

WASHINGTON'S GAS UTILITIES NEED TO DRASTICALLY REDUCE EMISSIONS. HOW WILL THEY PLAN FOR IT WHILE PROTECTING CUSTOMERS?

New research and modeling by Synapse Energy Economics shows that a Managed and Timely Transition is the best case scenario.

We need to cut emissions by at least 95% from gas in buildings by 2050 to maintain a stable climate and to meet Washington's State Energy Strategy (SES). What are the potential impacts on gas utilities and their customers resulting from the state's pathway? How can gas utilities plan to reduce emissions per state law and transition to electricity while keeping rates affordable for their customers? How can utilities meet equity and climate goals while staying in business to provide essential services like heating?

Residential

Sales Signature Signatu

2023 2026 2029 2032 2035 2038 2041 2044 2047 2050 2053 2056 2059 2062 2065

Figure 4. Assumed extension of SES nathway to 2065

THIS RESEARCH MODELS FOUR SCENARIOS THAT ACHIEVE 95% EMISSIONS REDUCTION:

Managed and Timely Transition (2025)

Clustered electrification and accelerated depreciation starting in 2025

Average annual gas bills under \$900 into the 2040s

Delayed Managed Transition (2030)

Clustered electrification and accelerated depreciation starting in 2030

Average annual gas bills surpass \$1000 by 2040

Delayed Managed Transition (2035)

Clustered electrification and accelerated depreciation starting in 2035

Average annual gas bills almost reach \$1,200 by 2040

Unmanaged Transition (2050)

Planning doesn't occur until 2050

Average annual gas bills surpass \$1,200 by 2040 and reach \$2,000 before 2050

A MANAGED TRANSITION KEEPS GAS RATES THE LOWEST FOR THE LONGEST.

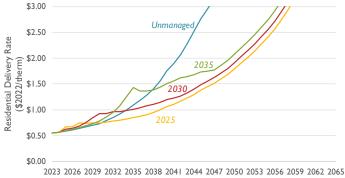
While gas rates ultimately rise under all scenarios due to a shrinking customer base, the **Managed and Timely Transition (2025) rates** remain lowest and most stable over time.

The transition from gas to electric is possible for a dual-fuel utility like Puget Sound Energy, but it requires intentional planning and implementation. We define a "managed transition" as one that accomplishes the following:

- Implements a plan for clustered electrification by 2025
- Assets have a plan for accelerated depreciation by 2025
- Physical extent of the gas system shrinks as electrification occurs

\$3.00

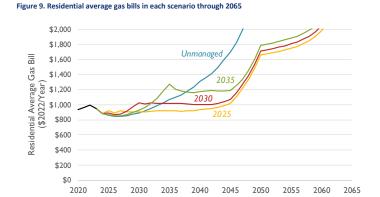
Figure 8. Residential delivery rate by scenario



WHAT HAPPENS WHEN THE TRANSITION IS NOT MANAGED?

The Managed and Timely Transition (2025) keeps average gas bills under \$900 into the 2040s, whereas the Unmanaged Transition (2050) causes bills to surpass \$1,200 per year in 2044.

When the managed transition is delayed, or is unmanaged altogether, we see gas rates climb much more quickly. This is because the utility is forced to maintain pipelines that are serving fewer and fewer customers and are not cost-effective, and the utility isn't planning to depreciate its infrastructure on an accelerated timeline.



THE UTILITY "DEATH SPIRAL" AND IMPACTS ON LOW-INCOME CUSTOMERS

We need a managed, not scattershot, transition off gas to protect customers left on the gas system for the longest and to help everyone make the switch.

Many regulated utilities make large investments that are paid for gradually - similar to paying off a mortgage. Utilities earn a regulated rate of return on these investments and recover these rates through customer bills. As more customers transition off the gas system, however, the remaining customer base shrinks and cost recovery is shared amongst fewer individuals. As a result, the last customers left on the gas system will face exponentially higher costs - known as the utility death spiral. You see this in the **Unmanaged Transition** scenario as rates quickly grow off the chart. Gas utilities are already seeing a stagnation, or even decline, in customer growth due to a number of factors: federal and state incentives to electrify, growing concern about the climate and health impacts of gas, and state building codes that incentivize efficient, electric appliances. But the people who are switching from gas to electric are largely middle- to higher-income and can afford to make this switch.

Increasing gas bills, via the utility death spiral, will disproportionately harm low-income gas customers who may not be able to afford the full cost of a heat pump or face additional barriers in electrifying their homes. Lowincome households, disproportionately BIPOC, face higher levels of air pollutants and should not be the last ones left on the gas system with increasing bills. A Managed and Timely Transition (2025) plans for decreasing customers and a shrinking system, and protects low-income customers the best.