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www.shiftzero.org 811 1st Ave Suite 305 Seattle, WA 98104 (206) 621-0094 To: Washington State Building Code Council

**From**: Shift Zero, Roadmap to a Zero Net Energy Building Code Task Force

Date: July 12, 2019

**Re:** Shift Zero Comments Supporting the Approval of the proposed 2018 Washington State Energy Code

Dear Chair Orth and the Washington State Building Code Council:

## Shift Zero would like to offer our strong support of the full package of proposed commercial energy code amendments currently before the Council.

Shift Zero is an alliance of 28 green building, energy efficiency, and climate action organizations and businesses that have come together to support policies and programs that advance a zero net carbon built environment for all communities in Washington State. Our members are experienced in designing and constructing high-efficiency buildings, including Passive House and net zero construction. With that expertise, we advocate for buildings to first be as efficient as possible, then to provide on-site renewable energy as practical, and finally, to have any remaining energy needs met by off-site renewables.

One of the key ways to ensure that our buildings are as efficient as possible is through strong energy codes. Washington has a legislative mandate for new buildings to be 70% more efficient by 2031 than they were in 2006 and an Executive Order (14-04) encouraging the State Building Code Council to meet that target more aggressively.

Though there is much more required to ensure that all Washingtonians live and work in the most efficient buildings possible, the proposed 2018 energy code sets us in a good direction. The increasing focus on performance and testing will help ensure that the energy code delivers actual energy savings in buildings.

**We would particularly like to highlight:** our support for the updates to air barrier testing and standards (Proposals 45 and 46), the addition of the Total System Performance Ratio (Proposal 50), the adoption of ASHRAE Appendix G (Proposal 141), and the addition of solar-ready roofs (Proposal 159). In some of these proposals (50 and 141), a carbon emissions metric is used; we recommend the value advanced by the Energy Code TAG of 0.55 pounds of CO2e per kWh, and a maximum of the .70 compromise as approved by the SBCC in late 2018, be used for these sections.

We also support the lighting power allowance (LPA) "Option 4" as described by Mike Kennedy in his July 12, 2019 public testimony. The WSEC LPA must represent an improvement over the 2015 code. Accordingly, we support adopting the ASHRAE 90.1-2019 standard as referenced in Kennedy's testimony. In addition, we strongly oppose extending Footnote C from this standard to all spaces in the building as suggested in Denise Fong's testimony.