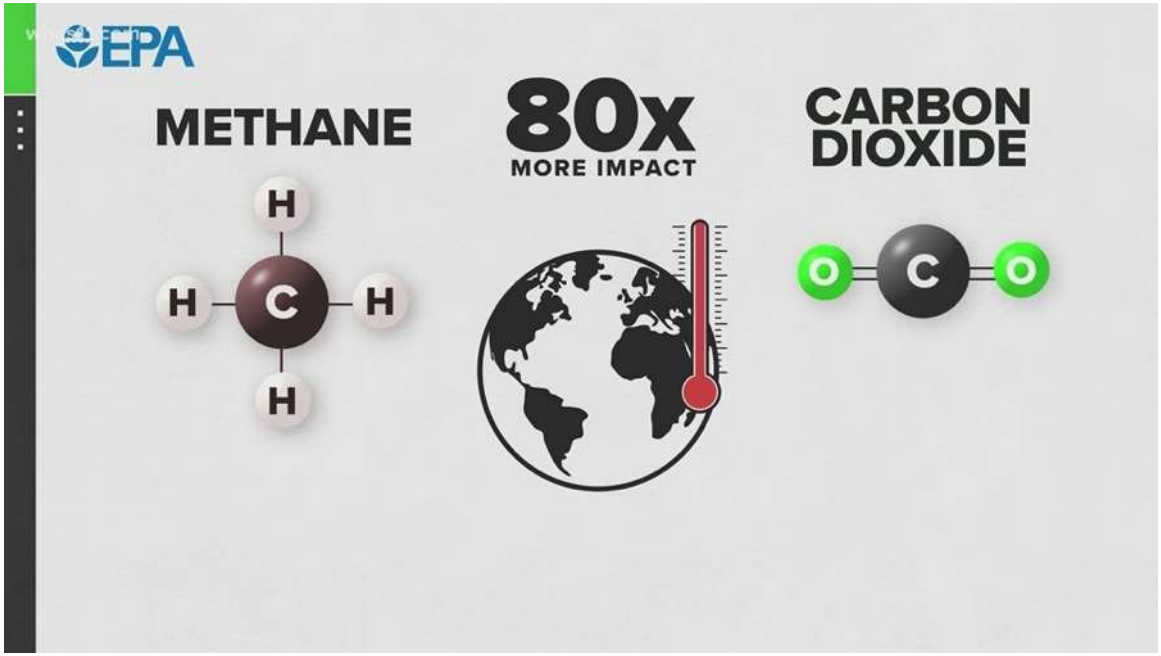
Banning natural gas in new commercial and multi-family residential units – why? how?



Tracy Furutani, Lake Forest Park City Council, April 24, 2023

Benefits:

- Reduced greenhouse gas footprint of the city

- Reduced heath effects, such as childhood asthma

- Reduced costs – running a heat pump, for instance, is less costly per energy unit than running a natural gas heater

Concerns:

- Employment – gas pipe fitters out of a job?

- Reduced city revenues – fewer gas installation permits?

- Single source of heating – what happens during a prolonged outage?

WHEREAS, climate change, if unchecked, will have ever increasing impacts on human health, natural systems, wildlife, and infrastructure, creating mounting costs for individuals, communities, businesses, and governments; and

WHEREAS, the scientific consensus as documented by the Intergovernmental Panel on Climate Change (IPCC) demands we limit global temperature increases below 1.5 degrees Celsius to avoid the most destructive and dangerous effects of climate change; and

WHEREAS, the Washington State Department of Ecology has reported that, "human caused climate change poses an immediate and urgent threat"; and

WHEREAS, economists have concluded that Washington's families and businesses are likely to incur billions of dollars of annual economic costs if communities fail to drive reductions in greenhouse gas pollution. These economic impacts include increased energy costs, coastal and storm damage, reduced food production, increased wildland fire, and increased public health costs; and

WHEREAS, the City of Bellingham has shown its commitment, declaring ambitious climate action goals commensurate with its obligations as a signatory of multiple climate agreements, including the We Are Still In Declaration, the City's Climate Protection Action Plan, the Compact of Mayors, 100% Clean Energy, and Local Governments for Sustainability (ICLEI) Cities for Climate Protection, the Race to Zero; and

WHEREAS, in 2007 the Bellingham City Council passed Resolution 2007-10 adopting greenhouse gas reduction targets and a Climate Protection Action Plan to achieve those targets; and

The city of Shoreline's ban on fossil fuel heating of commercial and large residential buildings

C403.1.4 Use of electric resistance and fossil fuel-fired HVAC heating equipment. HVAC heating energy shall not be provided by electric resistance or fossil fuel combustion appliances. For the purposes of this section, electric resistance HVAC heating appliances include but are not limited to electric baseboard, electric resistance fan coil and VAV electric resistance terminal reheat units and electric resistance boilers. For the purposes of this section, fossil fuel combustion HVAC heating appliances include but are not limited to appliances burning natural gas, heating oil, propane, or other fossil fuels.

There are numerous exceptions listed. Passed by City Council 6 December 2021 as Ordinance 948.

The city of Shoreline's ban on fossil fuel heating of hot water in commercial and large residential buildings

C404.2.3 Group R-1 and R-2 occupancies with central service water heating systems. In buildings with central service water heating systems serving four or more Group R-1 or R-2 dwelling or sleeping units, the primary water heating equipment shall not use fossil fuel combustion or electric resistance. Service hot water shall be provided by an air-source heat pump water heating (HPWH) system meeting the requirements of this section. Supplemental service water heating equipment is permitted to use electric resistance in compliance with Section C404.2.3.4.

There are numerous exceptions listed. Passed by City Council 6 December 2021 as Ordinance 948.

The city of Bellingham's ban on fossil fuel heating of commercial and large residential buildings

C403.1.4 Use of electric resistance and fossil fuel-fired HVAC heating equipment. HVAC heating energy shall not be provided by electric resistance or fossil fuel combustion appliances. For the purposes of this section, electric resistance HVAC heating appliances include but are not limited to electric baseboard, electric resistance fan coil and VAV electric resistance terminal reheat units and electric resistance boilers. For the purposes of this section, fossil fuel combustion HVAC heating appliances include but are not limited to appliances burning natural gas, heating oil, propane, or other fossil fuels.

The same numerous exceptions as Shoreline are listed, including excluding buildings with less than 2500 square feet of conditioned space. Passed by City Council 7 February 2022 as Ordinance 2022-02-04.

The city of Bellingham's ban on fossil fuel heating of hot water in commercial and large residential buildings

C404.2.3 Group R-1 and R-2 occupancies with central service water heating systems. In buildings with central service water heating systems serving four or more Group R-1 or R-2 dwelling or sleeping units, the primary water heating equipment shall not use fossil fuel combustion or electric resistance. Service hot water shall be provided by an air-source heat pump water heating (HPWH) system meeting the requirements of this section. Supplemental service water heating equipment is permitted to use electric resistance in compliance with Section C404.2.3.4.

The same numerous exceptions as Shoreline are listed. Passed by City Council 7 February 2022 as Ordinance 2022-02-04.

City of Seattle has also modified those sections of the energy code, both for heating and for hot water heating. The wording is identical to the other two cities' changes. This ordinance was enacted 1 February 2021.

Potential issues

The city of Berkeley (CA) had its natural gas ban thrown out by a federal appeals court last week. This was in response to a lawsuit filed by the California Restaurant Association on behalf of restaurant owners who wanted to open new restaurants with gas appliances.

The Shoreline and Bellingham bans have an exception for commercial restaurants. They also require that there be a nearby electrical outlet that can handle a comparable electrical cooking appliance.