

SCALE 2030 Webinar Q&A

On June 4, 2025, the Clean Energy Transition Institute (CETI) and 2050 Institute hosted a webinar presenting key insights from two recently published papers: <a href="https://www.scalen.com/scalen.com/hosted-a-webinar-com/hosted-

<u>SCALE 2030</u> is a CETI and 2050 Institute project that aims to shift Washington from an approach focused on incremental energy efficiency and emissions reductions to a systemic framework that will enable the rapid market transformation needed to decarbonize buildings in just over 25 years.

The *Clean Buildings Ecosystem Assessment* compiles existing data and research from state, regional, and federal sources to develop a holistic view of the existing building ecosystem in Washington.

The Clean Buildings Transition Framework outlines the challenges to decarbonizing buildings in Washington and proposes five strategies that emphasize building performance, increased and target funding, rapid market transformation, coordinated planning, and a regional approach to implementation.

Questions and Answers

Q: What percentage of the non-residential building square footage and energy consumption is covered by the Clean Buildings mandate for large buildings? Do we need to start addressing the smaller buildings soon?

A: CETI does not know the exact percentage of square footage or energy consumption that the Clean Building Performance Standard covers but will reach out to the Department of Commerce to ask and update this document when we have an answer. We do know, from available Commerce data, that there are an estimated 9,000 Tier 1 buildings and 25,000 Tier 2 buildings. However, Tier 2 includes multifamily buildings over 20,000 square feet, so it is not exclusively non-residential buildings.

Update 7/2/2025: Tier 1 of the Clean Building Performance Standard covers ~10,400 commercial buildings with a total floor area of ~1.6 billion square feet. Tier 2 of the Clean Building Performance Standard covers ~17,500 residential and commercial buildings with a total floor area of ~1.1 billion square feet. Within Tier 2, ~10,000 buildings and ~.3 billion square feet are non-residential. Thank you to the Department of Commerce for providing this additional information. The specific percentage of non-residential buildings square footage or energy consumption covered by the Clean Buildings Performance Standard is an area for further analysis.

Q: What strategies work for moving multifamily water heat away from electric resistance? You can't put heat pumps in a closet, and we don't want to refrigerate the living space.

A: There are <u>central heat pump water heater systems</u> already in existence that work for many multifamily buildings, but levels of market acceptance are still low. Additional solutions or potential strategies for increased market acceptance should be explored.

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Q: Is there a recommendation for what the targeted approach would be to get heat pump costs down? There are currently a lot of incentives already.

A: There are many potential approaches for reducing heat pump costs. We need to work more with industry – including manufacturers, distributors, and installers. Options include buying down the cost of equipment through midstream or upstream programs, group bulk buy programs, and installer training or incentives. There are also regulations in the United States and in Washington that could be considered in efforts to lower heat pump prices. These include permitting and inspection processes, retail sales taxes, and fuel switching prohibitions. Installation costs are another factor that can drive up heat pump prices, and exploring ways to optimize the installation process could help reduce high costs experienced by consumers.

Q: Why do you think we are not seeing (or will not see) the adoption curve cost decreases for heat pumps?

A: There might be many reasons for this. One could be that program incentives increase short-term demand and contractors may adjust prices. Another could be that we are not rapidly increasing heat pump adoption or market adaptation. Without policies and programs to increase demand and supply, we will not see the price decrease that we anticipate as technologies move across the adoption curve. Lowering the cost of heat pumps in Washington will require a concerted and coordinated effort.

Q: What policies around banning the use of natural gas do you see a need for within this strategy?

A: We do not necessarily see the need to ban natural gas. We do see a need for policies that would have zero-emission appliance standards, which would require an increase over time in the sales share of zero-emission equipment. There are also opportunities in the existing building chapter of the energy code to require that buildings account for the lost efficiency of not using a heat pump without strictly mandating heat pumps. There are many ways to accomplish the goal of decarbonizing buildings without banning natural gas.

Q: Have we seen something like the Clean Energy Regions concept in other places?

A: There are other similar examples, including <u>California's Regional Energy Networks</u>, of which there are several across the state that focus on programs and implementation. In New York, there are <u>Regional Clean Energy Hubs</u>, which are distinct geographic areas where there is targeted support to organize around clean energy.

Q: How have building scientists and installers and other technical experts already been engaged?

A: SCALE 2030 initiatives have not engaged building scientists and installers so far. We hope that these papers provide a foundation for future collaboration and discussion by providing a holistic view of the building ecosystem and key levers for change.

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