



LEGISLATIVE AND POLICY CHANGE CHAPTER THREE



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1. Introduction

State policy affecting the energy sector has changed rapidly in the last decade. Puget Sound Energy (PSE) continues to adapt planning processes to the quickly shifting policy landscape. This chapter outlines the major state and federal legislative and policy changes and how they informed the 2023 Gas Utility Integrated Resource Plan (2023 Gas Utility IRP).

On the state level, we incorporated rules from the Climate Commitment Act (CCA) and new building codes. We also included the known impacts of the federal Inflation Reduction Act (IRA) in the 2023 Gas Utility IRP.

2. Climate Commitment Act

In 2021, the Washington State legislature passed the Climate Commitment Act (CCA) establishing a comprehensive cap-and-invest program to reduce statewide greenhouse gas (GHG) emissions. The law directed the Washington State Department of Ecology (Ecology) to develop rules to implement and administer the program beginning on January 1, 2023. Ecology adopted the final program rules on September 29, 2022, and they went into effect on October 30, 2022. Puget Sound Energy must comply with the CCA; as a result, we expect price impacts for all our customers because the CCA imposes a price on GHG emissions. We will work to mitigate those impacts through decarbonization efforts and managing our allowances.

In this report, we discuss no-cost and consigned allowances. No-cost allowances are issued by Ecology and can be used directly for compliance. Consigned allowances are no-cost allowances provided to PSE by Ecology that must be sold at auction. The CCA law restricts the use of the associated auction allowance revenue to certain actions that benefit customers.

2.1. Program

The cap-and-invest program sets an overall cap on state GHG emissions, which declines over time in line with the state's statutory GHG emissions limits. Covered entities, such as PSE, must report GHG emissions to Ecology and obtain allowances to cover them. An allowance is a mechanism created by Ecology equal to one metric ton of GHG emissions.

2.2. Impacts and Actions

Gas utilities are required to comply with the CCA. In the 2023 Gas Utility IRP, we included three potential CCA allowance costs to analyze the impact of CCA compliance on PSE. We based the three CCA allowance costs on price curves in the *Final Regulatory Analysis*¹ report published by the Department of Ecology: Mid or Expected CCA price, Ceiling price and Floor price. The Ceiling and Floor prices we used are identical to the information provided by the report. However, we derived the Mid CCA price for the IRP from a combination of the Expected CCA price from 2024–2030 in the Ecology report and then transitioned to the California Energy Commission's (CEC) forecast for

¹ <https://apps.ecology.wa.gov/publications/documents/2202047.pdf>



California allowance prices for 2030–2050, based on the assumption that the CCA will eventually link to the California Cap-and-Trade Program.

Under the CCA, gas utilities receive direct allocation of no-cost allowances² (based on a 2015–2019 baseline). These no-cost allowances decline proportionally with the statewide cap established under RCW 70A.45.030.³ The reductions apply in the emissions cap scenarios in the IRP, as discussed.

The IRP scenarios studied the impacts on the gas portfolio in two ways:

1. Using a price cap: physical emission reductions are prioritized based on the least-cost addition of resources and then balanced with net additional allowances to meet CCA requirements.
2. Using an emissions cap: resource additions are prioritized without regard to cost to maximize physical emissions reduction before net additional allowances are allowed to balance the portfolio to meet CCA requirements.

The IRP also studied electrification scenarios as a means of reducing emissions to meet the requirements of the CCA. However, electrification also affects the electric utility. We include the results of the electrification analysis with impacts on the gas and the electric utility in this 2023 Gas Utility IRP. This analysis highlights the importance of a dual-fuel energy system as we transition to a low-carbon economy.

Another resource examined in this IRP is alternate fuels such as renewable natural gas (RNG) and green hydrogen. These are fuels determined to have no emissions compliance obligation under the CCA.

➔ A full explanation of the methodology and assumptions we used to model the impacts of the CCA is in [Chapter Four: Key Analytical Assumptions](#).

Please visit the Washington State Department of Ecology’s CCA rulemaking website to learn more about this state program.

3. Technology, Codes, Standards, and Electrification

Energy efficiency technology and changing codes and standards impact customer choices and energy efficiency programs.

The two energy codes impacting PSE customers included in the 2023 Gas Utility IRP, the Washington State Energy Code (WSEC), and several city ordinances are transitioning to focus on carbon emissions and energy efficiency. These changes emphasize the electrification of systems currently fueled by gas. Since February 2021, the 2018 WSEC no

² Some of the no-cost allowances are consigned to auction and are to be used as per provisions in [RCW 70A.65.130 \(2\)](#).

³ [RCW 70A.45.030](#)



longer gives builders efficiency credits for new single-family homes that install gas space or water heating, instead giving them credits for installing heat pumps for heat and hot water.

In 2021, the Seattle Energy Code⁴ created significant barriers to using gas for space and water heating in new commercial and multi-family buildings. With few exceptions, new buildings will use various types of heat pump technology to meet the demands of these systems. The Seattle Energy Code will affect the forecast demand for PSE's gas utility in Seattle, but the change in demand for electricity will impact Seattle City Light, the electric utility for the city of Seattle, not PSE's electric system.

Another provision included in the 2023 CPA is a statutory requirement (RCW 19.27A.160) that directs the WSEC revision process to achieve a 70 percent reduction in energy consumption by 2031 compared to a 2006 code baseline.⁵

The Washington State Building Codes Council (SBCC) has approved code changes to the 2021 WSEC that require builders to install electric heat pumps in new commercial and multi-family construction in place of gas heating and cooling technologies and gives preference to electric heat pumps in the residential building codes for space and water heating. Officials adopted these proposals into the WSEC at the end of 2022; they will go into effect on July 1, 2023. If implemented, these changes will affect PSE by increasing the electric energy and peak demand more than forecasted. The change to the peak demand will be affected by the technology installed in these new buildings.

Although technology continues to provide innovation in how we meet demand in customer homes and buildings, it takes time for these changes to gain significant market penetration. Therefore, the impact on demand is gradual. Heat pump water heaters, for example, have been on the market for nearly a decade, but they are primarily limited to the new home market rather than the much larger existing home market. When codes change quickly, adoption issues arise and may include:

- The complexity of the design, operation, and maintenance of systems that have traditionally been hands-off
- The lack of preparedness to install and maintain these systems in the installer community
- The lack of robust examples and applications that have validated approaches, such as new building electrification, the sole use of heat pumps to serve space, and water heating in large-demand applications

It also takes time to work out design flaws, build trust in the installer and trades community, and reduce costs so consumers can pay reasonable prices as we make these changes.

Despite the rapid pace of changing technology and codes and standards, we are committed to ensuring we make PSE customers aware of the opportunities to reduce energy use and their carbon footprints, advocating for intelligent changes to codes and standards, and working with our trade allies to understand and mitigate barriers to new technology adoption.

⁴ The cities of Bellingham and Shoreline also passed similar gas bans in their jurisdictions in 2022.

⁵ [RCW 19.27A.160](#)



3.1. Impacts and Actions

The CPA included the following codes:

- Forecast of more efficiency codes per RCW 19.27A.160⁵
- Gas restriction in city ordinances: Seattle, Shoreline, and Bellingham
- Updates to the 2018 WSEC

The 2023 Gas Utility IRP includes a zero-gas growth sensitivity: Washington State updated the 2021 WSEC in late 2022 after we completed the 2023 CPA; however, we included informative policy scenarios. One scenario explored zero growth in gas customers. This scenario overstates the impact the proposed 2021 WSEC building code would have if implemented, as it allows new gas customers with non-heating appliances, but it is a reasonable approximation of the impact.

The 2023 Gas Utility IRP included two policy-based electrification scenarios in the CPA. The electrification scenarios were examined in the gas and electric portfolio models, and the results of both are presented in the 2023 Gas Utility IRP. In one scenario, we adopt hybrid heat pumps as a complete replacement for existing heating systems in the residential customer classes and the other scenario adopts electric heat pumps.

Finally, the 2023 Gas Utility IRP evaluated alternative fuels to reduce GHG emissions. Although we assessed renewable gas in previous IRPs, this is the first time we evaluated the impact of incorporating green hydrogen into our distribution system. Blending green hydrogen into our existing distribution system was a new concept for PSE.

We include these scenarios to understand the potential impact on demand. By law, PSE must supply customer demand, so we must understand and predict the outcome of those factors that may impact future demand.

4. Inflation Reduction Act

The federal Inflation Reduction Act (IRA) was passed and signed into law in August 2022 and represented the single most significant federal investment in clean energy and climate-focused solutions in U.S. history, approximately \$370 billion. The IRA addresses climate change primarily by providing tax incentives and consumer rebates to move project developers and households toward lower-carbon or zero-carbon technologies. Impacts on gas utilities are associated with incentives for green hydrogen⁶ and subsidies for individual customers for electric appliances, which could impact growth or conversions from gas to electric appliances. It is too early to understand how the IRA may affect the conversion of certain customers from gas to electric service⁷ — we will consider this in future IRPs.

⁶ A maximum production tax credit (PTC) of \$3/kg for green hydrogen became available in 2023 and will go for ten years (2032). <https://www.congress.gov/bill/117th-congress/house-bill/5376/titles>.

⁷ Applications for states to request these funds won't be available until the middle of 2023 with funds likely not available to the public until early 2024.



4.1. Impacts and Actions

The 2023 Gas Utility IRP includes the IRA impact on green hydrogen. However, we did not address the IRA impact on customer appliance costs for two reasons. First, Congress passed the IRA after we completed the CPA. Second, rulemakings are still required to clarify how the Act will impact appliance prices to end-use customers. We will include those impacts in future IRP analyses when the information becomes available. Future appliance subsidies may or may not affect future CPA due to the use of a total resource cost test in Washington⁸. Additionally, such subsidies might impact customer decisions, which could impact loads. We will factor in IRA subsidies when considering customer behavior in future analyses.

5. Washington Clean Buildings Act

The Washington Clean Buildings Act (HB 1257) became law during the 2019 legislative session. HB 1257 establishes a standard to improve the energy performance of large commercial buildings. It includes new natural gas conservation requirements that address the growing demand for gas to heat building space and water. Utilities must also expand programs to make renewable natural gas available to customers who want to purchase it. Section 12 of the law encourages utilities to incorporate renewable natural gas into their supplies to serve all retail customers. In December 2020, the Washington Utilities and Transportation Commission (Commission) issued a policy statement on how utilities may incorporate RNG into their gas portfolio to serve customers.⁹

Puget Sound Energy worked with the Commission and other interested parties to develop guidelines to implement the law's requirements. We also conducted a Request for Proposal (RFP) soon after the Act became law to determine the availability and pricing of RNG supplies. After analysis and negotiation, we acquired a long-term supply of RNG from a recently completed and operational landfill project in Washington at a competitive price. We will incorporate RNG supply not utilized in PSE's voluntary RNG program(s) into PSE's supply portfolio, displacing natural gas purchases as provided for in HB 1257.

5.1. Impacts and Actions

We are planning significant investments in cost-effective RNG supplies and believe being a proactive RNG buyer and/or producer in the region is valuable. Our analysis indicates that PSE can acquire sufficient RNG volume to meet the needs of our future voluntary RNG program participants, our portfolio and achieving meaningful carbon reductions.

⁸ This question is being considered under the UTC staff investigation - UE-210804.

⁹ Commission Policy Statement: <https://www.utc.wa.gov/casedocket/2019/190818/docsets>