

November 29, 2021

MEMORANDUM

To: Land Use & Neighborhoods Committee
From: Yolanda Ho, Analyst
Subject: Energy Code Amendment – Council Bill 120239

On December 3, 2021, the Land Use & Neighborhoods Committee (Committee) will discuss [Council Bill \(CB\) 120239](#) that would amend the 2018 Energy Code. Staff from the Seattle Department of Construction and Inspections (SDCI) will be available to answer technical questions at the meeting.

This memorandum describes (1) the background of the legislation, (2) CB 120239; (3) potential impacts of CB 120239, and (4) next steps.

Background

On February 1, 2021, the Council passed [Ordinance 126279](#) that adopted the [2018 Energy Code](#). This latest update to the Energy Code continued the City's practice of adopting an amended version of the Washington State Energy Code that requires new multifamily residential buildings taller than three stories and all new commercial buildings to conform to higher standards than those required by the State. These regulations also apply to alterations and/or replacement of existing building components. The 2018 Energy Code went into effect on March 15, 2021.

Notable changes to the 2018 Energy Code included the addition to the code's intent section the goal of reducing carbon emissions to the existing goal of increasing energy efficiency. To help achieve these goals, the code included restrictions on the use of fossil fuels and electric resistance for space and water heating. The space heating restriction went into effect on June 1, 2021, and the water heating restriction, which is limited to multifamily and hotel uses,¹ will go into effect on January 1, 2022.

During the Committee's deliberations regarding adoption of the 2018 Energy Code in January 2021, Councilmember Lewis proposed an [amendment](#) that would have extended the restrictions on the use of fossil fuels and electric resistance for water heating to all commercial buildings. This amendment had not been considered as part of the code update, and thus had not been discussed with either the public during SDCI's outreach and engagement process or the City's [Construction Codes Advisory Board \(CCAB\)](#), whose role is to consider potential Seattle-specific amendments to the construction codes, suggest changes as appropriate, and then vote on whether to recommend adoption of any proposals. Additionally, the change may

¹ The water heating restriction exempted commercial buildings based on the rationale that they have less predictable hot water demand as compared to multifamily and hotel uses.

have required additional environmental review, which could have delayed the effective date of the 2018 Energy Code.

Due to these circumstances, the Committee did not vote on this amendment and instead requested that SDCI complete additional work to consider this change. SDCI began the outreach and engagement process for this proposed amendment following the Council's adoption of the 2018 Energy Code by holding a public meeting on March 12, 2021. SDCI also discussed the potential change during its public webinars on February 9, 2021, and June 22, 2021, related to requirements for heat pump water heaters (HPWH) as adopted in the 2018 Energy Code. Additionally, SDCI discussed the amendment in a presentation to the local chapter of the American Society of Plumbing Engineers on May 1, 2021.

The CCAB met multiple times this year to discuss the amendment and proposed including several exceptions that would make implementation of the new requirement less burdensome. Following these discussions, the CCAB ultimately voted to recommend adopting this amendment with the exceptions included.

SDCI completed the required environmental review as an [addendum](#) (also known as a State Environmental Policy Act (SEPA) Note To File) to the original Determination of Non-Significance that was issued in December 2020.

CB 120239

As adopted, the 2018 Seattle Energy Code requires that central water heating in multi-family and hotel uses be performed by HPWH, rather than gas or electric resistance water heaters. Commercial buildings are exempted from this requirement, allowing them to continue to use systems that rely on fossil fuels or electric resistance.

CB 120239 would extend the HPWH requirement to include new commercial buildings that incorporate more than minimal water heating capacity. As recommended by the CCAB, there are several exceptions, most notably that this does not apply to most upgrades of existing commercial buildings. The legislation also includes several technical changes to make the code provisions more coordinated and enforceable.

Potential Impacts of CB 120239

CB 120239 would eliminate the use of fossil fuels for water heating in most new commercial buildings, helping to decrease Seattle's greenhouse gas (GHG) emissions. Climate change, which has accelerated in response to increased GHG emissions caused by the combustion of fossil fuels, disproportionately impacts low-income people and people of color, and efforts to decrease emissions are intended to avoid the worst impacts of climate change over the long term.

This legislation may increase the number of jobs for workers who install and maintain HPWH systems, but could also diminish job opportunities for those who install and maintain gas water heating systems as demand for these services will diminish over time as more buildings shift to fully electrical systems and appliances.² The City has a commitment to ensure a just transition for such workers as part of the Green New Deal for Seattle ([Resolution 31895](#)).

HPWH systems could add complexity and cost to commercial development in the near term as developers, designers, and engineers adjust to the new requirement. Costs are expected to diminish over time as the requirement becomes the accepted standard and the market offers greater options for HPWH systems.

New City facilities would also be subject to this legislation. Similar to the impacts to commercial development generally, this change could initially result in increased capital costs for City projects. The Mayor's recent [Executive Order 2021-09](#) directs capital departments to develop an Electrification Strategy for all municipal buildings to be fully electrified by 2035, and this amendment to the 2018 Energy Code would be a step towards achieving that goal.

Next Steps

The Committee will continue discussion of CB 120239 and possibly vote at its meeting on December 8.

cc: Esther Handy, Director
Aly Pennucci, Policy and Budget Manager

² The Bureau of Labor Statistics' 2020 data indicate that at the national level, over 80 percent of workers in the "Plumbers, pipefitters, and steamfitters" occupation are white and 24.5 percent are Hispanic/Latino. For reference, 78 percent of all workers in the U.S. are white and 17.6 percent are Hispanic/Latino.