



DECARBONIZING BUILDINGS PROJECT

MISSION

The [Clean Energy Transition Institute](#)'s mission is to accelerate the transition to a clean energy economy in the Northwest by advancing economic deep decarbonization strategies. The Institute provides research and analytics on, and roadmaps for, the pathways to a low-carbon economy; offers an information clearinghouse for decarbonization solutions and technologies; and convenes stakeholders to facilitate the shift to clean energy in the Northwest. Our vision is to decarbonize the Northwest economy at the speed and scale that climate science requires.

PURPOSE

The Institute was founded on February 8, 2018 to provide analytics for policymakers to understand how to accelerate the clean energy transition. The Institute is an independent, nonpartisan entity with the core competencies of skilled analysis and research abilities; seasoned facilitation skills; project management; communications expertise; and training in framing questions and translating complex issues into comprehensible formats.

Our efforts support Northwest decision-makers engaged in building the clean energy economy and in passing climate and clean energy policies: nongovernmental organizations, advocates, utilities, businesses, investors, academicians, and elected officials and their staffs and agencies. We communicate findings about the clean energy transition clearly to those not immersed in deep decarbonization. We convene stakeholders to examine and resolve specific trade-offs on decarbonization and to remove barriers to accelerating the transition.

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The Institute released [Meeting the Challenge of Our Time: Pathways to a Clean Energy Future in the Northwest](#), a deep decarbonization pathways study for Idaho, Montana, Oregon, and Washington (NWDDP study), on June 5, 2019.

The study finds that clean, efficient electricity is critical to decarbonizing the energy sector in the coming decades. In the optimal decarbonization case, total energy demand decreases by 34% from 2020 to 2050, while the share of electricity and electrically produced fuels serving that demand grows from approximately 23% today to 55% in 2050.

That electric grid would need to be 96% clean by 2050 and heat and cool buildings and power vehicles that currently use fossil fuels; coal is eliminated from the grid and natural gas can only be 3.7% of the share of resources for electricity in 2050.

Consequently, we must demonstrate that it is possible to wean the region off natural gas, a radical departure for many Northwest communities and one that could have significant negative impacts on the region's most vulnerable residents, which we must avoid.

Decarbonizing the built environment involves a variety of strategies, including decreasing the amount of natural gas used to heat buildings and water. Our approach to identifying these strategies is fourfold:

1. **Collaborative Partnerships:** We will co-develop the Decarbonizing Buildings project with frontline communities and engage collaboratively with those that must be part of the solution, which includes utilities; state and city policymakers; advocates; and especially those who represent the communities most impacted by the clean energy transition.
2. **Data Assessment:** We will research and analyze data to develop a baseline of how much natural gas is in use for heating buildings and water and the relative value of energy efficiency measures compared to eradicating natural gas use in buildings in terms of decarbonization.
 - What strategies are the most cost-effective for decarbonizing buildings and have the least economic impact on low-income residents?
 - What studies exist about the use and carbon intensity of natural gas in the Northwest?
 - How many natural gas plants are in operation in the Northwest and what are their expected economic lifespans? How are they capitalized and what happens to ratepayers if they become stranded assets before realizing their expected economics?
 - How many residences in the Northwest currently use oil, natural gas, or electricity?
 - What have the natural gas companies submitted for plans to increase the use of natural gas in Northwest homes?
 - What strategies beyond removing natural gas should be considered for decarbonizing buildings?
3. **Solutions Development:** Once armed with as clear a picture as possible of the use and distribution of natural gas in the Northwest built environment and the potential for other solutions to reduce carbon emissions in buildings, we will map solutions based on a rigorous review of what others around the country have done to decarbonize buildings. We will do so with an eye toward those that focus on equity and ensure that the transition burden doesn't fall heaviest on the most vulnerable communities.
4. **Policy Recommendations:** We will assess city and state policy best practices from around the country that have focused on equitable and technically sound decarbonization pathways to craft policies customized to Northwest culture, politics, and economics. We will work with our community partners to choose those that have the best application for the circumstances that apply to marginalized communities in the Northwest.
5. **Pilot Program:** We will co-develop a pilot program with our partners to explore implementing proposed strategies for decarbonizing buildings in a King County community that the Institute would raise the funds for frontline communities to implement.

DESIRED PROJECT OUTCOMES

The Decarbonizing Buildings project reveals barriers to reducing carbon emissions from buildings equitably in the Northwest. The Institute co-develops the project in conjunction with disproportionately impacted communities. The work results in specific city and state policy recommendations. The Institute supports communities disproportionately impacted by the clean energy transition by providing fundraising assistance to conduct a follow-up pilot project.