

September 29, 2020

To: Duane Jonlin, Energy Code and Energy Conservation Advisor, SDCI  
and the Construction Advisory Board

RE: Proposed Seattle Energy Code

The 43rd District Democratic Environmental Caucus is very pleased that the City of Seattle continues to upgrade the WA State Commercial Energy Code to increase the building efficiency requirements and reduce the use of carbon based fuels in commercial buildings. These efforts help our city and the region meet its greenhouse gas emissions goals. They are vital to fight climate change for our health, our economy and our natural environment.

This proposed Seattle Energy Code is based on the principle of reducing GHG emissions in the most cost effective way possible, when a building is built not as a retrofit. It appears concerns about added building cost have been balanced with the cost of utilities for housing. Lower utilities resulting from these codes will benefit those in affordable and low-income housing over the long term. The Code has been written in a very transparent process that involved the building community and environmental community. The process makes it stronger and better.

75% of the GHG emissions in commercial buildings come from space and water heating with fossil fuels. Therefore the most effective ways to cut greenhouse gas emissions is to stop using carbon-based fuels in heating buildings and water. We fully support changes in the code to stop the use of fossil fuels for heating, though we feel they should go farther and faster. Also, the prioritization of the envelope as a permanent and long term energy efficiency measure makes economic sense.

Below is a list of key proposed changes to the code we fully support:

- 1) No fossil fuel space heating. Only electric space heating allowed, with efficient electric heating, such as heat pumps, in all but very small rooms including in both high and mid-rise multi-family buildings
- 2) Don't allow modelers to trade off the building envelope for other energy efficiency measures.
- 3) An increase in the PV requirements.
- 4) An increase in building performance and energy credit requirements.
- 5) Only heat pump water heaters, no fossil fuel water heating, allowed in residential buildings (R1 and R2) and hotels.

Below is a list of key proposed changes to the code we think should be changed or added because equipment installed now will remain in place for 15-20 years and we can not wait 20 years to begin work on meeting our GHG emissions reduction goals:

- 1) Include other buildings that use a lot of hot water in the restriction of fossil fuel for water heating. Require heat pump water heaters, waste heat recovery or solar for water

heating in buildings with high hot water use. The requirement could be based on a hot water usage metric. This could include the following building types: hospitals, gyms with showers, restaurants, laundromats, motels, any unit serving showers, commercial laundry, some labs, pools, out-patient surgery clinics.

- 2) Do not delay the restriction of fossil fuel use for water heating.
- 3) The proposal to require an electric plug and electrical capacity for future change out where a gas water heater is installed, so an electric water heater can be installed, is a great idea. However, this alone will not facilitate the future installation of heat pump water heaters if the gas water heater was installed in a heated space. If you have to re-pipe and re-wire to get the heat pump in an appropriate location, this will be a more costly retrofit and therefore a standard electric water, not a heat pump water heater will typically be the replacement. Therefore, the code should require gas water heaters be installed in a location where a replacement with a heat pump water heater is going to work easily, that is in an unheated space.

Thank you for your efforts to date and your consideration of these changes to the proposal. Feel free to contact us regarding this.

Holly Townes, ME PE

Energy Efficiency Engineer

On Behalf of the 43rd District Democrats Environmental Caucus

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