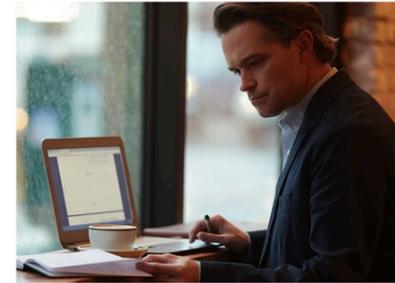


Clean Energy Transformation Act

Washington Equity Advisory Group
EAG Meeting 7

November 17, 2021



PacifiCorp Equity Advisory Group (EAG)

Meeting #7

November 17, 2021, 1pm-4pm Pacific Time

- RMI facilitators will change PacifiCorp, RMI, and Equity Advisory Group (EAG) participant names to First Name, Last Initial, PacifiCorp/RMI/EAG.
- We recommend using “Gallery View” (icon in top right) when in group discussions.
- If you called in with your phone, merge your audio and video.
- For technical support, click on “Chat” (icon in tool bar at bottom), toggle to “Erifili D, RMI” as the recipient, send your message.

EAG Members:

- If you are able, please keep your camera on for as much of the meeting as possible (icon in bottom left) but stay muted unless speaking.
- Please use the chat at any time to engage in the conversation or ask questions.
- To raise your virtual hand to speak, click on "Reactions" in your tool bar, select “Raise Hand.”

Public Observers:

- Thank you for joining us and observing this meeting.
- You can “Rename” yourself by clicking the “...” on your participant square.
- Please stay on mute with your camera off until the public comment period.
- Please use the chat for technical support by messaging “Erifili D, RMI,” but please do not ask questions or respond to prompts in the chat until the public participation period.

Meeting #7 Objectives

- Explore components of PacifiCorp's November 1 Draft Clean Energy Implementation Plan (CEIP)
- Receive feedback from the EAG on the Draft CEIP, especially on issues of equity

Since EAG Meeting #6, what have PacifiCorp and RMI done?

- Drafted and submitted the November 1 Draft CEIP to Washington UTC
 - Included documentation of feedback received through October 31
- Held a third Technical Conference on November 10
- Held a third Public Meeting on November 10
- Washington Commission approved Bates White as an independent evaluator to oversee the 2022 All Source RFP and 2025 supply-side action items.
- Continued collecting Draft CEIP feedback and comments
- Rescheduled EAG Meeting from December 15 to January 19

Meeting #7 Agenda

Time (PT)	Description
1:00 PM	Welcome and Meeting Overview: Updates, Objectives, Agenda, and Check-in Poll
1:15 PM	Nov 1 Draft CEIP Overview
1:25 PM	Chapter 1: Interim and Specific Targets
1:35 PM	Chapter 2: CBIs and Metrics
1:50 PM	Chapter 3: Specific Actions
2:10 PM	Chapter 4: Incremental Costs
2:20 PM	Break
2:30 PM	CEIP Feedback Activity
3:50 PM	Next Steps

PacifiCorp's Draft Clean Energy Implementation Plan



The CEIP's Purpose

Why do we have a Clean Energy Implementation Plan (CEIP)?

- Pacific Power's CEIP was created to meet the requirements of Washington State's Clean Energy Transformation Act (CETA), which became a law in May of 2019.
- CETA directs utilities to pursue a clean energy future and make sure that the benefits are equitably distributed among all Washingtonians, at a reasonable cost.
- The CEIP includes the actions that Pacific Power will take in the next 4 years (2022-2025) to make progress toward CETA's clean energy goals:
 - By December 31, 2025, all coal-fired generation must be removed from Washington's electricity supply.
 - By January 1, 2030, utilities must be greenhouse gas (GHG) neutral.
 - By 2045, 100% of Washington's electricity supply must come from renewable and non-emitting resources.

CEIP Progress

- PacifiCorp filed its draft Clean Energy Implementation Plan (CEIP) on November 1.
- PacifiCorp's first CEIP describes how the utility fulfills requirements of Washington State's Clean Energy Transformation Act (CETA).
- PacifiCorp's 2021 Integrated Resource Plan (IRP) informs the company's actions toward meeting the requirements of CETA.
 - The IRP also informs the company's efficiency targets filed November 1 in PacifiCorp's 2022-2023 Biennial Conservation Plan.
 - The November 1 filing includes the Demand-Side Management Business Plan to achieve the energy efficiency targets; this plan includes an increased focus on named communities and specific program related utility actions that are also in the CEIP.

The CEIP Chapters

Interim and Specific Targets

PacifiCorp's **pathway to carbon-neutral by 2030** and **100% renewable and non-emitting by 2045**, including **what actions can be taken over the next four years** to move toward targets.

Customer Benefit Indicators

Discussion of the co-development of **Customer Benefit Indicators, metrics, and weighting.**

Specific Actions and Narrative

Detailed actions for the next four years, including **projects (utility-scale and distributed), programs, company initiatives, and other compliance actions.**

Incremental Cost and Rates Calculation

The **total cost to retail customers** of CETA compliance; incremental cost is the difference between the CETA-compliant portfolio and the alternative lowest reasonable cost portfolio.

Public Participation

Feedback from the public, advisory groups, and other stakeholders, and PacifiCorp's plans to address barriers to participation in the future.

Interim and Specific Targets

(Draft CEIP pages 6-22)



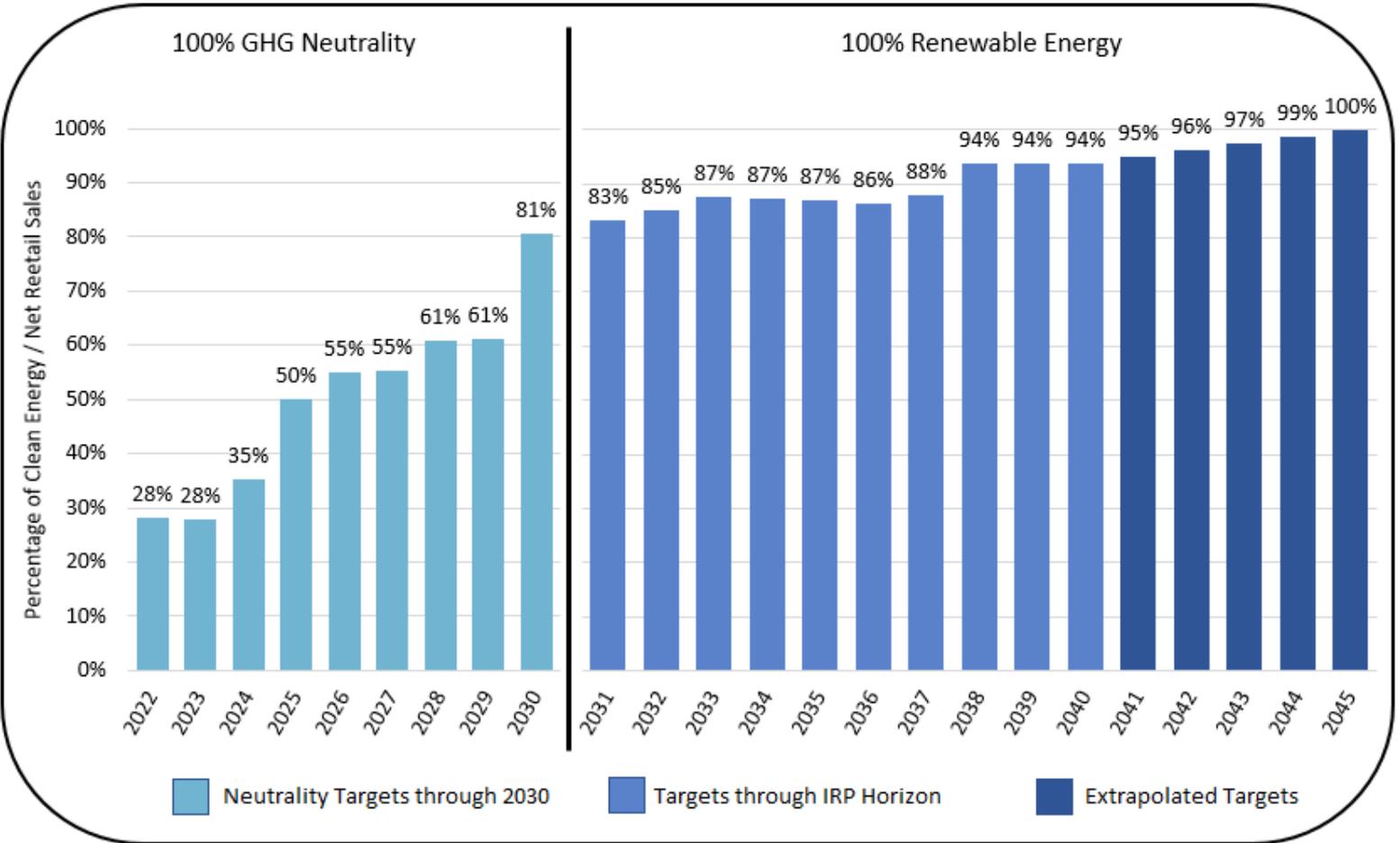
Supply-Side Interim and Specific Targets

Interim Targets

- The graph at right, from the draft CEIP, shows PacifiCorp’s path to reach CETA Interim targets
- Informed by the company's long-term Integrated Resource Plan (IRP)
- Measured as a percentage of Washington customer needs met by renewables and non-emitting resources
- PacifiCorp’s interim target percentage nearly doubles from 2022 (28%) and 2025 (50%) and reaches 81% by the end of the decade

Specific Targets

- Near-term targets are achieved with equity-conscious increases in energy efficiency



Energy Efficiency and Demand Response Interim and Specific Targets

Energy Efficiency

- Energy efficiency targets are based on the Washington biennial conservation plan (2022-2023) and extended outward for an additional two years (2024-2025).
- Targets are based primarily on the IRP's preferred portfolio with some adjustments to reflect current information.

Resource	2022-2025 Target (MWh)
Energy Efficiency	212,431

Demand Response

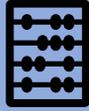
- Demand response (DR) targets are based on competitive bids in the 2021 DR request for proposal (RFP) and assumes all programs are operational in 2022.
- PacifiCorp is currently in the process of negotiating contracts for programs and is actively working to increase certainty regarding potential volume from vendors.

Resource	2022-2025 Target (MW)
Demand Response	34.7

CBIs and Metrics

(Draft CEIP pages 23-45)





CUSTOMER BENEFIT INDICATORS & METRICS

- 9 CBIs and 17 metrics to track CETA progress
- Establishes baselines for comparison

CBIs are mapped to one or more CETA benefit categories

- Non-energy benefit
- Energy benefit
- Reduction of burden
- Cost reduction
- Environmental
- Public health
- Energy resiliency
- Risk reduction

CEIP Chapter 2 Content

Introduction and regulatory compliance

- Lays out how CBIs are designed to achieve and demonstrate the equity goals of utility actions (defined in Chapter 3) and points to the corresponding sections of the CETA regulation

Identification of named communities

- Shows the results of the study identifying HICs and vulnerable populations within PacifiCorp’s Washington service territory that informs utility actions

Development of CBIs, CBI weighting, and metrics

- With input from the public and key stakeholder groups, discusses the iterative process of refining CBIs and associated metrics, tagging CBIs to benefit categories, and weighting them

Baseline analysis of CBIs

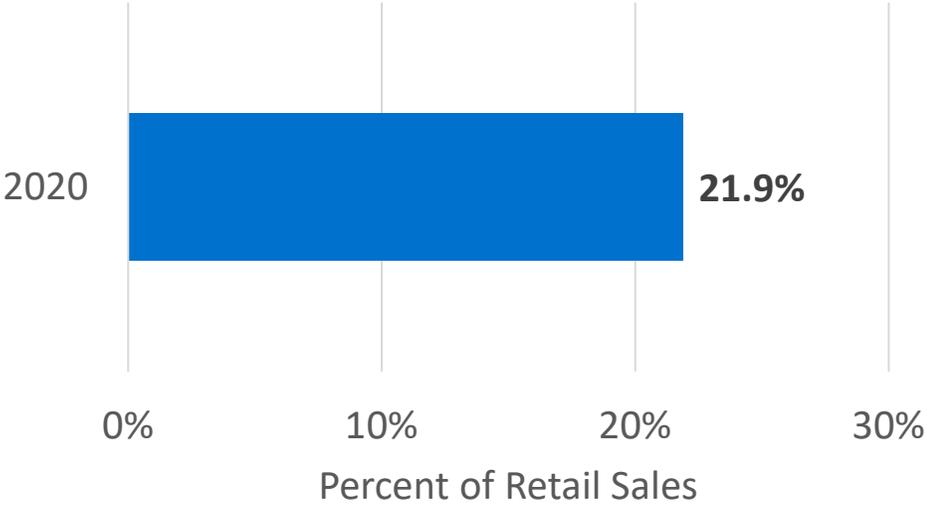
- Provides the starting point baseline estimates for each of the 17 CBI metrics, against which future CEIP reports will compare to measure progress

Customer Benefit Indicators (CBIs) and Metrics

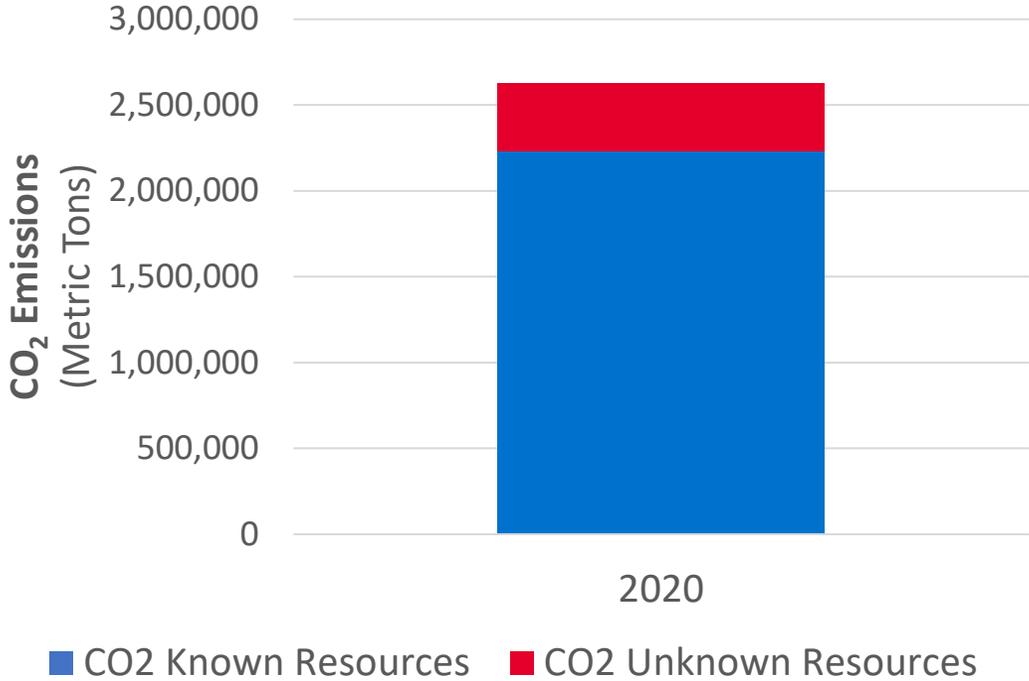
CBI	Benefit Categories	Metric(s)
Culturally and linguistically responsive outreach and program communication	<ul style="list-style-type: none"> • Reduction of burdens • Non-energy benefit 	<ul style="list-style-type: none"> • Outreach in non-English languages • Percentage of responses to surveys in Spanish
Community-focused efforts and investments	<ul style="list-style-type: none"> • Non-energy benefit • Reduction of burden 	<ul style="list-style-type: none"> • Workshops on energy related programs • Headcount of staff supporting program delivery in Washington who are woman, minority, or can show disadvantage for energy efficiency programs with exception to low income
Participation in company energy and efficiency programs and billing assistance programs	<ul style="list-style-type: none"> • Cost reduction • Reduction of burden • Non-energy benefit • Energy benefit 	<ul style="list-style-type: none"> • Number of households/businesses, including named communities, who participate in company energy/efficiency programs • Percentage of households that participate in billing assistance programs • Number of households/businesses who participate/enroll in demand response, load management, and behavioral programs
Efficiency of housing stock and small businesses, including low-income housing	<ul style="list-style-type: none"> • Energy benefit 	<ul style="list-style-type: none"> • Number of households and small businesses that participate in company energy/efficiency programs • Energy efficiency expenditures • Gas to electric conversions for Low-Income Weatherization program
Renewable energy resources and emissions	<ul style="list-style-type: none"> • Environmental 	<ul style="list-style-type: none"> • Amount of renewables/non-emitting resources serving Washington • Washington allocated greenhouse gas emission from Washington allocated resources • Number of public charging stations in named communities
Households experiencing high energy burden	<ul style="list-style-type: none"> • Cost Reduction • Reduction of burden 	<ul style="list-style-type: none"> • Number of customers suffering from high energy burden by: highly impacted communities, vulnerable populations, low-income bill assistance (LIBA) and Low-Income Weatherization participants, and other residential customers
Indoor air quality	<ul style="list-style-type: none"> • Public health • Non-energy benefit 	<ul style="list-style-type: none"> • Number of households using wood as primary or secondary heating
Frequency and duration of energy outages	<ul style="list-style-type: none"> • Energy resiliency • Risk reduction • Energy benefit 	<ul style="list-style-type: none"> • SAIDI, SAIFI, and CAIDI* at area level including and excluding major events
Residential customer disconnections	<ul style="list-style-type: none"> • Energy security 	<ul style="list-style-type: none"> • Number of residential customer disconnections including disconnections within named communities

CBI Metric Baselines: Environmental Metrics

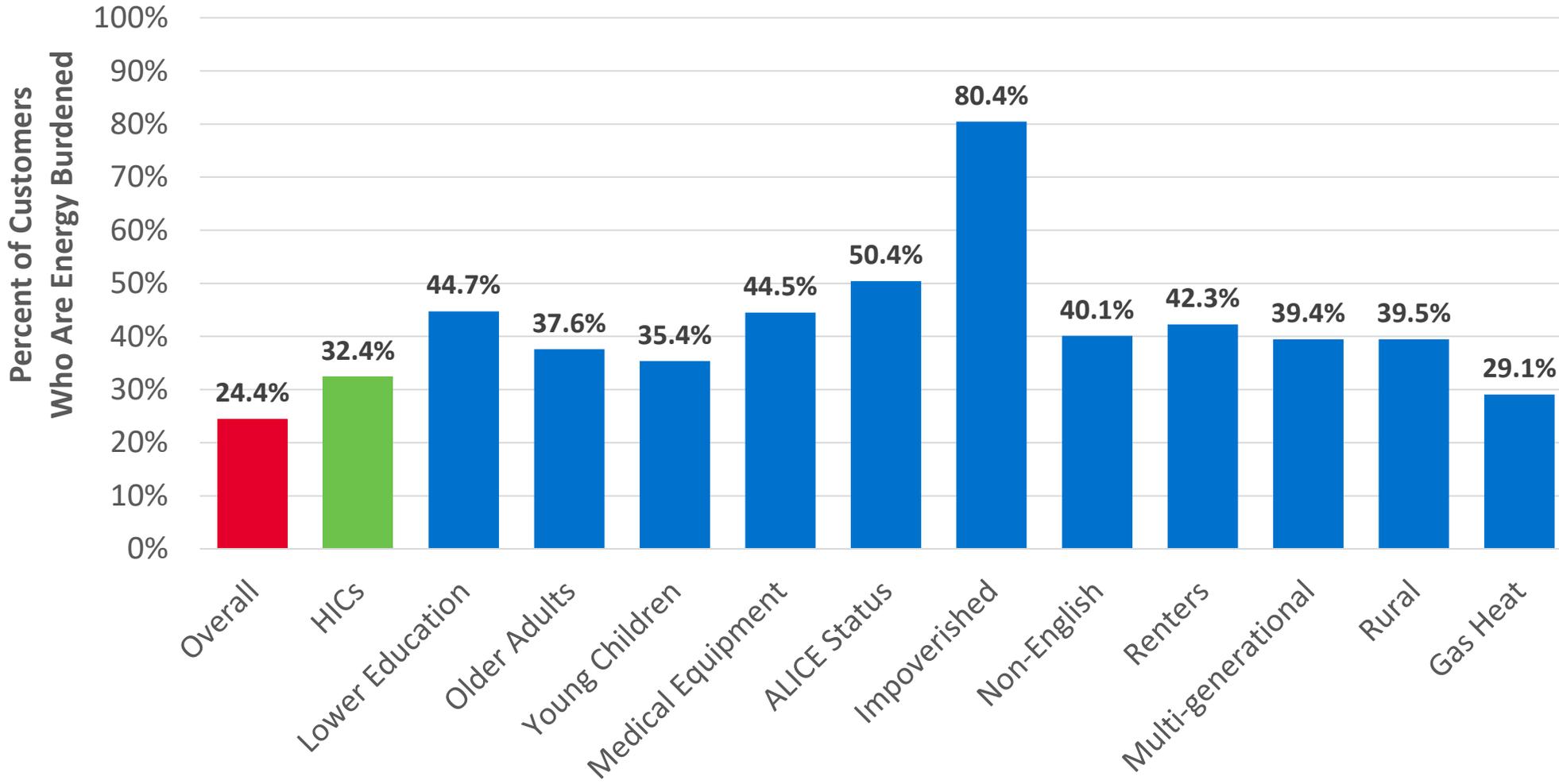
Percent of Washington Retail Sales Served by Renewable and Non-Emitting Energy Resources, 2020



Washington-Allocated Greenhouse Gas Emissions from Washington-Allocated Resources, 2020



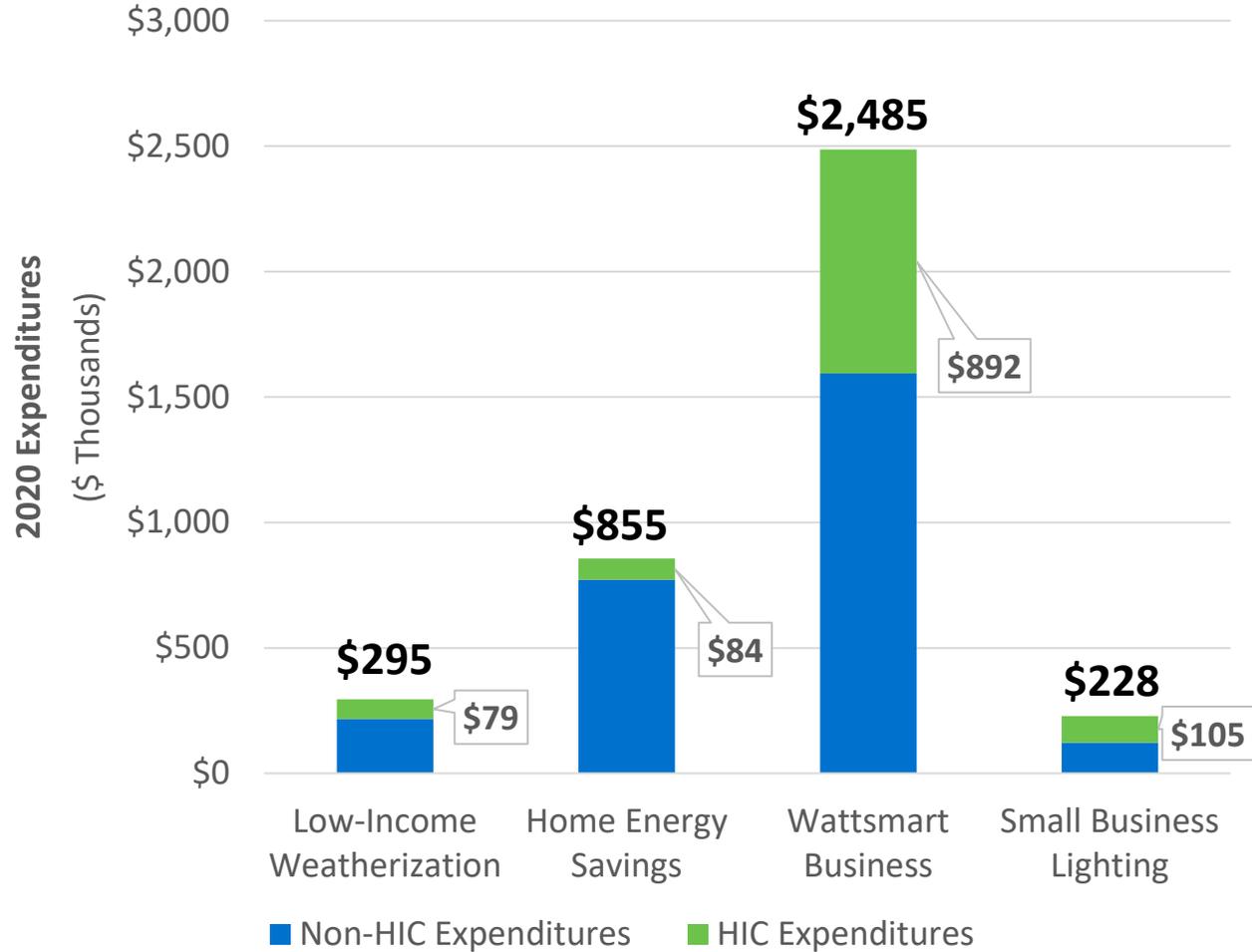
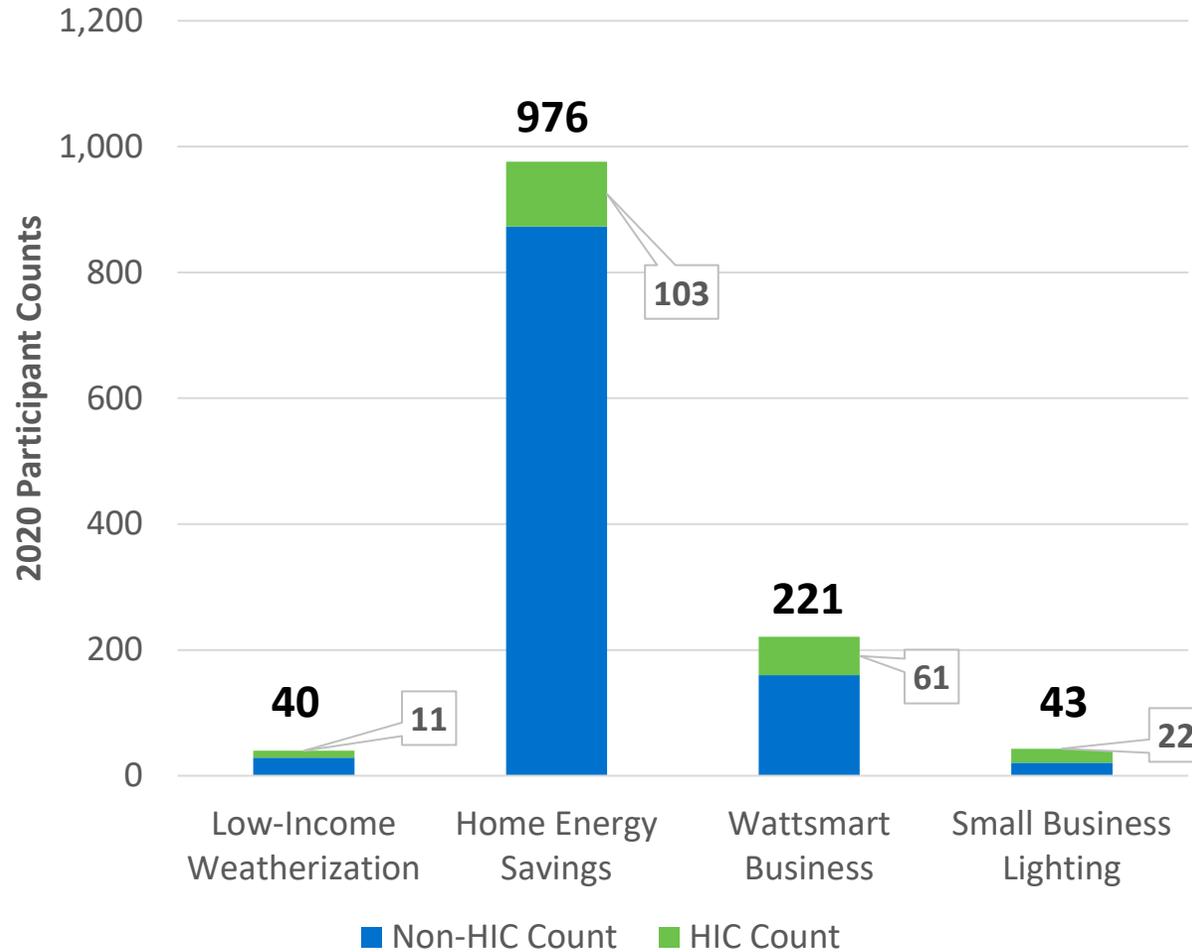
CBI Metric Baselines: Energy Burden* by Vulnerable Population



PacifiCorp is currently gathering data for the following additional Vulnerable Populations:

- Hearing Impaired
- People Living with a Disability
- MWBE
- Low-Income Migrants
- Multi-Family
- People Experiencing Homelessness
- Different Land Status
- Farm and Agricultural Workers
- Single Parents

CBI Metric Baselines: DSM Program Participation & Expenditures, 2020

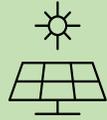


Specific Actions

(Draft CEIP pages 46-64)



Utility Action Categories



SUPPLY-SIDE RESOURCES

These actions support PacifiCorp to generate more electricity from renewable and non-emitting resources for its customers in Washington.



COMMUNITY OUTREACH & ENGAGEMENT

These actions create greater opportunities for the communities PacifiCorp serves to reap the benefits of clean electricity programs, regardless of their economic or cultural circumstances.



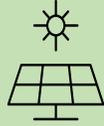
ENERGY EFFICIENCY

These actions help customers transform their homes, offices, and businesses to use electricity more efficiently. This has the effect of lowering bills and creating more comfortable spaces.



DEMAND RESPONSE

Demand response is when customers change their electricity usage at certain times to put less pressure on the grid. These actions help customers access more of the clean electricity produced by PacifiCorp's resources.



SUPPLY-SIDE RESOURCES

- By 2024, add battery storage capacity and new renewable (wind and solar) resources
- By 2026, add needed renewables and storage (those to be added before 2025 will be included in the CEIP)

A proposed 2022 All-Source Request for Proposals may identify an additional 1,345 MW of supply-side resources to come online in 2025.

Project Name	Location	Resource Size (MW)	Battery Size (MW)	Expected Online
Portland/N. Coast	NW Oregon	130	n/a	2025
Willamette	NW Oregon	615	n/a	2025
Borah Hemingway	Idaho	600	600	2025
Total		1,345		

The 2020 All-Source Request for Proposals identified 3,098 MW new renewable resources which are expected to come online in 2024 and contribute to the PacifiCorp's progress toward meeting the clean energy requirements in Washington.

Project Name	Technology Type	Location	Resource Capacity (MW)	Battery Capacity (MW)
Anticline	Wind	Wyoming	100.5	n/a
Cedar Springs IV	Wind	Wyoming	350.4	n/a
Rock Creek I*	Wind	Wyoming	190	n/a
Rock Creek II*	Wind	Wyoming	400	n/a
Boswell Springs	Wind	Wyoming	320	n/a
Two Rivers	Wind	Wyoming	280	n/a
Cedar Creek	Wind	Idaho	151	n/a
Rocket Solar II	Solar with Battery	Utah	45	12.5
Fremont	Solar with Battery	Utah	99	49.5
Rush Lake	Solar with Battery	Utah	99	49.5
Parowan	Solar with Battery	Utah	58	58
Hornshadow I	Solar with Battery	Utah	100	25
Hornshadow II	Solar with Battery	Utah	200	50
Green River I & II	Solar with Battery	Utah	400	200
Hamaker	Solar with Battery	Oregon	50	12.5
Hayden 2	Solar with Battery	Oregon	160	40
Dominguez I	Battery Storage System	Utah	n/a	200
Glen Canyon	Solar Photovoltaic	Utah	95	n/a



ENERGY EFFICIENCY

- Deliver programs to help customers improve energy efficiency and save energy/money
- Target named communities

- Expected to deliver a total of **217,408 MWh** during the implementation period. Equivalent to providing electricity to almost 28,000 homes.¹
- Energy efficiency **expenditures** are expected to be approximately \$23 million/year with approximately \$2 million/year attributable to compliance with CETA.
- Focus of CETA compliance is getting **efficient equipment installed in named community homes and businesses.**

¹ EPA Calculator: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

Program or Initiative (MWh/Year)	2022	2023	2024	2025	2022-2025
Low Income Weatherization (114)	182	182	182	182	
Home Energy Savings (118)	10,349	10,986	10,349	10,986	
Home Energy Reports	4,414	(182)	4,414	(182)	
Total Residential Programs	14,945	10,986	14,945	10,986	
Wattsmart Business (140) - Commercial	22,645	23,256	22,645	23,256	
Wattsmart Business (140) - Industrial	13,936	13,776	13,936	13,776	
Wattsmart Business (140) - Irrigation	935	935	935	935	
Total Business Programs	37,516	37,967	37,516	37,967	
Northwest Energy Efficiency Alliance	3,314	3,977	3,314	3,977	
Total Conservation	55,774	52,930	55,774	52,930	217,408

Estimated Energy Efficiency Expenditures

Year	Incentives/direct benefits (Millions)	General implementation (Millions)	Total (Millions)
2022	\$ 14.72	\$ 8.09	\$ 22.81
2023	\$ 14.72	\$ 8.31	\$ 23.03
2024	\$ 14.72	\$ 8.09	\$ 22.81
2025	\$ 14.72	\$ 8.31	\$ 23.03
Total	\$ 58.87	\$ 32.79	\$ 91.67



DEMAND RESPONSE

- Pursue new demand response programs
- Make these new programs available to residential, business, and irrigation customers

- Demand response (DR) programs give **incentive payments to customers** to encourage lower electricity use during critical times.
- Proposed utility action to deliver approximately **34 MW DR programs in Washington** by 2025.
- Once fully operational, programs are expected to deliver an additional 10 MW of capacity per year at a cost of \$1.5 to \$2 million a year.
- Even if CETA didn't exist, the 2021 IRP identified DR as a cost-effective resource. Therefore, **the costs of DR programs are not included in the incremental cost calculations.**

Proposed Demand Response Programs

Curtailment

Incentives for commercial and industrial customers to reduce their operational loads.



Irrigation load control

Incentives for agriculture customers to reduce irrigation pumping loads, typically in the summer.



Home appliances

Incentives to residential customers for curtailment of electric water heater loads and HVAC loads through smart thermostats.



Batteries

Incentives for residential and commercial customers to install batteries to support the electric grid.





COMMUNITY OUTREACH & ENGAGEMENT

- Provide the infrastructure for greater participation in utility programs (translation, outreach, incentives, bill assistance, grants, and education)
- Improve language accessibility

Actions that focus on the delivery of programs and communications to customers in named communities.

Outreach, language, and education

- Improve language accessibility and outreach by assessing customer needs, reviewing current programs, identifying gaps, and developing clear plans and processes for action.
- Develop a webpage to host educational resources in English and Spanish.
- Identify and expand outreach to non-profits that provide services to named communities with the goal of increasing grant applications and approvals.

REDUZCA EL COSTO DE SUS FACTURAS
Obtenga incentivos para comprar nuevos productos

WATTSMART BUSINESS | PACIFIC POWER

¿Está listo para mejorar e reducir sus facturas de energía? Pacific Power tiempo y dinero. Cuando más bajos del país.

Ya sea que quiera reemplazar o actualizar su sistema de tomar las decisiones correctas.

TRES FORMAS DE BENEFICIARSE:

- Regístrese para recibir incentivos. Únase a las oportunidades y ofertas.
- Visite nuestro sitio. Inicie un proyecto de ayuda para financiar.
- Encuentre proveedores. Comenzar. Pacific Power Business Vendor Network.

Si tiene alguna pregunta, visite wattsmartbusiness@pacificpower.com

*Algunos incentivos requieren aprobación.

TÚ TIENES EL PODER DE *ahorrar dinero*
A TRAVÉS DE LIBA

El Programa de Asistencia de Facturas para Bajos Ingresos (LIBA) reduce las facturas eléctricas de Pacific Power para hogares con ingresos bajos a moderados. En promedio, los participantes ahorran alrededor de \$650 cada año.

¡Inscribirse en LIBA es sencillo, así que regístrate ahora!

Si vives en los condados Walla Walla, Columbia o Garfield, llama a Blue Mountain Action Council al 509-529-4980.

Para consejos en como ahorrar energía y dinero, visita BeWattsmart.com.

Facturas eléctricas reducidas

Créditos aplicados hacia la factura neta

AHORRA

Ahorros promedio de \$650 al año

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Establish an Electric Vehicle (EV) program

- Establish an EV program that provides additional support for named communities.
- Install EV charging infrastructure, purchase electric vehicle charging infrastructure, conduct outreach and education related to transportation electrification, and potentially purchase electric vehicles.
- Program will be developed with stakeholders to ensure an inclusive program design, which may expand beyond grants.

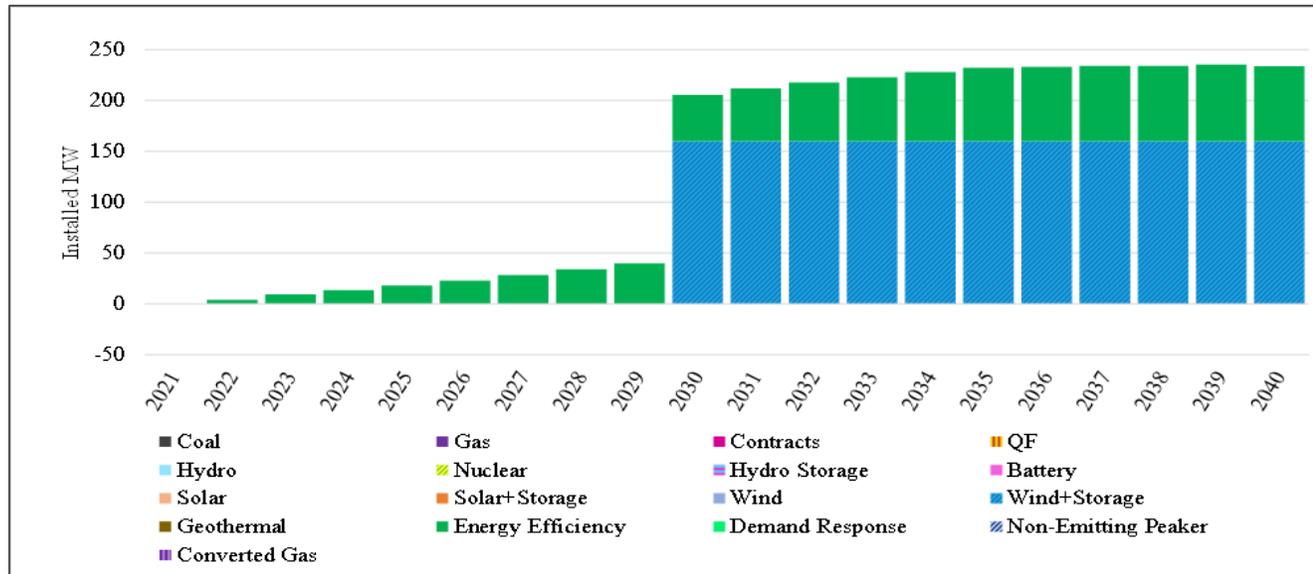
Incremental Costs

(Draft CEIP pages 65-71)



Modeled Incremental Costs

Incremental resources identified by the IRP (cumulative)



- Incremental costs of CETA include resource additions from the IRP
- Although PacifiCorp is planning significant renewables additions in the near-term, these additions are not driven directly by CETA
- In 2022-2025 there are no CETA-driven renewable resource costs
- By 2030, PacifiCorp anticipates CETA-driven renewables additions such as Yakima Wind
- Community impacts and benefits for Washingtonians will be analyzed to ensure equitable outcomes
- Alternatives are also being considered to transmission projects, which can be disruptive to communities

Non-Modeled Incremental Costs

- Costs also include non-modeled costs, for example:
 - Costs of CETA implementation like the EAG
 - **Equity considerations** in Demand-Side Management (DSM) programs
- The estimated incremental cost of CETA is on average, \$5.6 million annually
 - This is not the cost to ratepayers; rate-setting is a separate process
- **Key takeaway: The estimated cost impacts of CETA are modest**

Break



Next Steps



Reminder About Sharing CEIP Feedback

- The November 1 Draft CEIP is available at www.pacificorp.com/ceip
- Submit comments directly to PacifiCorp via email at CEIP@PacifiCorp.com by December 3
- File comments with the Washington UTC Records Center
 - Use the "Submit a Comment" feature at <https://www.utc.wa.gov/consumers/submit-comment>

Next Steps

- 1. Survey.** Please take a few minutes to complete the survey or send feedback directly to CEIP@pacificorp.com.
- 2. Materials.** Notes from this meeting will be shared and posted to the website next week. We will share and post EAG Meeting #8 materials in advance of the **next meeting on January 19, 1-4 pm Pacific Time.**
- 3. Draft CEIP Feedback.** Please submit feedback by **December 3.**
- 4. Thinking Ahead.** Considerations for **EAG 2022** expectations, participation, and subject matter topics.

Looking Ahead

Meeting	Topics
1. May 13	Background and introduction <ol style="list-style-type: none"> 1. Background on PacifiCorp and the Clean Energy Transformation Act (CETA) 2. EAG member perspectives, backgrounds, and experiences
2. June 16	Highly-impacted communities (HICs) and vulnerable populations <ol style="list-style-type: none"> 1. HICs and vulnerable populations 2. Potential benefits, burdens, and opportunities of clean energy for HICs and vulnerable populations
3. July 21	Customer benefit indicators (CBIs) <ol style="list-style-type: none"> 1. List of vulnerable populations 2. Overview of PacifiCorp's Clean Energy Implementation Plan (CEIP), existing customer programs, and CBIs 2. CBI alignment with challenges for HICs and vulnerable populations 3. Initial draft of CBIs
4. Aug 18	CBIs part 2 <ol style="list-style-type: none"> 1. Public survey 2. CBI weighting 3. Introduction of CBI metrics
5. Sept 15	CBI metrics, utility planning, and utility actions <ol style="list-style-type: none"> 1. Refined CBIs and CBI metrics 2. Overview of 2021 IRP and introduction of CEIP 3. Initial list of utility actions
6. Oct 20	Preparing for draft CEIP comments <ol style="list-style-type: none"> 1. Highlight EAG's input 2. Review CBIs and metrics and discuss utility actions
7. Nov 17	Draft CEIP review and comments <ol style="list-style-type: none"> 1. Feedback on the November 1 Draft CEIP
8. Jan 19, 2022	EAG next steps <ol style="list-style-type: none"> 1. Reflection on EAG process in 2021 2. Next steps for the EAG in 2022