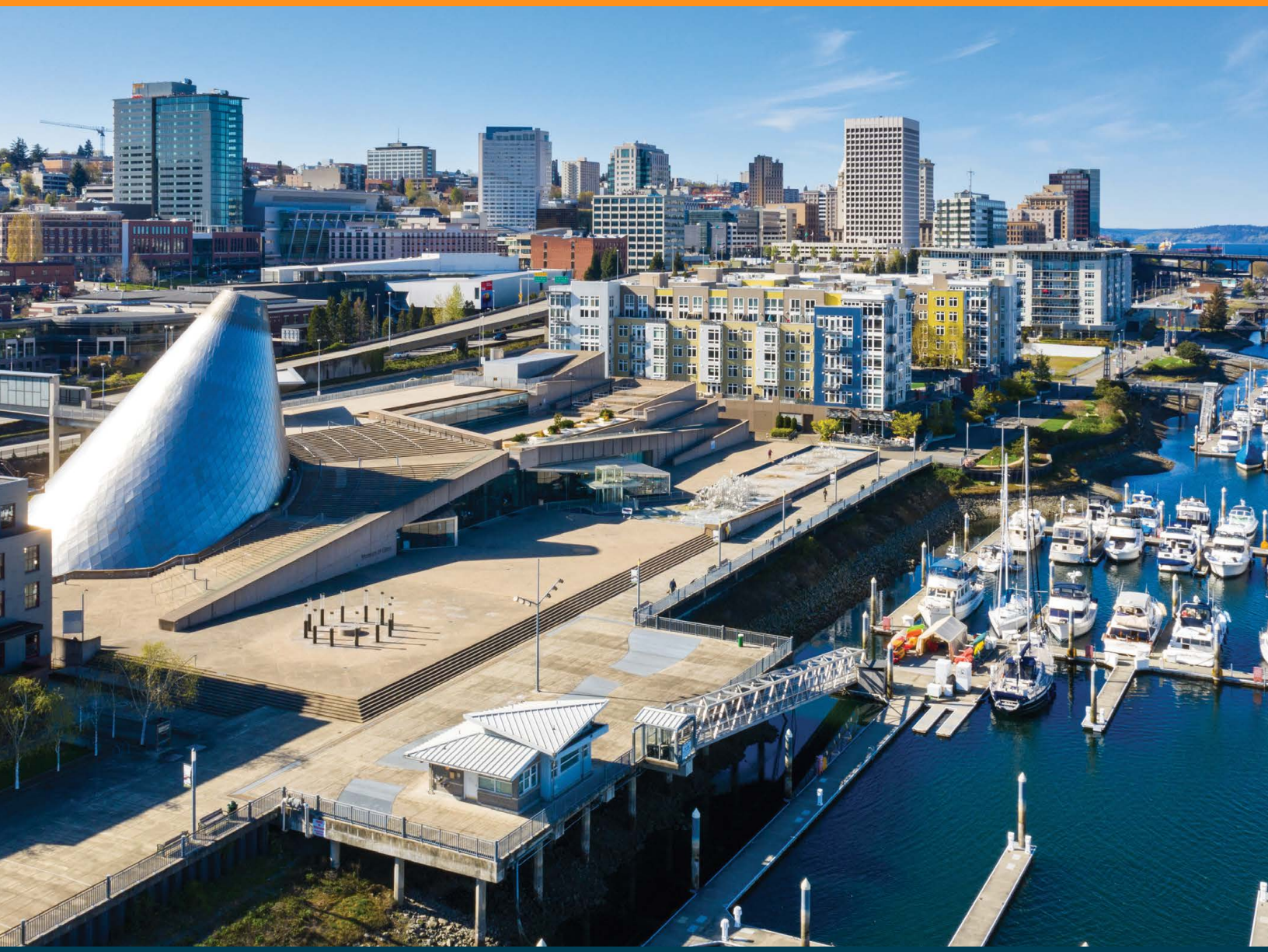


TACOMA POWER
TACOMA PUBLIC UTILITIES

Customer Energy Solutions Plan 2024-2025

Contents

Executive Summary

This Customer Energy Solutions (CES) Plan outlines our approach for the 2024 – 2025 biennium. This biennium features several noteworthy changes and opportunities as the extended impacts of COVID-19 moderate, new policies encourage electrification, and demand and capacity management become more critical to utility operations. Additionally, this biennium merges two groups, Customer Energy Programs (CEP) and Energy Research and Development (ER&D), to provide unified and integrated customer energy offers under the newly created CES group. Conservation will remain a keystone CES activity, and achieving our conservation target will be more challenging than in past bienniums. For the first time, Tacoma Power relied on rollover savings to meet our previous biennial conservation target, which may signal future challenges in meeting subsequent savings targets. In the 2024 – 2025 biennium, CES intends to assess and incorporate improved risk mitigation for our portfolio, expand and diversify our offerings, and emphasize equity and income-qualified customer access to our programs.

Our biennial conservation planning process starts with the Conservation Potential Assessment (CPA), which was completed in the fall of 2023. This assessment establishes our 2024 – 2025 State Energy Independence Act (EIA) mandated energy conservation target of approximately 56,000 MWh, a value comparable to our 2022 – 2023 target. Various factors influence the assessed potential, including new conservation measures, progress in state and Federal energy codes and standards, past conservation achievements, and changes in avoided costs.

In this biennium, CES will maintain a robust and varied portfolio of programs and we intend to acquire approximately 65,000 MWh at a cost of $25 per MWh with a portfolio utility cost test benefit-cost ratio of 1.6, a value higher than the minimum 1.0 cost-effectiveness threshold. Our targeted conservation achievement is larger than our EIA target as a hedge against risk due to our significant portfolio exposure to our residential behavior-based program. Additionally, this larger target will sustain the output of our other conservation programs and will position Tacoma Power for increases in building electrification. In this biennium, savings will originate from various sectors. We project our commercial, industrial, and residential programs to comprise 79 percent of our savings portfolio. Meanwhile, our income-qualified and external programs encompass 1 percent and 20 percent of planned savings, respectively.

We are introducing several changes and enhancements to our offerings in this biennium. First, our sizeable residential behavior-based program, with approximately 60,000 participants, will start generating savings. We also continue to revise our income-qualified offerings to provide more financial support to those customers in greatest need. For our commercial and industrial sectors, we plan to maintain our current offerings, though CES will consider adjustments based on near-term trends. We also intend to expand our equipment rebates program offerings and explore modifications to incentives for the indoor horticultural customer segment.

Additionally, we will continue to offer programs outside conservation including customer-sited renewables and customer-renewable choices through our Solar Net Metering and Evergreen Options programs. CES will also support our mobility, EV rebates, and demand response initiatives. We will also continue collaborating with the City of Tacoma (City) to help improve tree canopy coverage via the Tree Coupon Program. Lastly, we remain engaged with local and state policymakers concerning energy conservation, electrification, and the City of Tacoma Decarbonization Strategy.

We look forward to the 2024 – 2025 conservation biennium and are excited to expand our offerings and enhance our analytics, equity, and program effectiveness.

Background

2.1. About Tacoma Power and CES

Tacoma Power is a municipally owned power utility under the Tacoma Public Utilities (TPU) organization which in turn is owned by the City. Under the public power framework, citizens have heightened local control over utility operations to provide specialized and higher-caliber services reflecting local needs and priorities. Today, our utility provides electric service to approximately 180,000 customers across 180 square miles that covers Tacoma and much of Pierce County.

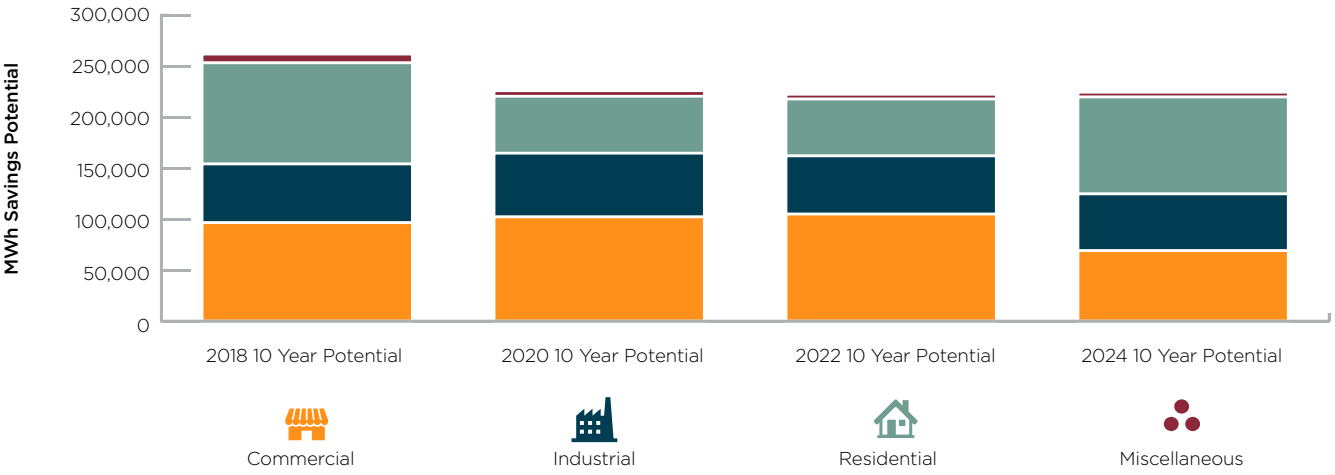
CES is a group within the Power Management section of Tacoma Power. Power Management is responsible for optimizing our power generation assets, energy trading, long term planning, power contract management, and customer programs. Specifically, CES is responsible for customer-facing programs including energy conservation, customer sited renewables, mobility, and customer-focused peak load management. Our energy programs are thoughtfully positioned as a critical customer service offering that enhances utility operations.

2.2. A Legislative Mandate for Conservation

Many states employ Energy Efficiency Resource Standards as an energy policy tool to achieve energy efficiency targets via legislative mandate. In 2006, Washington state voters voiced their desire for utilities to improve their environmental performance by passing Initiative 937, also known as the Washington Energy Independence Act. Among many requirements, this act requires utilities to biennially assess cost-effective energy conservation via a conservation potential assessment (CPA) using the Total Resource Cost (TRC) test to verify resource cost-effectiveness. Per the CPA, Tacoma Power establishes a two-year conservation target. Our utility must achieve this two-year target or risk fines of approximately $75 per MWh after accounting for inflation. This target applies to the compliance biennium, i.e., not for individual years, and the target is a singular savings value without individual product, program, or sector targets.

Figure 1 details the assessed 10-year economic conservation potential over several CPA cycles. As indicated in the chart, our potential has steadily declined, particularly in the residential sector, which is a general trend in our region. In the current CPA, residential heat pump water heater potential grew considerably, partially reversing recent trends in decreasing potential. Other factors also affect the 10-year potential, including advancement in state codes and standards, variations in avoided energy costs, changes to conservation equipment costs and performance and past conservation accomplishments.

Figure 1: 10-Year Conservation Potential 2018-2024



Beyond the EIA, other energy policies also impact our program offerings and approaches to Customer Energy Solutions. Other policies of note include:

Clean Energy Transformation Act

- State law requires electricity to be 100 percent non-emitting by 2045. This law also requires utilities to have programs and funding available for income-qualified households. Program details such as effectiveness, outreach strategies, and funding levels are reported to the State biennially. Programs in this context include all forms of income-qualified customer support, including conservation programs.

Clean Building Performance Standard

- The State requires qualifying commercial buildings to benchmark energy use, develop an energy management plan, and potentially reduce energy consumption on a five-year cycle.

Building Energy Benchmarking

- State law requires Tacoma Power to maintain energy use data for non-residential buildings in a format compatible with Energy Star Portfolio Manager.

State Energy Code

- The State requires the energy code to reduce building energy use by 70 percent by 2031 relative to 2006 levels through updated and progressive requirements every three years.

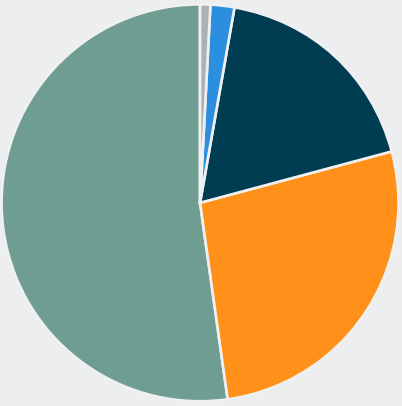
Appliance Standards

- State law establishes efficiency standards for various appliances and requires electric water heaters to feature a demand response communication port.

2.3. The 2024 – 2025 Conservation Potential Assessment

Tacoma Power completed its 10-year 2024 – 2033 CPA in 2023. We use this third-party assessment to determine our State-mandated two-year conservation target that our Public Utility Board must approve. The Board-approved target for the 2024 – 2025 biennium is about 56,000 MWh. Figure 2 provides the estimated energy conservation potential by sector per the CPA. Per the Figure, the largest source of potential savings is from the residential sector (52 percent), followed by the commercial and industrial sectors (27 percent and 18 percent, respectively). In this CPA, the residential sector potential grew while the commercial sector potential decreased, and the industrial sector potential remained largely unchanged despite the closure of the WestRock paper mill. While the CPA provides valuable insights, it does not prescribe where and how we achieve savings, nor does the target align with the utility cost test employed for our program vetting.

Figure 2: Sector Savings Potential by 2043 per the CPA

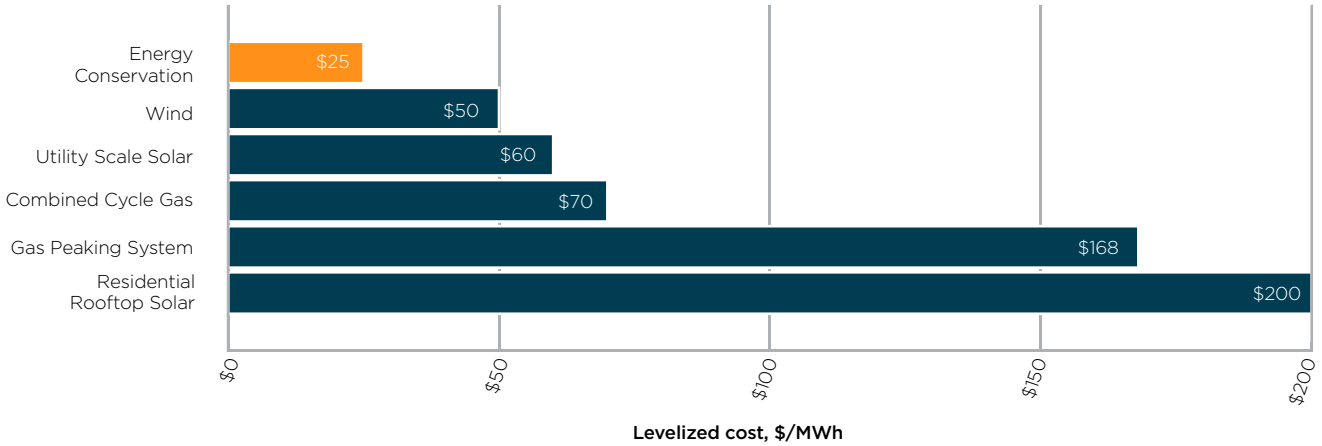


Street Lighting **1%** | Distribution Efficiency **2%** | Industrial **18%** | Residential **52%** | Commercial **27%**

2.4. Incorporating Conservation into Utility Operations

Utility support for conservation may appear counterintuitive. Utilities generate revenue by selling electricity, so incentivizing customers to use less energy might not seem sensible. However, providing energy to customers always incurs costs, and incentivizing customers to conserve when energy acquisition costs are higher reduces our costs and mitigates future rate pressure. This energy cost tipping point, where it is less costly to conserve energy than to acquire additional resources, is the "avoided cost." Per Figure 3, utilities often have diverse power resources to meet their loads. Most sources have benefits and disadvantages, for example, variable vs. dispatchable power, high vs. low cost, low carbon vs. fossil, which can drive the resource cost. As noted in the Figure, energy conservation generally costs Tacoma Power $25 per MWh, far less than other common power resources, and includes customer engagement and load-shaping benefits.

Figure 3: Levelized Cost of Various Power Resources



2.5. Bonneville Power Administration Dynamics in Utility Conservation

We do not conduct energy conservation in isolation, and a critical relationship in performing conservation is with the Bonneville Power Administration (BPA). Our utility relations with BPA are broad and include power purchases, regional coordination, power transmission, and conservation. Within our conservation industry, BPA plays a critical regional role vetting energy savings and participating in regional groups like the Northwest Energy Efficiency Alliance (NEEA) and the Northwest Power and Conservation Council (NWPCC). Additionally, BPA provides our utility financial reimbursement for conservation through a mechanism known as the energy efficiency incentive (EEI). To recover these EEI funds, CES must submit documented, vetted, and approved energy savings via a complex system of conservation classification, reporting rules, and systems. Lastly, BPA also approves our measurement and verification protocol documents that govern our custom conservation programs.

While at times complex and labor intensive, adhering to these BPA requirements provides us essential benefits, including:

- Enhanced customer support
- Reimbursement of millions of conservation dollars per biennium
- Regional conservation advocacy
- A reduction of audit risk due to compliance with trusted BPA processes

In short, the BPA helps our utility deliver conservation at lower cost and risk.

CES Conservation Programs

Developing a robust conservation portfolio requires balancing internal costs, equity considerations, and customer needs. At times, these considerations can be in tension. Nevertheless, we strive to create a portfolio that best addresses these factors to provide Tacoma Power with a least cost resource and efficiently meet our legal obligations under the EIA. To this end, CES conservation offerings must:

1. Be cost-effective per established cost-effectiveness metrics. CES employs the well-established Utility Cost Test (UCT), where we evaluate program costs (incentives, staff time, etc.) against the avoided cost of our marginal power resource. Conservation is cost-effective when the levelized cost to acquire conservation is less than the levelized avoided power costs.
2. Benefit customers with services that reduce utility expenses and improve comfort and safety.
3. Equitably distribute spending among our customer classes, including residential, income-qualified, commercial, industrial, and hard-to-reach segments such as multifamily and small businesses.
4. Be structured to motivate customer buying and behavior patterns that result in energy conservation given their limited time, funds, and focus.

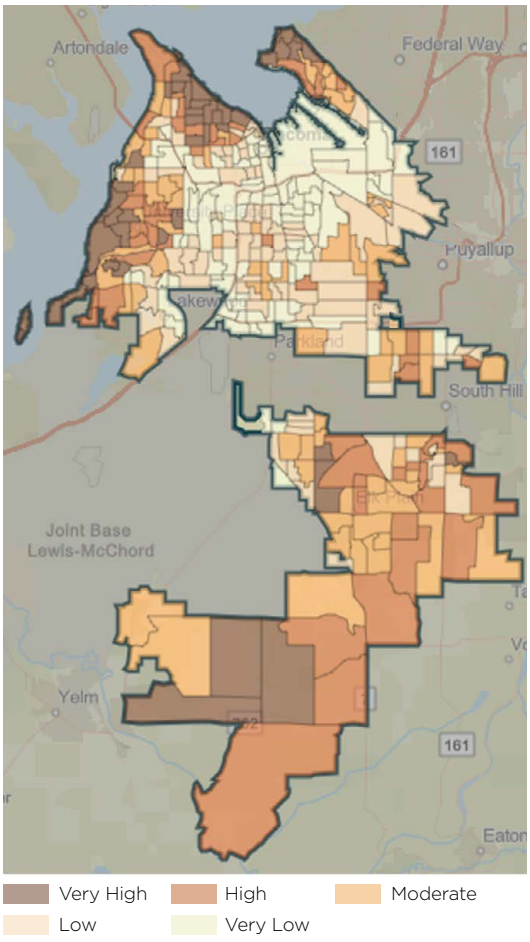
3.1. Striving for Equity in Programs

We fund our energy conservation programs through power sales. As all customer segments contribute through their utility bills, they should have access to our programs. While commercial and industrial programs offer the least cost-conservation resources, residential customers are also entitled to program access. This segment also plays a critical role in our utility operations through policy involvement and public engagement. Additionally, income-qualified[1] customers experience high utility burdens where their utility bills are a sizeable portion of household expenses. These customers often benefit most from energy conservation programs yet experience barriers to entry due to the high upfront costs of the most impactful energy conservation equipment, such as space and water heaters. We strive to reduce barriers to entry by continuously improving our offers and developing programs focused on customers in need.

Figure 4 details our Equity Index Map for our power service territory. Areas in lighter colors indicate low opportunity areas that require additional focus on services, including energy conservation programs. CES programs have been more successful in areas of higher opportunity as our programs are most suitable to residential customers who own their homes and can leverage their savings, financing, or home equity for higher-cost energy conservation, such as whole-home heat pumps and windows. While we need to maintain these programs to help achieve our legally mandated energy conservation target, we must also tailor our offerings for areas with lower opportunity.

In this Plan, we will continue to improve our support for marginalized customers who struggle to access our programs. To better serve them, we will expand our income-qualified offerings and, critically, no longer limit incentive levels for this segment based solely on cost-effectiveness. In turn, this permits us to provide higher incentive levels for these customers that lower their barrier to entry to our programs.

Figure 4: Tacoma Power Service Area Equity Map



[1] Note, historically this customer segment has been described as "low income". As the term "low income" has a negative connotation that produces barriers to access, we use the term "income qualified" to denote programs available to customers that most benefit from additional assistance.

3.2. CES Portfolio

For the 2024 – 2025 conservation biennium, the CES energy conservation target is approximately 65,000 MWh, a value greater than the economically achievable potential determined in the current CPA. While there are several reasons our target is greater than the CPA target, the primary reason relates to risk mitigation for our portfolio from the exceptionally large residential behavior-based program. Specifically, due to near- and mid-term uncertainties around the performance of the behavior-based program, CES is not adjusting other conservation programs that may need to sustain savings beyond the 2024 – 2025 conservation biennium. To achieve our 2024 – 2025 target, CES has budgeted about $7.8M in capital funds and approximately $12M in operations and maintenance (O&M) funds for conservation. We have obligated additional O&M funds for staff supporting non-conservation programs such as solar, mobility, demand response, community engagement, internal initiatives, etc.

Turning to programmatic economic performance, the portfolio UCT benefit-cost (BC) ratio stands at 1.6, and the associated resource-levelized acquisition cost is $25 per MWh. Note that this excludes our income-qualified programs. This ratio is comparable to the performance of the 2022 – 2023 portfolio, which had a respective UCT BC ratio and levelized acquisition cost of 1.5 and $25 per MWh. In short, the portfolio remains cost-effective, and conservation continues to be our least-cost resource.

Table 1 presents a breakdown of sector and program-level performance. Our commercial/industrial sector, residential sector, and NEEA-derived savings UCT BC ratios are respectively 1.5, 0.9, and 6.5. Our income-qualified programs are not required to be cost-effective but are still evaluated for cost-effectiveness for transparency and tracking purposes. In this biennium, the UCT BC ratio of these programs is 0.2.

Compared to the 2022 – 2023 plan, our commercial/industrial and residential sector UCT ratios have decreased, and the residential sector UCT ratio is now less than 1.0. While this is a point of concern, we assess our total cost-effectiveness based on the portfolio performance. However, the change in the residential sector performance is noteworthy and is largely due to decreases in the avoided cost (which makes conservation less cost effective), the performance of the behavior-based program (which has a large impact on the residential sector performance) and increases to overhead costs. Nevertheless, our NEEA-derived savings are projected to be highly cost-effective, and many of these savings originate from the residential sector.

Table 1: Conservation Acquisition, Budgets, and Financial Performance

Energy Efficiency Portfolio Program / Sector	Planned Savings, MWh	UCT Ratio	Resource Cost, $/MWh	Customer Incentives, $	Planned Overhead, $
All Energy Efficiency Programs	**65,280**	**1.6**	**$25**	**$7,782,000**	**$12,220,000**
General Energy Programs: Non-Income-Qualified Overhead					$2,070,000
General Energy Programs: Income-Qualified Overhead					$80,000
Support from Non-CES Utility Groups					$1,450,000
Business & Industrial Efficiency	**26,020**	**1.5**	**$26**	**$3,286,000**	**$3,050,000**
Bright Rebates	11,360	2.2	$18	$1,516,000	$660,000
Custom Retrofit	4,800	1.2	$34	$728,000	$630,000
New Construction	3,720	1.2	$32	$679,000	$610,000
Commercial Strategic Energy Management	530	0.8	$54	$12,000	$130,000
Industrial Strategic Energy Management	3,760	3.8	$10	$59,000	$130,000
Equipment Rebates	1,850	1.6	$25	$292,000	$140,000
Commercial/Industrial Sector Conservation Overhead					$750,000
Residential Efficiency	**25,350**	**0.9**	**$50**	**$1,789,000**	**$3,550,000**
HVAC and Water Heating	3,300	1.1	$41	$1,291,000	$370,000
Weatherization and Windows	240	0.6	$86	$308,000	$250,000
Custom Projects	200	1.1	$37	$99,000	$20,000
Home Energy Reports	21,100	1.2	$33	$0	$1,320,000
Multifamily	510	1.5	$27	$91,000	$90,000
Residential Sector Conservation Overhead					$1,500,000

Table 1: Conservation Acquisition, Budgets, and Financial Performance (continued from previous page).

Energy Efficiency Portfolio Program / Sector	Planned Savings, MWh	UCT Ratio	Resource Cost, $/MWh	Customer Incentives, $	Planned Overhead, $
Residential Income Qualified Efficiency	**910**	**0.2**	**$323**	**$2,707,000**	**$850,000**
Owner-Occupied Conservation	470	0.3	$139	$768,000	$140,000
Agency Partnerships	130	0.2	$262	$511,000	$70,000
Renter Occupied Conservation	310	0.1	$397	$1,428,000	$190,000
Income Qualified Conservation Overhead					$450,000
Other Efficiency Programs/Sources	**13,000**	**6.5**	**$6**	**$0**	**$1,170,000**
NEEA	13,000	6.5	$6		$1,170,000
Rollover*	11,200				

*This is a contingency source of savings that permits the use of historic savings to meet a portion of the current target. It does not contribute to the CES 2024 – 2025 Savings Target value of 65,280 MWh.

Commercial/Industrial Conservation Programs

Tacoma Power serves over 18,000 businesses, including facilities like industrial operations, health care, schools, and retail, as well as small businesses such as restaurants, clothing stores, and veterinarians. To meet the needs of these businesses, CES offers a diverse set of programs. Table 2 provides the program-specific projected energy savings and incentives for the 2024 – 2025 period and percentage values that contextualize each program to the sector and overall portfolio targets. Additionally, economic performance indicators via the program UCT ratio and its associated resource acquisition cost are noted.

Table 2: Commercial/Industrial Program Details

Program	Projected Savings, MWh	Projected Incentives, $	Percent of Sector	Percent of Portfolio	UCT Ratio	Resource Cost, $/MWh
Bright Rebates	11,360	$1,516,000	44%	17%	2.2	$18
Custom Retrofit	4,800	$728,000	18%	7%	1.2	$34
Industrial Strategic Energy Management	3,760	$59,000	14%	6%	3.8	$10
New Construction	3,720	$679,000	14%	6%	1.2	$32
Equipment Rebates	1,850	$292,000	7%	3%	1.6	$25
Commercial Strategic Energy Management	530	$12,000	2%	1%	0.8	$54
Totals	**26,020**	**$3,286,000**	**100%**	**40%**	**1.5**	**$26**

As noted in the Table, the Bright Rebates lighting program represents just under half of the total commercial/industrial sector savings and nearly 20 percent of the total portfolio. Custom Retrofit, our most flexible program for the commercial/industrial sector, comprises almost 20 percent and 10 percent of the sector and total portfolio, respectively. Additionally, New Construction respectively comprises approximately 15 percent and 5 percent of the sector and total portfolio. The remaining programs generally produce less direct savings than the three custom programs but provide important services such as improving equity to program access, customer engagement, and development of projects for our custom programs. We provide additional program details in the following sections.

3.3. Bright Rebates

Overview	Bright Rebates is one of our portfolio's most established, successful, and cost-effective energy conservation programs. This program focuses on lighting retrofits in the commercial, industrial, and institutional sectors. Overwhelmingly, the dominant lighting retrofit is for LED lighting. LED lighting continues to be increasingly cost-competitive while providing unparalleled lighting design flexibility, control, and notable non-energy benefits like reduction in maintenance costs. This program has proven incredibly popular with customers and trade allies alike, and our lighting team produces high volumes of efficient and cost-effective energy conservation for over one hundred customers per biennium.
Changes	None notable.
Incentives	This program provides up to $0.17 per first year saved kWh, covering up to 60 percent of project costs for customers with larger power loads. For small and medium businesses, we provide up to $0.19 per first-year saved kWh, covering up to 100 percent of the project cost. Networked and luminaire-level lighting controls are eligible for additional incentives.
Risks	The commercial/industrial lighting market is increasingly dominated by LED lighting. A near perennial risk exists regarding the uncertainty concerning the timing of saturation of LEDs in the commercial/industrial sectors. Additionally, Washington state recently passed legislation that no longer permits sales of linear and compact fluorescent lighting products starting in 2029. While we don't anticipate this new law to markedly impact our program in the 2024 – 2025 biennium, this law will likely impact projected energy savings from future CPAs. Also, this law may cause a near-term increase in program participation followed by a decline after 2029. Additionally, the program is experiencing a sustained decrease in project counts and savings since 2018.

3.4. Custom Retrofit

Overview	Building systems and processes can be complex, and our Custom Retrofit program provides a flexible approach for projects ranging from sophisticated industrial retrofits to simpler water heating system improvements. Additionally, many projects this program supports include critical non-energy benefits for customers. Measures this program supports include retrofits for compressed air systems, heating, ventilation, and air-conditioning (HVAC), pumps, fans and their associated controls, industrial processes, and other measures not covered by other programs. Lastly, we frequently employ Custom Retrofit for indoor agricultural conservation projects related to HVAC systems, dehumidification systems, and horticultural process lighting.
Changes	None notable.
Incentives	This program provides $0.30 per first year saved kWh for HVAC measures and $0.23 per first year saved kWh for non-HVAC measures, covering up to 70 percent of the project cost. Additionally, we can fund up to 50 percent of energy study costs or provide certain technical support services for complex projects such as high-efficiency HVAC design, compressed air system upgrades, energy modeling, etc.
Risks	The performance of this program is often reliant on large, complex projects that can save up to millions of kilowatt-hours. While critical, these projects can be challenging to predict and can span conservation bienniums, which results in variable program performance and metrics. Additionally, these varied custom projects are highly site-specific, require more significant internal resources to implement, feature variations in analytical assumptions and approaches, and are exposed to audit risks due to their complexity. Lastly, an increasing and significant portion of savings for Custom Retrofit originate from indoor cannabis cultivation. While these projects can be highly cost-effective, they can have shorter measure lives than other capital projects and are not eligible for BPA EEI fund reimbursement (i.e., these projects are self-funded).

3.5. Industrial Strategic Energy Management

Overview	Our industrial customers are amongst our largest electrical loads and feature unique and site-specific energy use patterns. Notable operational and no/low-cost energy conservation opportunities exist in these energy-intensive industrial processes. Our Industrial Strategic Energy Management (ISEM) program helps develop long-term partnerships with our industrial customers to identify operational efficiency opportunities, process optimizations, and holistic energy management strategies. We offer industrial ISEM through the BPA Energy Smart Industrial Program. Our sustained partnership with these customers also yields projects for other conservation programs.
Changes	None notable.
Incentives	This program provides $0.025 per saved annual kWh for operations and maintenance savings beyond a predetermined baseline.
Risks	ISEM programs require sustained customer engagement to yield energy savings. Participants may not sufficiently engage personnel or operations in a manner that results in savings. Moreover, a lack of compelling utility cost reductions or participant bandwidth limitations may lead customers to deprioritize or withdraw from ISEM. Due to high customer-staff engagement requirements, ISEM performance is at heightened risk of disruption from staff turnover. Changes in organizational priorities and/or loss of or failure to appoint a key individual or team can counteract accomplishments.

3.6. New Construction

Overview	Our New Construction program targets building and industrial facilities undergoing construction as well as major renovations in existing buildings. Common conservation measures include lighting, HVAC, industrial process loads, indoor horticulture process loads, and domestic water heating.
Changes	None notable.
Incentives	This program provides $0.20 per first year saved kWh, covering up to 100 percent of the added cost for conservation measures that exceed the state energy code or standard practice when the energy code is inapplicable, such as industrial processes. The program also offers incentives to facilitate decisions early in the design process that result in energy conservation.
Risks	Washington state has relatively aggressive energy codes and ambitious plans for increasingly strict future energy codes. Increased stringency of the energy code results in reduced potential for new construction conservation. However, changes in equipment costs, development patterns, and frequent building renovations continue to provide conservation opportunities, and the program has endured several cycles of code updates. Additionally, the 2021 Commercial Energy Code includes language that may encourage the selection of electrical equipment for space and water heating, which may increase the opportunity for conservation under the New Construction Program.

3.7. Equipment Rebates

Overview	While our custom conservation programs are suitable for medium to large projects, there is a great need for conservation solutions for smaller projects unsuitable for the overhead required by custom projects. For these projects, CES has a broad and growing set of rebates focused on discrete equipment that meets straightforward technical requirements. Customers and trade allies alike can apply for these rebates. Common measures include central heat pumps, ductless heat pumps, and smart thermostats.
Changes	CES continues to explore additional measures to add to this program.
Incentives	The Equipment Rebates program pays fixed incentives based on equipment quantity or capacity without complex energy calculations or site-specific measurement and verification. Incentives range between $0.03 and $0.30 per kWh, depending on equipment type.
Risks	Our equipment rebates generally offset a smaller fraction of the project cost than our incentives under the custom programs, which may dampen customer willingness to participate. Additionally, the program is sensitive to administrative overhead and process efficiency as each project generally produces limited energy savings. Lastly, the program increasingly relies on trade ally support to direct potential projects to program staff. Development and management of those relations are crucial to sustained program growth and performance.

3.8. Commercial Strategic Energy Management

Overview	Large commercial facilities offer notable operational and no/low-cost energy conservation opportunities. Our Commercial Strategic Energy Management (CSEM) pilot program focuses on directly teaming with our commercial customers to identify building operational changes and holistic energy management strategies that yield energy savings. Additionally, our continued, integrated relationship with participating customers produces projects suitable for other conservation programs.
Changes	The CSEM pilot launched in 2018 with the assistance of a third-party implementor and focused on several cohorts representing a range of customers. Our pilot will end in this biennium as our agreement with the third-party implementor ends in 2024. CES will evaluate future program offerings that provide similar support to our customers.
Incentives	CSEM provides $0.025 per saved annual kWh for operations and maintenance savings beyond a predetermined baseline.
Risks	SEM programs rely on sustained customer engagement to produce energy savings. Participants may not sufficiently engage personnel or operations in a manner that results in savings. Moreover, a lack of appreciable utility cost reductions or staff bandwidth limitations can cause customers to withdraw from CSEM programs. And unlike traditional capital programs, CSEM programs are at heightened risk of disruption from staff turnover. Additionally, increasing customer focus on decarbonization might prompt a deprioritization of electricity conservation. Lastly, recruiting private industry into these programs can be challenging when they lease their facilities or have limited facilities within our service area.

Residential Conservation Programs

Tacoma Power provides service to over 162,000 residential customers, and our customers occupy a range of home types, including detached single-family homes, condominiums, town and row homes, and large multifamily developments with hundreds of units. Given the diversity of dwelling types, a blend of owner and tenant-occupied residences, and a diverse set of income levels within our customer population, our residential efforts strive to provide conservation program offerings that reflect the diversity of our customers.

Table 3 outlines specific projected energy savings and incentives for the 2024 – 2025 biennium and provides percentage values that contextualize each program to the sector and overall portfolio targets. Economic performance indicators are also provided via the program UCT ratio and its associated resource acquisition cost. These programs are available to any qualifying residential Tacoma Power customer regardless of their income. Table 4 provides further details for our income-qualified residential customers.

As presented in Table 3, our Home Energy Reports program represents over 80 percent of our projected residential sector savings and 30 percent of our portfolio savings. HVAC and Water Heating along with our Multifamily program are both projected to respectively deliver 13 percent and 5 percent of sector and total portfolio savings. Lastly, Weatherization and Custom projects will respectively provide a net of 2 percent and 1 percent of sector and total portfolio savings. Additional program details are provided in the subsequent sections.

Table 3: Residential Program Details

Program	Projected Savings, MWh	Projected Incentives, $	Percent of Sector	Percent of Portfolio	UCT Ratio	Resource Cost, $/MWh
Home Energy Reports	21,100	$0	83%	32%	1.2	$33
HVAC and Water Heating	3,300	$1,291,000	13%	5%	1.1	$41
Multifamily	510	$91,000	13%	5%	1.5	$27
Weatherization and Windows	240	$308,000	1%	0%	0.6	$86
Custom Projects	200	$99,000	1%	0%	1.1	$37
Total	**25,350**	**$1,789,000**	**100%**	**39%**	**0.9**	**$50**

3.9. Home Energy Reports

Overview	The Home Energy Reports (HERS) program launched in mid-2023 and will yield savings starting in 2024. Under this program, approximately 60,000 residential customers receive quarterly reports featuring household electricity use information, a comparison of home energy performance relative to similar households, and tips for reducing home electricity use. We implement the program through a third party under the direct guidance of CES. This program spans two years with options to extend pending positive results.
Incentives	This program does not provide direct incentives to customers but includes a third-party contract cost.
Risks	Launching a new program entails risks, including schedule challenges and negative customer experiences. Additionally, the use of a third-party implementer introduces additional complexity and risk. Specifically, our HERS program experienced a launch delay due to the magnitude and complexity of data analysis, which delayed our ability to report savings from the 2022 – 2023 biennium to the subsequent 2024 – 2025 biennium. Moreover, the program has proved challenging from a risk mitigation and portfolio balancing perspective as this program features a singular cohort that spans 40 percent of our residential customer base, accounts for 20 percent of the total portfolio, and has a low measure life with unclear persistence that may not provide steady or reliable long-term savings. In turn, our other conservation programs cannot fully adjust or scale in response to the magnitude of savings produced by HERS, which results in potential overproduction of energy savings and overreliance on rollover to mitigate risk. Additionally, the CPA forecast for this program does not align with program implementation, which, given program size, results in misalignment between CPA targets and program delivery.

3.10. HVAC and Water Heating

Overview	Tacoma Power has a 40-year history of helping residential customers improve the comfort and efficiency of their homes through our HVAC and Water Heating program. Measures supported by this program include heating/cooling systems like ductless heat pumps, central heat pumps, variable speed heat pumps, and hybrid/heat pump water heaters. Additionally, this program relies on close trade ally relations as they are the primary method of identifying customers for this program.
Changes	CES has made various rebate adjustments given changes to avoided cost and BPA measure assumptions. Specifically, we added a duct insulation rebate for electrically heated homes. Customers installing a heat pump water heater can choose a zero-interest loan or a rebate (zero-interest loans will continue to be unavailable for non-income-qualified space heating systems). Income-qualified customers qualify for additional loan offers detailed in the residential income-qualified section.
Incentives	Ductless heat pumps qualify for a $1,000 rebate. Central heat pumps that replace an electric furnace are also eligible for a $1,000 rebate. Variable-speed heat pumps that replace an electric furnace qualify for a $2,000 rebate, while all other displaced heating sources qualify for a $1,000 rebate. Hybrid/heat pump water heaters qualify for a $500 rebate or a loan of $4,000 or $6,000 for non-ducted and ducted installations, respectively. Lastly, duct sealing for single-family and manufactured homes is eligible for a $450 and $250 rebate, respectively, while duct insulation qualifies for a $120 rebate.
Risks	Space and water heating system measures can be marginally cost-effective and have relatively long payback periods, which may be unattractive to cost-sensitive customers. Additionally, these measures are susceptible to changes in the BPA-deemed savings values, which often negatively affect their cost-effectiveness performance and can result in their removal from the BPA-maintained list of measures that CES relies upon.

3.11. Multifamily (5+ units/building)

Overview	Improvements in rental housing efficiency benefit tenants through lower utility bills. Property owners may also experience more reliable equipment and amenities such as sound deadening and cooling. Conservation measures supported by this program include insulation, common area lighting, double-pane windows, smart thermostats, and heat pump/hybrid water heaters.
Changes	None notable.
Incentives	Insulation is eligible for rebates of $0.80/sq. ft. and $1.50/sq. ft. for low (3 stories or less) and high-rise buildings, respectively. For low-rise buildings, windows are eligible for $12/sq. ft. for single pane to double pane retrofits and $8/sq. ft. for metal frame, double pane to efficient double pane retrofits. High-rise buildings are eligible for $8/sq. ft. for single pane to double-pane window replacements. Smart thermostats for central systems are eligible for a $75 rebate, while programable line voltage thermostats qualify for a $25 rebate. Common area lighting incentives are determined via the lighting calculator based on site-specific conditions.
Risks	Rental properties often struggle with energy conservation due to the split incentive whereby tenants benefit from reduced utility bills from conservation, but only the rental property owners have the authority to perform modifications to the rental property. Therefore, there is a split incentive to perform the work as the property owner does not reduce their annual operating costs through conservation, and the tenant lacks the authority or capital to perform cost-effective conservation. As a result, it can be challenging to recruit participants into this program.

3.12. Weatherization

Overview	Like our HVAC offerings, Tacoma Power has a multi-decade history of supporting residential customers to improve the thermal comfort and efficiency of their homes. Measures supported by this program include insulation and high-efficiency windows. Like our HVAC and Water Heating Program, this program relies on solid trade ally relations as they are the primary method of identifying eligible customers.
Changes	We have made various rebate adjustments given changes to avoided costs and BPA measure assumptions.
Incentives	Rebates for attic, wall, and floor insulation are $750 per area or a loan up to $6,000. Single-pane window retrofits are eligible for $100 per window and $400 per sliding door. Double-pane, metal-frame window retrofits are eligible for $50 per window and $200 per sliding door. For single-pane retrofits, a customer can choose a zero-interest loan for up to $8,000 instead of a rebate.
Risks	Weatherization measure saturation has increased in our service area and the remaining potential has decreased. Additionally, measures such as window replacement can be marginally cost-effective and have relatively long payback periods, which may discourage customer consideration of this measure. Additionally, these measures are susceptible to changes in the BPA deemed savings values, which often negatively affect their cost-effectiveness performance and can result in removal from the BPA-maintained list of measures that CES employs to define our offerings.

3.13. Custom Projects Program

Overview	Select residential energy conservation opportunities exist that do not fit within our standard programs. In these circumstances, CES offers a performance-based incentive via a custom program. Due to its flexible nature, most measures that meaningfully produce cost-effective electricity conservation are eligible for incentives.
Incentives	These projects are incentivized at $0.50 per saved kWh for the first year, up to 100 percent of the project cost.
Risks	Custom and new construction conservation projects require site-specific energy savings calculations to determine incentives. Consequently, these projects are time-intensive and often only cost-effective if the energy savings are appreciable. As a result, it is challenging to support customers with these offerings and uptake will likely remain low.

3.14. Consumer Products via Retail Distribution

Overview	Tacoma Power has historically maintained a retail distribution program for common consumer products, including CFLs, LEDs, smart thermostats, and heat pump water heaters. This energy savings delivery channel proved highly successful by delivering appreciable, cost-effective energy savings at the point of sale during consumer product decision-making. This program proved particularly effective for lower-cost items such as energy-efficient light bulbs. Passage of the Energy Independence and Security Act (EISA) in 2007 heralded massive energy savings within the consumer lighting products arena by effectively phasing out incandescent lighting. While this yielded notable policy-driven energy savings, it removed a key source of energy savings from the retail distribution channel. Over time, this policy has limited the products the retail distribution channel can support, which in turn caused this channel to no longer be cost-effective. Additionally, our contract with the delivery vendor expires in 2024. As a result, CES will end the retail distribution program during the 2024 – 2025 biennium. CES will evaluate and explore whether it might be cost-effective to re-consider retail distribution in the future.

Residential Income Qualified Conservation Details

The City and Pierce County have witnessed notable change and development over the last decades. Population levels continue to climb, housing affordability faces challenges, and income inequality is growing. Moreover, Tacoma has a higher percentage of individuals who are considered impoverished than other large metropolitan areas in the Puget Sound region. Additionally, the "split incentive" imposes an additional barrier that is particularly pernicious for income-qualified customers as this segment is less likely to be homeowners. A split incentive refers to situations where tenants pay for their energy bills but cannot choose the technology needed to improve the energy efficiency of their property and thereby have limited power to reduce their energy bills or negotiate energy-efficiency upgrades. In other words, as the property owner and tenant are two separate entities, the costs and benefits of conservation are split between the two, which results in under-investment in energy conservation for leased homes and buildings. Therefore, addressing the split incentive is fundamental to developing robust and equitable programs to meet the needs of income-qualified customers.

Given the clear need to provide equitable programs that reduce customer energy burden, CES continues expanding its range of income-qualified conservation offerings. A key change for the previous 2022 – 2023 income-qualified conservation programs was to permit programs to operate beyond the traditional cost-effectiveness threshold used to determine rebates for non-income-qualified programs. Doing so allowed us to provide improved offerings to income-qualified customers. In this biennium, we will continue to leverage this policy change to enhance offerings and have budgeted over 30 percent of our total conservation budget towards income-qualified customers.

Table 4 details the various CES income-qualified conservation programs, their associated projected energy savings, percentages for each program demonstrating their contribution to the sector and overall target, and their resource costs. As noted in the Table, our owner-occupied income-qualified heating and weatherization program will likely be our most active program in the 2024 – 2025 biennium as it is an established program known to our Trade Allies. Our NEEA award-winning Income-Qualified Rental Program is forecasted to provide about 34 percent of income-qualified sector savings. Given the challenges in addressing the split incentive within rental properties, it has the highest rebate budget. Lastly, our Agency Partnerships program is slated to comprise approximately 14 percent of income-qualified savings.

Table 4: Income Qualified Residential Program Details

Program	Projected Savings, MWh	Projected Incentives, $	Percent of Sector	Percent of Portfolio	UCT Ratio	Resource Cost, $/MWh
Owner-Occupied Heating and Weatherization	470	$768,000	52%	1%	0.3	$139
Renter-Occupied Heating and Weatherization	310	$1,428,000	34%	0%	0.1	$397
Agency Partnerships	130	$511,000	14%	0%	0.2	$262
Total	**910**	**$2,707,000**	**100%**	**1%**	**0.2**	**$323**

3.15. Owner Occupied Income-Qualified Residential Customers

Overview	CES has developed comprehensive offerings for income-qualified customers who own and occupy their homes. We help our income-qualified customers by combining rebates with a zero-interest deferred loan. This combination allows customers to reduce utility bills without upfront cost and permits flexible loan repayment. Common measures supported by this program include insulation, high-efficiency windows, duct sealing, hybrid/heat pump water heaters, and space heating heat pumps.
Changes	Several changes to rebates and deferred loans were made to improve offerings and manage our loan fund. Given the number of changes, please consult our website for up-to-date details.
Incentives	Incentives are structured with the intent that the combination of a deferred loan and rebates to cover 100 percent of the project cost, though this is not always possible for high-cost measures such as central heat pumps. More specifically, this program provides 100 percent cost coverage for insulation up to $4 per square foot, a threshold that should cover most, if not all, insulation installations. Windows are eligible for a rebate of $45 per square foot up to $4,000 and a deferred loan for an additional $4,000. Heat pump water heaters can qualify for rebates of $2,000 to $4,000 for non-ducted and ducted units, respectively, in addition to a $2,000 deferred loan. Ductless heat pumps qualify for a rebate of $7,000 and a deferred loan of $7,000. Duct insulation and duct sealing rebates cover 100 percent of the installation cost. Lastly, central heat pumps are eligible for the standard rebate offering.
Risks	The past several bienniums have witnessed a significant decline in income-qualified conservation projects. We developed deferred loans to buoy program participation, but this offer has had a modest uptake. We adjusted our offerings to help increase participation rates and assistance levels.

3.16. Tenant Occupied Income-Qualified Residential Customers

Overview	During the last biennium, CES identified a need for a tailored conservation program for rental homes with income-qualified customers. Rental homes are a challenging market for utility energy conservation due to the split incentive. To address this split incentive challenge, CES launched this program to fully fund energy conservation measures provided the property owner has income-qualified tenants and adheres to an affordability covenant that regulates rent increases. Property owners who prefer not to sign an affordability covenant receive rebates to cover 30% of the equipment costs and finance the remaining costs with a zero-interest loan. Additionally, this program covers costs for those minor repairs, such as drywall and window frame repairs, that enable the installation of conservation measures. Supported measures include insulation, windows, and heat pumps.
Changes	None notable.
Incentives	This program covers 100 percent of the project cost when a property owner signs an affordability covenant, and a percentage of the loan is forgiven for each year that the owner complies. Alternatively, when an affordability covenant is not in effect, the program pays for 30 percent of the project cost and will cover the remaining 70 percent with a zero-interest loan. In all cases insulation is covered at 100 percent of the project cost.
Risks	CES launched this program during the previous biennium and has supported over 20 projects. Since its launch, recruitment has slowed and in response, CES will invest additional energy in recruitment by leveraging our existing partner relations. Additionally, the program is staff-time intensive, which limits further growth.

3.17. Agency Partnerships

Overview	Local organizations that provide or facilitate access to affordable housing to income-qualified customers are natural partners for conservation. This program provides funds to augment existing agency partner budgets to cover the added cost of installing energy-efficient equipment at prevailing wage. Common measures supported by this program include insulation, high-efficiency windows, and heat pumps.
Changes	Incentive levels were increased to help sustain program growth.
Incentives	Incentive levels are unique to each agency partner per the agreements that govern the partnership.
Risks	The primary mission of our Agency Partners is to secure and provide affordable housing, which is not always in alignment with producing energy savings unless we provide sufficient funding to offset increased administrative costs. Additionally, as the incentives do not fully cover equipment costs, our Agency Partners might not consistently secure the necessary funds to install conservation equipment. Lastly, reporting conservation accomplishments from these partner agencies to the State and BPA for reimbursement can be challenging.

3.18. Northwest Energy Efficiency Alliance

Overview	Overview: NEEA is a regional alliance of 15 funding utilities and energy efficiency organizations representing 13 million energy consumers. By operating at scale, NEEA provides Tacoma Power unique access to energy conservation approaches, such as mid-stream incentives and code development, that operate best at an economy of scale otherwise inaccessible given our budgets, staff levels, and the purchasing power of our customer base. Consequently, NEEA leverages regional collaboration and the pooling of regional resources and risk mitigation to achieve cost-effective energy conservation. NEEA serves our customers through upstream market transformation efforts using two strategies. First, NEEA identifies new energy conservation products and services for Tacoma Power customers. Past efforts have promoted high-efficiency lighting, ductless heat pumps, and improved practices for business and industry. Secondly, NEEA accelerates the adoption of emerging energy-efficiency products, services, and practices. Examples of market transformation include encouraging retailers and distributors to stock and promote products such as efficient air conditioning units, pumps with integrated controls, and lower-cost triple-pane windows. During the 2020 – 2021 and 2022 – 2023 bienniums, NEEA played a critical role in helping Tacoma Power meet its mandated energy conservation targets, which highlights the value of this partnership. Forecasts for the 2024 – 2025 biennium are detailed in Table 6 and includes the associated forecasted energy savings, percentage contribution to the overall target, economic performance, and the resource costs. It merits notable emphasis that at a resource cost of $6 per MWh, NEEA provides notable energy savings well below the portfolio average of $25 per MWh. **NEEA details:** • Projected Savings, MWh: 13,000 • Percent of Portfolio: 20% • UCT Ratio: 6.5 • Resource Cost $/MWh: $6
Changes	NEEA operates on five-year planning cycles. The sixth cycle will conclude in 2024, and the seventh cycle will start in 2025. Costs are based on known cycle six costs plus estimated cycle seven costs.
Risks	The savings achieved through NEEA vary annually depending on NEEA initiatives and in response to changes in baseline assumptions between cycles due to updates in the NWPCC Plan. Additionally, reportable savings are not finalized until an annual report is issued, which introduces portfolio challenges if savings fall short of forecasts.

3.19. Mitigating Risks in Our Energy Conservation Portfolio

CES has an established record of meeting and frequently exceeding our targets. However, regionally, it has been more challenging to meet those targets in recent biennium. Missing our target results in financial penalties and increased scrutiny, and exceeding our target introduces more nuanced outcomes related to maintaining sustainable conservation rates. While excess savings can be banked for future reporting periods, banked savings expire after two reporting biennium periods. Over-production of savings without sufficient withdrawal of banked savings will inevitably produce stranded savings incapable of being claimed for compliance. Additionally, overly uneven and unpredictable acquisition of conservation can place strain on our conservation network of trade allies, marketing team, loan funds, and staff time. In short, CES seeks to maintain a sustainable rate of conservation that facilitates long-term and stable conservation programs, and doing so requires careful consideration and mitigation of risks.

Our primary risk mitigation tool is banked, rollover savings. Per State law, utilities are permitted to meet up to 20 percent of a current biennial conservation target with excess savings acquired in the previous two biennial periods. Under the provisions of this law, CES has cultivated a sizeable buffer of banked savings capable of meeting the maximum permitted 20 percent fraction of our current biennial target, which is approximately 11,200 MWh. This buffer provides significant risk mitigation. Additionally, HERS can produce significant energy savings. However, over reliance on this program is risky as it comprises over 30 percent of our portfolio target, which is a value greater than the 20% rollover. Moreover, this program delivers savings once per year, which introduces forecasting challenges and does not permit CES to easily monitor performance compared to other programs that provide steady savings throughout the year. Additionally, our industrial indoor horticulture market segment continues to display notable growth potential and can function as a hedge against risk. We also maintain a savings forecasting system that, with sufficient warning, permits execution of promotions to encourage additional savings.

There is also risk pertaining to predicting our expenditures and managing our budgets. Although CES assesses historic spend rates and considers future financial pressures, accurately planning for budgets without overly large contingencies is challenging. Several large budgetary pressures are frequently outside CES purview. Namely, exceptionally large projects play a key role in achieving our targets, but they can have unexpectedly large budget impacts that are challenging to account for during budget planning exercises. Additionally, our various programs provide incentives at different rates. Unanticipated high participation in select programs may result in budget stresses. In response, CES can adjust incentives due to unanticipated participant behavior or forestalling projects to future budget periods. Also, CES maintains a budget reservation system to avoid over commitment of funds. If the budget reservation system indicates we might overspend, we can respond slowing program participation, reducing incentives, and/or requesting additional funds before depleting our budget.

Lastly, as clearly demonstrated by the COVID-19 pandemic and the associated inflationary pressures and supply chain disruptions, there are external factors that introduce sustained risk. CES witnessed a notable reduction in customer participation from 2020 through 2022. Although the peak of the pandemic-related impacts is waning, associated challenges persist, and equipment costs remain higher than in previous years. This creates multiple pressures, including reduced conservation cost-effectiveness and decreased return on investment on the part of participants. These risks are beyond our control. We can attempt to adjust incentives, reduce barriers to entry, and realign internal resources to high potential areas in the face of strong headwinds, but we may principally rely on banked savings to weather anticipated deviations from our plans.

Non-Conservation Customer Energy Solutions and Initiatives

CES has developed a diverse set of non-conservation, customer-facing programs in response to customer interest and policy mandates. These efforts provide beneficial engagement with customers and community partners outside the traditional roles of energy retail and conservation.

4.1. Customer Sited Renewables

Overview	Many customers install grid connected renewable energy systems such as solar photovoltaic (PV) arrays at their homes and businesses. Additionally, the State Energy Code has provisions that may encourage building developers to install on-site renewables during construction. Customers with these systems might be eligible for incentives, including net metering credits, a fully subscribed State production credit, Federal tax credits, and State sales tax exemptions. In the case of the legacy state production credit, Tacoma Power functions as a payment conduit for production credits that is reimbursed to the utility via reduced taxes. Moreover, under the state's net metering law, customers with systems less than 100 kilowatts (KW) in capacity are credited for excess energy production at the retail rate.
Changes	Solar net metering customers will more clearly see excess energy production tracked on their utility bills, which will reduce future power use charges. Excess production will no longer provide credit for fixed charges or other utility services such as water or solid waste.

4.2. Evergreen Options

Overview	Evergreen Options is a green energy program mandated by State law that offers customers an opportunity to buy electricity produced from renewable sources. We use customer funds under this program to purchase renewable energy certificates (RECs) and provide grants for local organizations, such as schools, non-profits, and institutional facilities, to install on-site renewable systems within the Tacoma Power service area. In this biennium, CES plans to offer one $50,000 grant each year.
Changes	None notable.
Risks	Ongoing enrollment in Evergreen Options is necessary to support our renewable energy grant program. Additionally, management of grant process can be staff and overhead intensive.

4.3. Tree Coupon Partnership

Overview	In 2018, the City of Tacoma determined that tree canopy cover was at 18 percent, a value well below neighboring cities. As a result, in 2019 Tacoma Power partnered with the City of Tacoma to enhance the City Shade Tree Program to increase tree canopy to 30 percent by 2030 by encouraging customer tree planting and proper tree care. Planting trees produces myriad benefits including reducing the need for home air conditioning, improved storm water management, and community beautification. To receive a tree discount, Tacoma and Pierce County residents complete a tree coupon application with the City of Tacoma Urban Forestry Program. Once their site information is verified, they receive a coupon redeemable for $30 per tree for up to three trees from participating nurseries. Participants also receive care and watering instructions, tips for strategically planting trees to conserve energy, and planting assistance if needed. Customer surveys find that the tree coupon program is popular and initial tree survival is greater than 90% after the first year.
Changes	None notable.
Risks	Long-term care and success of trees is site and participant dependent. Management of the program requires additional staff time and overhead.

4.4. Clean Buildings Performance Standard

Overview	In 2019, the Washington State Legislature passed the Clean Buildings Act and established a Clean Buildings Performance Standard (CBPS) that defines energy performance standards for Tier 1 Buildings (i.e., commercial buildings larger than 50,000 square feet). CES estimates that 500 to 700 Tier 1 buildings are located within our service area. Compliance involves developing an energy management plan and meeting either an energy performance target or investing in all cost-effective energy conservation. Building owners must report compliance with the law every five years starting in 2026 depending on building size. Alternatively, building owners can comply by paying a fee. Additionally, in 2022 the Legislature passed an expansion to the CBPS for Tier 2 Buildings (i.e., commercial buildings ranging from 20,000 to 50,000 square feet and any multifamily building greater than 20,000 square feet). CES estimates 5,000 to 7,000 Tier 2 buildings are in our service area. Building owners must benchmark the energy performance of these buildings and develop an energy management plan starting in 2027 and every five years thereafter. By 2030, the State must implement recommendations for a performance-based standard for Tier 2 buildings like that of Tier 1 buildings. These standards might prompt capital projects eligible for our conservation programs. Additionally, utilities around the region are developing CBPS-specific programs to support building owners.
Changes	We have thoroughly overhauled our Energy Star Portfolio Manager (ESPM) system to equally support customers and building owners that are not customers. We are also developing an online intake system to better track and mange connection requests. Lastly, CES continues to explore how to develop new or augment existing programs to better support building owners navigate CBPS compliance.
Risks	Support of such a large quantity of buildings via ESPM is unprecedented and requires notable staff time to test, support, and maintain. Additionally, our existing programs may not always be positioned to best identify and support conservation projects that result from the CBPS. To date, there has not been a significant increase in request for ESPM connections, an action that is a precursor to a building owner exploring CBPS compliance. This lack of requests may indicate that building owners are considering compliance with the standard via fine. If so, this introduces risk around development of CBPS-specific programs if a limited number of building owners intend to comply via conservation.

TACOMA POWER
TACOMA PUBLIC UTILITIES