From: Rachel [Rheya] Molloy <rachelamolloy@gmail.com>

**Sent:** Friday, February 18, 2022 1:15 AM **To:** DES SBCC <sbcc@des.wa.gov>

Subject: Support - State Building Code Council Building Electrification

## **External Email**

February 18, 2022

Dear Members of the State Building Code Council; SEP SEP

Thank you for providing this opportunity for testimony. My name is Rachel Molloy, resident of Redmond, WA. Speaking only for myself, I serve as a city and school district sustainability advisor, engaged directly in building and home energy efficiency system upgrades and climate emissions reductions. Achieving zero emission by 2030-2040 is the prioritized target of our state, county, and city in response to scenarios outlined by US National Climate Assessment 2018 and IPCC AR6 report.

As a carbon neutral, and electrified homeowner myself (already having implemented these same efficiency and wiring upgrades with capable, locally-owned electricians, and assisting neighbors in the same); undoing inefficient, inadequate, and outdated construction and wiring practices from 30 years ago, means SUPPORTING changes today to accelerate building code preparedness, mitigation, and greenhouse emission reductions in line with priority policy efforts, and supported by data and advancements in market (not inaction and still hypothetical "green hydrogen" upgrades of some future tomorrow).

21-GP1-136 – Support banning natural gas for commercial water heating uses and requiring the use of electric heat pump for water heating purposes.

**21-GP1-103** - Requires electric heat pumps for all new commercial construction and retrofits, and bans the use of natural gas for commercial space heating (HVACs).

Building impacts and the technology addressing climate change are surpassing our state building codes and trade groups, which unintentionally locks in decades of avoidable emissions at a time when we can least afford to do so. New construction in our high demand neighborhoods is baselined with heat pump exchange cooling/heating (essential in +100-120F heat waves). Heat pump, tankless, and electric water heating is already the norm. +50% of Seattle homes now have air conditioning, and this skyrocketing rate of increase will only continue. Heat pump technology has advanced to the point were gas backup is no longer needed for home heating in our area (especially with the on-going warming trend), except in the most extreme polar vortex outbreak scenario, at which point gas pipelines would be equally vulnerable to shortage or freezing. Tankless gas water heaters still require electricity or protected panel battery backup, so electrification is still the stronger overall efficiency, emissions, and long-term resiliency choice.

Homeowners are electrifying in response to climate change, this can unburden our grid and alleviate unsafe vulnerabilities already existing in outdated infrastructure and outdated practices. Super charger outlets, induction stoves, LED lighting, battery backup, solar system integration for peak use times, are already the emerging global market best practices. We need to prepare our homes and

buildings now for the smoke, wildfire, heat, extreme weather, high winds, flooding, and heavy precipitation already here...and for the climate-informed residents and owners who will be living and working in them.

Thank you for your time and consideration on these matters,

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**Rachel "Rheya" Molloy** - she/her M: 206-931-7052 18308 NE 107th St, Redmond, WA 98052

rachelamolloy@gmail.com