-integration in support of overall grid management.

### **Electric Vehicle Managed Charging**

This program is under consideration and is currently in the preliminary stages of planning. The Company currently envisions that the program will shift the electric vehicle charging load of participating residential customers to off-peak hours and allow curtailment in support of overall grid management.

### **Time-of-Use Pilots**

Beginning in May 2021, PacifiCorp launched residential and non-residential service time of use pilots. The residential pilot (Schedule 19) targets single family residential customers and is available for up to 500 customers on a first-come, first-served basis. The non-residential time of use pilot (Schedule 29) targets non-residential customers with loads under 1,000 kW and is available for up to 100 customers on a first-come, first-served basis.

While the Company has made progress on these demand response actions since filing the CEIP, as described above, program implementation is just beginning to ramp up. As noted in the CEIP, “Total demand response volume is subject to change based on timing of programs and contract negotiations.”<sup>19</sup> As implementation and development of these new programs continues, progress toward and change to the interim targets will likely occur as expectations regarding demand response volumes are informed by actual effective program dates, leading to improved planning estimates.

## **C. Incremental Cost**

An update to the incremental cost calculation will be provided for the remaining years in the CEIP period, 2023 – 2025 in the November Biennial Report.



## D. Public Participation

**Public participation tactics:** PacifiCorp is continuing to build a CEIP public participation process that is open, transparent, and accessible. To meet these goals, we have implemented procedures that provide opportunities for public participation that embrace inclusive design and aim for communication with stakeholders to be proactive and easy to understand. On May 1, 2023, PacifiCorp filed its 2023 Clean Energy Implementation Plan (CEIP) Public Participation Plan (PPP)<sup>22</sup> which outlines the various public participation tactics PacifiCorp is implementing to meet its goals. Through this implementation, particular successes and challenges have arisen:

### **Successes:**

- Flexibility in meeting format and design has offered greater accessibility and public participation.
- Incorporating storytelling into presentations has helped us understand others by bridging communication and cultural gaps.
- Leaning into co-creation by embracing an inclusive design model. PacifiCorp continues to apply an inclusive approach in its advisory group model, consulting with experts and community partners and inviting stakeholder feedback to ensure that the same customers and vulnerable communities that PacifiCorp serves in the state have a seat at the table.

### **Challenges:**

- Time constraints for advisory group members. Community groups continue to experience staffing shortages and as a result, have had to navigate multiple commitments as best as possible.

### **Adjustments made to public participation tactics during the year**

PacifiCorp is working to continuously evolve and enhance its outreach and communications in Washington, with the goal of reaching all customers. During the past year, we have taken steps to deliver culturally and linguistically relevant messaging and communications as a way to advance shared understanding among our customers on energy-related topics. By doing this, we help create more avenues for customers to connect and to participate in our public engagement efforts. Adjustments made to our public participation tactics include:

- **Increase of Spanish Language Communications.** The company has increased its Spanish paid advertising and direct outreach in Washington to promote energy assistance, energy efficiency, safety and preparedness, and the company's future plans. Additionally, PacifiCorp has steadily added information, resources and brochures to its website in Spanish, helping to increase site visits and engagement with this online content. Email engagement with Spanish-speaking customers has also increased, specifically for energy

---

<sup>22</sup> [210305-WA UE-210305 PAC-PPP-5-01-23.pdf \(pacificorp.com\)](#)

efficiency programs. Throughout the year, social media messages with energy assistance, safety and preparedness information are posted in Spanish on Pacific Power's Twitter and Facebook channels.

- **Digital Outreach:** A higher level of digital advertising in 2022 increased customer awareness and impressions. Overall, display and social media advertising performed above the national average in engagement. In 2022, PacifiCorp's Spanish-language advertising generated over 3 million images, resulting in 12,000 web page visits. The company also increased placement in Spanish radio broadcasts in 2022, delivering over 1,600 spots.
- **Expanded Local Community Outreach:** As a company, we participated in the Central Washington State Fair, Community Resource Fairs via the Yakima Valley Farm Works Clinic and Downtown Summer Nights, to support deeper engagement in Washington in 2022. At these events, a bilingual Pacific Power field representative was onsite to help connect customers to available programs and show customers how to access online coupons and special offers for savings. Brochures and pamphlets about company programs were also available at these events in English and Spanish.
- **New Translation Partner:** As part of its expanded outreach to support more culturally and linguistically responsive communication, PacifiCorp sought to find a new translation partner. In 2022, the company began working with *Maracab*, an agency focused on accurate, consistent and relevant translation and interpretation services. To reach a variety of audiences, *Maracab* has native translators, speakers and technical experts (e.g. electrical engineers) that specialize in a variety of languages and dialects. To refine and improve their processes, *Maracab* conducted an analysis which found that Mexico-Spanish heritage is the most prevalent among PacifiCorp's customer audiences, allowing for more precise and accurate language translations. *Maracab* has also provided Spanish-language interpretation services for PacifiCorp's public meetings in Washington to help overcome language barriers and deliver more inclusive outreach. PacifiCorp plans to continue to build on this partnership to offer materials that go beyond simple translation and employ transcreation to incorporate the three elements of language, culture and emotional connection needed to resonate, in our case, with Spanish-speaking audiences.<sup>23</sup>
- **Embracing Multicultural Marketing:** PacifiCorp is working to address cultural barriers and embrace cultural differences by obtaining a deeper understanding of its communities in Washington. As another way to refine and enhance mechanisms for outreach and communication, the company is exploring new advertising and outreach channels to reach Spanish-speaking customers more directly in their communities. For example, PacifiCorp launched a pilot program to increase awareness of and participation in Pacific Power's Wattsmart® energy efficiency programs. For this initiative, the company is

---

<sup>23</sup> [Source: Transcreation: Why Do We Need It? – Digital.gov](#)

working closely with a multicultural marketing agency to develop a Spanish-language earned media plan that will help connect and resonate with customers and strengthen media and customer relationships to reach the Latine community through culturally relevant messaging and content. This plan envisions radio and television interviews with local networks, the publication of print and email articles, and partnerships with local community influencers to help disseminate messages. The company also identified a local field service representative from the Yakima community as the trusted messenger to deliver messaging. Beyond these measures, through contacts with community organizations and local chambers of commerce, PacifiCorp continually gains new skills and learns new information to accommodate and celebrate cultural differences while enhancing community engagement.

### **Advisory group activities**

PacifiCorp has historically considered input throughout the planning process from the Company's existing Washington advisory groups: the DSM Advisory Group, Low-Income Advisory Group, and the IRP Public Input Process. PacifiCorp has also established its Washington EAG. These groups and processes will continue to inform how the Company approaches, among other things, long and intermediate-term planning, programs, and outreach strategies.

- **Equity Advisory Group (EAG).** PacifiCorp formed an EAG comprised of community members and leaders from across its service area in Washington. EAG engagement helps establish shared understanding of equity values, perspectives, and community needs and viewpoints as we collectively move towards a clean electricity future. Responsibilities of the EAG include advising on equity concepts, communication strategies, and program design.
- **Demand Side Management (DSM) Advisory Group.** DSM Advisory Group topics are focused on energy efficiency (also known as conservation) and include but are not limited to the Energy Independence Act (EIA or I-937) biennial target setting process, including program design and plans, adaptive management, budgets, and communication strategies to achieve the Commission-approved biennial target, cost recovery through the system benefit charge, cost effectiveness. Since beginning to launch demand response programs in 2022, PacifiCorp has also leveraged the DSM Advisory Group as a way to seek feedback on DR program design and other related regulatory matters.
- **Low-Income Advisory Group.** PacifiCorp's Low-Income Advisory Group meets regularly to discuss issues related to energy burden, as well as to advise the company on program design to increase limited-income customer's ability to pay their monthly bills through energy assistance, efficiency measures, and bill discounts.
- **Integrated Resource Planning (IRP) Public Input Process.** Stakeholders have been involved in the development of PacifiCorp's IRP process generally, and the 2023 IRP specifically, from the very beginning. For the 2023 IRP, the public-input meetings held beginning in January 2022 were the cornerstone of the direct public- input process, and there have been 11 public-input meetings held as part of the 2023 IRP development

cycle. All meetings have been held via phone conference. The IRP public-input process also included state-specific stakeholder dialogue sessions held in the summer of 2022. The goal of these sessions was to capture key IRP issues of most concern to each state, as well as to discuss how to tackle these issues from a system planning perspective. PacifiCorp seeks to ensure stakeholders understand IRP planning principles, and these meetings continued to enhance interaction with stakeholders in the planning cycle and provided a forum to directly address stakeholder concerns regarding equitable representation of state interests.

### **Advisory group materials and meeting summaries**

- Equity Advisory Group:
  - o January 19, 2022 [Equity Advisory Group January Meeting Slides](#)  
[EAG January 2022 Meeting Public Notes](#)
  - o February 16, 2022 [Equity Advisory Group February Meeting Slides](#),  
[EAG February 2022 Meeting Public Notes](#)
  - o March 16, 2022 [Equity Advisory Group March Meeting Slides](#),  
[EAG March 2022 Meeting Public Notes](#)
  - o April 13, 2022 [Equity Advisory Group April Meeting Slides](#)
  - o June 15, 2022 [Equity Advisory Group June Meeting Slides](#),  
[EAG June 2022 Meeting Public Notes](#)
  - o July 13, 2022 [Equity Advisory Group July Meeting Slides](#),  
[EAG July 2022 Meeting Public Notes](#)
  - o September 14, 2022 [Equity Advisory Group September Meeting Slides](#)  
[EAG September 2022 Meeting Public Notes](#)
  - o October 19, 2022 [Equity Advisory Group October Meeting Slides](#)  
[EAG October 2022 Meeting Public Notes](#)
  - o December 7, 2022 [Equity Advisory Group December Meeting Slides](#)  
[EAG December 2022 Meeting Public Notes](#)
- Demand Side Management (DSM) Advisory Group:
  - o February 28, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
  - o April 28, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
  - o June 28, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
  - o September 8, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
  - o December 14, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
- Low-Income Advisory Group: (pending online links to content)
  - o February 3, 2022 [PowerPoint Presentation \(pacificorp.com\)](#)
  - o June 8, 2022 [Pacificorp | EAG meeting](#)
- Integrated Resource Planning (IRP) Public Input Meetings:
  - o [February 25, 2022 Public Input Meeting 1](#)

- [April 7, 2022 Public Input Meeting 2](#)
- [May 12, 2022 Public Input Meeting 3](#)
- [June 10, 2022 Public Input Meeting 4](#)
- [July 14, 2022 Public Input Meeting 5](#)
- [September 1-2, 2022 Public Input Meeting 6](#)
- [October 13, 2022 Public Input Meeting 7](#)
- [December 1, 2022 Public Input Meeting 8](#)

## IV. Appendix 1. Supporting Detail for CBI Metrics

This section provides more granular detail on the CBI metric values presented earlier in this document.

**Table 20. Details for Workshops on Energy Related Programs in Washington, 2022**

Workshop	Focus	Date	Location	HIC Location	Non-HIC Location	Vulnerable Population
Clean Buildings Roundtable hosted by Yakima County Development Association	Business	1/27/2022	Online	1		
Wattsmart Business vendor program training	Business	3/15/2022	Walla Walla		1	
Wattsmart Business vendor program training	Business	3/16/2022	Yakima	1		
Clean Buildings Accelerator Coffee chat	Business	4/5/2022	Online	1	1	
Clean Buildings Accelerator Coffee chat	Business	4/18/2022	Online	1	1	
Workshop for employees at fruit packing plant (2 presentations)	Residential	4/25/2022	Tieton		1	Ag workers (196)
Workshops for employees at fruit packing plant (3 presentations)	Residential	4/27/2022	Yakima		1	Ag workers (314)
Workshops for employees at fruit packing plant (4 presentations)	Residential	4/28/2022			1	
Workshop for employees at fruit packing plant (2 presentations)	Residential	4/29/2022			1	
Clean Buildings Accelerator Coffee chat	Business	5/2/2022	Online	1	1	
Clean Buildings Accelerator Coffee chat	Business	5/9/2022	Online	1	1	
Workshop for employees at fruit packing plant	Residential	5/10/2022	Grandview		1	Ag workers (70)
Clean Buildings Accelerator, Workshop 1 - Kickoff	Business	5/26/2022	Online	1	1	
Clean Buildings Accelerator, Workshop 2 - Energy Bootcamp	Business	6/30/2022	Online	1	1	
Clean Buildings Accelerator, Workshop 3 - O&M Ramp Up	Business	7/28/2022	Online	1	1	
Clean Buildings Accelerator, Workshop 4 - Engagement	Business	8/18/2022	Online	1	1	
Clean Buildings Accelerator Coffee chat	Business	10/20/2022	Online	1	1	
Clean Buildings Accelerator Coffee chat	Business	11/1/2022	Online	1	1	
Clean Buildings Accelerator Coffee chat	Business	12/7/2022	Online	1	1	
<b>Total</b>				<b>13</b>	<b>17</b>	

**Table 21 – Customers Experiencing High Energy Burden, by Vulnerable Populations**

Vulnerable Population	2020			2022		
	Mean Energy Burden (%)	Number	Percent	Mean Energy Burden (%)	Number	Percent

1	High school diploma or lower educational attainment	6.3%	14,750	27.7%	5.0%	12,445	23.7%
2	Older Adults (65+ yrs)	3.4%	1,896	11.6%	3.2%	1,909	11.5%
3	Young Children (5 yrs or under)	5.2%	1,540	18.0%	3.4%	944	10.9%
4	People who have a hearing impairment	3.3%	2,040	12.2%	3.0%	1,573	9.3%
5	People with a disability	4.5%	2,940	19.1%	3.9%	2,776	17.9%
6	People with medical equipment at home	3.4%	2,513	14.3%	3.8%	2,579	13.9%
7	Diverse supplier business owners	2.3%	2	6.4%	2.6%	3	11.2%
8	Energy burdened	13.8%	14,750	100%	12.7%	12,445	100%
9	Asset Limited, Income Constrained, Employed (ALICE)	7.1%	12,992	37.6%	6.0%	11,417	31.0%
10	Low-income migrants	4.0%	318	14.4%	4.9%	776	21.0%
11	Low income	7.3%	5,061	37.5%	6.7%	4,820	35.3%
12	Immigration status (outside of US citizen)	2.3%	983	5.2%	2.7%	1,536	8.0%
13	People who speak limited English	3.5%	5,114	14.0%	3.9%	6,295	17.0%
14	Renters	4.4%	7,404	18.4%	3.8%	6,334	15.5%
15	Multi-generational households	4.1%	521	16.6%	3.6%	456	14.4%
16	Multi-family households	4.4%	514	15.7%	3.1%	604	18.2%
17	People experiencing homelessness	3.1%	143	19.9%	4.1%	232	27.1%
18	People living in rural areas	5.3%	966	26.0%	4.3%	846	22.4%
19	People living in different land statuses (such as land trust vs. fee patent that have different regulatory requirements)	No data	No data	No data	No data	No data	No data
20	Agricultural and/or farm workers	4.3%	2,391	14.1%	4.4%	3,057	17.9%
21	Gas-heated homes	1.9%	992	3.5%	1.9%	1,208	4.3%
22	Single parents	5.1%	2,186	24.5%	4.2%	1,578	17.5%

**Table 22 - Number of Households Using Wood as Primary or Secondary Heating Source Among Customers within Vulnerable Populations**

Vulnerable Population	2020			2022		
	Pop.	Primary Heat	Secondary Heat	Pop.	Primary Heat	Secondary Heat

1	High school diploma or lower educational attainment	57,143	3.9%	10.7%	54,524	4.7%	9.7%
2	Older Adults (65+ yrs)	16,391	4.6%	22.1%	16,587	3.1%	20.1%
3	Young Children (5 yrs or under)	8,554	3.5%	20.2%	8,657	2.4%	16.8%
4	People who have a hearing impairment	16,666	5.0%	25.3%	16,846	5.3%	24.0%
5	People with a disability	15,358	5.2%	19.8%	15,542	4.4%	18.5%
6	People with medical equipment at home	17,595	3.7%	19.3%	18,584	3.4%	15.8%
7	Diverse supplier business owners	26	5.3%	30.9%	29	4.4%	28.2%
8	Energy burdened	14,750	7.4%	16.9%	12,447	4.1%	12.6%
9	Asset Limited, Income Constrained, Employed (ALICE)	34,525	6.1%	10.6%	36,889	3.3%	7.1%
10	Low-income migrants	2,218	1.7%	13.5%	3,696	3.1%	5.6%
11	Low income	13,484	4.6%	11.1%	13,646	3.7%	8.5%
12	Immigration status (outside of US citizen)	18,908	2.9%	23.6%	19,134	3.0%	16.8%
13	People who speak limited English	36,635	1.7%	12.8%	37,074	2.1%	9.2%
14	Renters	40,328	2.2%	5.5%	40,811	1.4%	5.8%
15	Multi-generational households	3,129	6.3%	19.7%	3,167	4.2%	22.6%
16	Multi-family households	3,281	6.6%	22.5%	3,320	4.3%	30.9%
17	People experiencing homelessness	717	0.0%	4.8%	857	0.0%	7.1%
18	People living in rural areas	3,712	8.1%	22.3%	3,786	7.5%	22.0%
19	People living in different land statuses (such as land trust vs. fee patent that have different regulatory requirements)	No data	No data	No data	No data	No data	No data
20	Agricultural and/or farm workers	16,921	6.2%	17.5%	17,123	4.9%	15.0%
21	Gas-heated homes	28,090	0.0%	20.6%	28,426	0.0%	17.3%
22	Single parents	8,925	2.7%	15.8%	9,032	2.8%	12.8%