

MEMORANDUM

TO: Climate Action Steering Committee (CASC)
 FROM: Allison Osterberg, Senior Planner, TRPC
 DATE: February 22, 2022
 SUBJECT: Comments to Washington State Building Code Council on Proposed Updates to Commercial Energy Code

Requested Action

Discuss comments to be sent to State Building Code Council.

Background

The Washington State Building Code Council (SBCC) is a state agency that provides independent analysis and objective advice to the legislature and the Governor’s Office on state building code issues. The Council establishes the minimum building, mechanical, fire, plumbing and energy code requirements necessary to promote the health, safety and welfare of the people of the state of Washington, by reviewing, developing and adopting the state building code.

The State Building Code Council considers updates to codes on a three-year cycle to incorporate new information and technologies. The SBCC currently is considering changes to Commercial sections of the 2021 Washington State Energy Code (WSEC-C). Any approved changes will apply to new commercial buildings and new large multifamily buildings (four stories or taller) beginning on July 1, 2023.

The Zero Carbon Building Alliance advocacy group [Shift Zero has a summary of proposed changes](#) and [FAQs](#), with links to the individual proposals that are relevant to climate issues, which include:

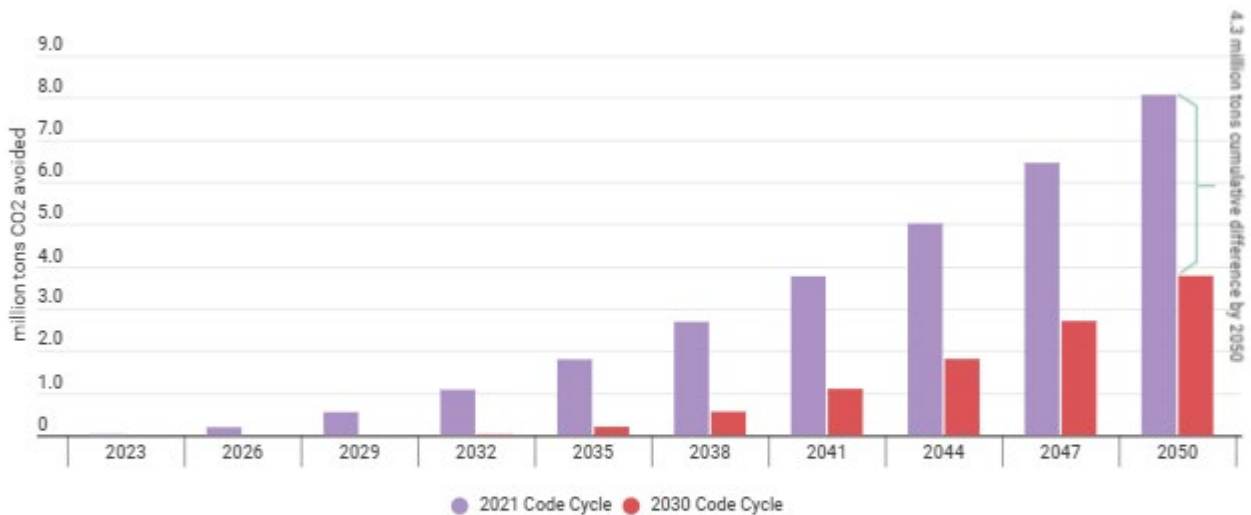
- **Increases energy efficiency requirements** for building envelopes.
- **Requires efficient electric heat pumps for space heating and water heating**, with some exceptions. These requirements do not apply to cooking stoves—new buildings will continue to be allowed to install gas cookstoves under the proposed amendment, but must also install an electrical circuit and outlet, so that future users of the building have the option to switch to an electric appliance.
- **Extends solar-readiness requirements** to applicable multifamily buildings.
- **Improves lighting efficiency.**
- Brings energy code into alignment with decarbonization pathway proposed in the 2021 State Energy Strategy developed by the Department of Commerce.

If proposed changes are not approved in this cycle, the next opportunities for changes to the state energy code will be for codes that would likely go into effect in 2026 or 2029. The [Rocky Mountain Institute \(RMI\) did a recent analysis](#) comparing the potential emissions savings from changes made in the current update cycle compared with waiting until the state’s overall target of 2031:

SOURCE: [ROCKY MOUNTAIN INSTITUTE](#), 2022

The Cost of Waiting

Cumulative Emissions Savings
from All-Electric Space and Water Heating Proposals



Source: Emissions impacts are based on RMI analysis using the NREL's Cambium model, EIA CBECS (2012), and EIA commercial gas demand.

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WA Commercial Building Electrification - Emissions Infogram

Connection to Thurston Climate Mitigation Plan and 2022 TCMP Work Program

Energy use in commercial buildings accounts for a quarter (25 percent) of total greenhouse gas emissions in the Thurston region, according to the most recent greenhouse gas inventory, and about 15 percent of those emissions are due to natural gas use. The Built Environment as a whole—including residential, commercial, and industrial energy use—accounts for 62 percent of countywide emissions.

A plank of the framework adopted in the Thurston Climate Mitigation Plan is to shift more appliances, heaters, and vehicles to electricity. Under the requirements of the Clean Energy Transformation Act (CETA), electricity will increasingly come from clean energy sources, leaving natural gas use as the largest source of emissions in buildings.

In the Implementation Strategy for the TCMP, jurisdictions agreed that several relevant actions should be part of the region's Legislative Agenda, including building on changes in the state building and energy code to support a faster shift toward greater efficiency and electrification of new construction. The consensus among jurisdictions was that these actions would be most efficient and effective through changes made at the state level, through the state Energy Code, rather than by individual jurisdictions:

- **B6.2, electric appliances in new construction** – Update codes to require electric appliances in new construction
- **B6.4, natural gas transition** – Phase out new natural gas connections in new buildings over time
- **G5.2, solar-ready building code** – State-level amendments to state building code requiring solar-ready construction

At the January 24, 2022 meeting, the Climate Action Steering Committee discussed sending a comment letter to the State Building Code Council supporting the proposed changes. Staff drafted the attached letter for review by committee members.

Separately, as part of the 2022 Work Program, CASC members are collaborating on a [building electrification cost assessment](#) that will provide information on the potential costs and cost savings of building electrification in Thurston County. A [similar assessment done by RMI for Seattle](#) found significant cost savings for all-electric homes compared to new homes relying on mixed fuels. The building electrification cost assessment will shed light on how such policies will apply to Thurston County’s specific market and real estate conditions. This information can help partners prepare for a shift to building electrification, by understanding who may be impacted and how to minimize any negative impacts, whether the policy direction is coming via the state building and energy codes or through a local policy.

Next Steps

The schedule for the State Building Code Council public review is:

- **February 25 and March 11:** Two public hearings, both 10am-4pm
- **March 11:** Written comments deadline
- **March 18:** SBCC meeting to review comments
- **April 22:** SBCC to approved changes to Commercial Energy Code
- **Summer and Fall:** SBCC will review proposed changes to the residential energy code (WSEC-R)
- **July 1, 2023:** Commercial and Residential Energy Codes go into effect

Decision Options

- **Option A:** Approve comment letter as drafted.
 - Addresses priority strategies and actions identified in the TCMP as part of the Legislative Agenda
 - Does not allow partners additional time to understand impacts of changes to the local community, including through results of the building electrification cost assessment
- **Option B:** Approve comment letter with changes, as suggested by discussion and agreement of the Climate Action Steering Committee
 - Addresses priority strategies and actions identified in the TCMP as part of the Legislative Agenda, with greater input from Steering Committee members
 - Does not allow partners additional time to understand impacts of changes to the local community, including through results of the building electrification cost assessment
- **Option C:** Do not send comment letter on behalf of the CASC. Individual jurisdictions may still opt to send in their own comments within the public comment period.

- Allows partners to receive results of the building electrification cost assessment to better understand potentials costs and benefits before advocating for specific proposals
- Delays regional action on several priority strategies and actions in the TCMP until the next Energy Code review cycle.

Attachments and Resources:

- Attachment 1: Draft Comment Letter to State Building Code Council
- Link: [Washington State Building Code Council](#)
 - [Proposed Rule Making, 2021 Washington State Energy Code](#)
- Link: [Shift Zero Overview of Proposed changes to Washington State Energy Code](#)
- Link: [Rocky Mountain Institute analysis of carbon emissions and cost savings from Washington State Energy Code changes](#)

**MEMBERS****City of Lacey**

Carolyn Cox
Robin Vazquez

City of Olympia

Lisa Parshley
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Thurston County

Tye Menser
Carolina Mejia

City of Tumwater

Eileen Swarhout
Charlie Schneider

February 28, 2022

Washington State Building Code Council
1500 Jefferson St SE
Olympia, WA 98504

To Members of the State Building Code Council:

As the chair of the Thurston Climate Action Steering Committee, I am writing to express our support for proposed updates to the Washington State Commercial Energy Code that accelerate a transition away from reliance on fossil fuels in commercial and multifamily buildings. These include requirements that new construction include electric heat pumps and water heaters.

The Thurston Climate Action Steering Committee includes policymakers from the communities of Thurston County, Lacey, Olympia, and Tumwater who are working together to address the causes of climate change. Collectively, we represent more than 300,000 residents in one of the fastest growing areas of the state. In 2020, we completed the Thurston Climate Mitigation Plan, a regional framework for climate action that identifies strategies and actions to reduce locally generated greenhouse gas emissions.

Energy use in buildings is the largest source of emissions in our region, accounting for almost two-thirds (62%) of our carbon footprint. In developing our climate plan, we found that requiring electric appliances in new construction through the state building and energy codes is among the most efficient and effective ways to reduce emissions from this sector. Changes to the state code ensure that community members across our region will have consistent access to technologies that not only reduce emissions, but that have public health benefits and reduced costs over their lifecycle. This change is especially important for commercial and multifamily buildings, where tenants often have less control over appliance decisions, though they are most likely to benefit from the cost savings and health benefits of building decarbonization.

We especially support the adoption of a state building energy code that requires that use of efficient electric heat pumps for space and water heating in new commercial and large multifamily buildings. It is important that these changes to code be put in place now, rather than waiting for a future code review cycle, as any delay will extend our community's reliance on fossil fuels in ways that we will need to retrofit or offset at some time in the future to meet our climate goals. The solutions exist to make our buildings healthier and more resilient, and now is the time to accelerate their adoption.

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Thank you for your consideration of comments and the expertise that you bring to this review. We urge you to move forward the amendments, which will be to the benefit of communities like ours and across the state of Washington.

Sincerely,

Lisa Parshley, Olympia City Council
Chair, Thurston Climate Action Steering Committee

Tye Menser, Thurston County Board of Commissioners
Vice Chair, Thurston Climate Action Steering Committee

Carolyn Cox, Lacey City Council
Thurston County Climate Action Steering Committee

Eileen Swarthout, Tumwater City Council
Thurston Climate Action Steering Committee

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