

ANALYSIS AND DECISION OF THE DIRECTOR OF THE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS

SEPA Threshold Determination for Building Emissions Performance Standard

Project Proponent: City of Seattle

BACKGROUND AND PROPOSAL

Background Information

In Seattle, buildings are responsible for more than one-third of the city's greenhouse gas (GHG) emissions. These emissions pollute our air, accelerate climate change, and harm people's health and the environment. Seattle's largest source of building-related carbon emissions — over 90% — is from burning fossil fuels, like gas and oil for heat, hot water, and cooking.ⁱ Seattle's climate goals are to reduce carbon emissions 40% from commercial and residential buildings by 2030 (compared to a 2008 baseline) and to be net-zero GHG emissions by 2050.

The proposed Building Emissions Performance Standard ordinance is estimated to lead to improved emissions performance such that total building-sector emissions would decline by 27% citywide by 2050.ⁱⁱ

The estimated number of properties with existing "covered buildings" that would be subject to the proposal is approximately 3,580 (or approximately 4,135 buildings when including buildings on campuses), of which 1,650 are non-residential uses, 1,885 are multifamily residential uses, and 45 are campus properties (representing approximately 600 buildings). The covered buildings are approximately less than 3% of the total building inventory (non-residential, multifamily and single family uses) currently in Seattle, but emit over one-third of building related emissions.ⁱⁱⁱ

Current Proposal

The proposal is draft legislation that would apply to non-residential and multifamily buildings located in Seattle with a gross floor area greater than 20,000 square feet (excluding parking) that exist prior to the required compliance intervals ("covered buildings"). The proposal would require the following:

- Covered buildings would be required to reduce their greenhouse gas emissions over time, eventually meeting a net-zero GHG emissions standard (or an authorized alternative performance level) by a certain year between 2041-2050 depending on the building activity/use type.
- Covered buildings would be required to meet applicable greenhouse gas intensity targets ("GHGIT") for each compliance interval. GHGITs are established by building activity type and based on 2019 average greenhouse gas intensities ("GHGIs") by building type (e.g., office, retail, hotel, multifamily, etc.) for Seattle benchmarked buildings.^{iv} A

greenhouse gas emissions intensity target (GHGIT) means the target that limits the greenhouse gas emissions intensity of a building. A building's greenhouse gas intensity is the sum of each energy fuel source consumed in one year multiplied by the emissions factor of that fuel, divided by the gross floor area of the building.

- For covered buildings, compliance intervals for benchmarking verification and reporting obligations begin in 2027 for buildings 90,001 sq.ft. or greater, and in subsequent years for smaller building size categories: 2028 for building 50,001 90,000 sq.ft.; 2029 for buildings 30,001 50,00 sq.ft; and 2030 for buildings 20,001 30,000 sq.ft. For portfolios, district campuses, and connected buildings approved for alternative compliance per Section 22.925.100 or for a decarbonization plan, these obligations would begin in 2028.
- The GHGIT compliance schedule would begin in 2031 starting with covered buildings over 220,000 square feet, and covering smaller size building categories sequentially (for example 2032 for buildings 90,001 220,000 sq.ft.), with a new compliance interval proceeding every five years after that for each given building size category. For portfolios, district campuses, and connected buildings approved for alternative compliance per Section 22.925.100 or for a decarbonization plan, the GHGIT compliance schedule would begin in 2033, and continue with new compliance intervals every five years after that.¹
- Covered buildings would need to meet applicable GHGITs (or alternative performance levels) and reporting obligations by October 1 of their applicable compliance year.
- Building owners may meet GHGITs by taking a variety of actions that may include implementing low-cost operations and maintenance measures, energy-efficiency measures such as lighting replacements, window replacements and wall insulation, switching from high emissions-intensive fuels to less emissions-intensive fuels, and replacing fossil fuel space and water heating equipment to electric. The proposal exempts all-electric buildings (approximately 25% of nonresidential covered buildings and 45% multifamily covered buildings) from having to comply with a GHGIT.
- It is expected that building owners would make incremental improvements in phases over the four compliance intervals. However, if there were minimal upgrades needed or if an owner decided to make more comprehensive upgrades at one time, once they achieve the net-zero emissions standard, no further upgrades would be required.
- The estimated number of properties of all types that would be subject to the proposal, by gross floor area, is as follows:
 - o 220,001 square feet and greater: 370
 - o 90,001-220,000 square feet: 625
 - o 50,001-90,000 square feet: 695
 - o 30,001-50,000 square feet: 945
 - o 20,001-30,000 square feet: <u>945</u>

TOTAL: 3,580

The pathway and particular actions to reduce emissions for each individual building would vary depending on their starting GHG emissions levels, and energy efficiency levels, fuel types and

¹ This information is also portrayed in the Director's Report and the bill language.

configurations of heating, hot water, and other equipment in the building. Similarly, an owner's chosen approach would vary depending on the particular interests of each owner and the asset improvement plans they may already have in place. Below is an overview of the actions that might be needed for an office building, to give a sense for how owners could reduce building emissions to meet the GHGIT. These steps could be completed in incremental phases between the first and final compliance intervals. The sample decarbonization pathway below is provided for a typical office building built prior to 2012 that has both gas-fueled space and water heating. Some projects may need to combine steps 5 and 6 and implement them together due to the existing system infrastructure, and other projects may not decide to pursue step 4 due to the impact to tenants, but the steps provide a good sense for the range of overall actions owners might implement.

- 1. Implement low-cost tune-up measures. Actions would be those currently required under Seattle's existing Building Tune-Up Ordinance such as adjusting equipment operating schedules so they are turned off when not needed, or making sure ventilation dampers are working properly. In the proposal, a 10% GHGI reduction would be allowed as an alternative compliance option for non-residential buildings in the first compliance interval, 2027-2030, which could be achieved in some buildings by tune-ups alone.
- 2. Upgrade older fluorescent lighting to LEDs along with occupancy and daylighting controls.
- 3. Replace gas-fueled water heating systems with heat pumps.
- 4. Replace windows and/or add insulation to the walls and roof to reduce the heating and cooling loads.
- 5. Add a modern ventilation system that uses dedicated outside air systems with heat recovery.
- 6. Replace the gas-fueled heating system and the cooling system with heat pumps.

Also, some customers could choose to purchase renewable natural gas (RNG) through Puget Sound Energy's voluntary program and replace a portion or all (up to 100%) of their conventional natural gas with RNG. This option would allow building owners to reduce their building's emissions fully or partially while using their existing gas equipment. This could apply to restaurants in covered buildings, for example, if they wish to continue using gas-based equipment.

The current proposal reflects a number of adjustments made to its details, due to several suggestions that were the product of discussions and engagement with stakeholders and interested parties over the past year. Many of these adjustments relate to giving additional time and flexibility toward reaching compliance, including types of actions like:

- Defining later compliance schedule dates;
- Defining additional types of extensions or exemptions from compliance for specific situations;
- Allowing deductions of emissions from end uses; and
- Defining alternative compliance options.

These adjustments are described in more detail in Attachment 1 to this Threshold Determination.

Public Comment

The proposed changes require City Council approval. Opportunity for public comment will occur during Council meetings and hearings. The proposed ordinance and this environmental review and SEPA Determination also has been available online for public comments.

ANALYSIS – OVERVIEW

Environmental review resulting in a Threshold Determination is required pursuant to the State Environmental Policy Act (SEPA), WAC 197-11, and the Seattle SEPA Ordinance (Seattle Municipal Code (SMC) Chapter 25.05).

The following report describes the analysis conducted to determine that the action is not likely to result in *probable significant adverse environmental impacts*. This threshold determination is based on:

- the language of the proposed amendments and related contents as described above;
- the information contained in the *SEPA checklist* (dated May 30, 2023), including annotations made by SDCI staff;
- review of materials prepared as background information about the code amendments, prepared by City staff; and
- the experience of the SDCI analyst in reviewing similar documents and actions.

ELEMENTS OF THE ENVIRONMENT

Short-Term and Long-Term Impacts

Natural Environment Elements

Earth, Water, Water Quality

The current non-project proposal would not likely result in probable significant adverse impacts for these natural environmental elements, either directly, indirectly, or cumulatively.

Seattle is mostly urbanized in its development patterns, but it also has retained greenbelts, hillsides, stream, river, bay, and lake environments with diverse kinds of plant, animal, fish and marine habitats. This includes many shoreline edges hosting birds, fish, and other marine life.

- Wildlife on land largely includes those species habituated to urban areas and fragmented vegetated areas in the city, with common types including squirrels, opossum, coyotes, and a variety of bird species including bald eagles. Threatened, protected, or endangered species that could be present near future development include heron, and salmon in locations downstream via natural drainages.
- Seattle has numerous soil types, including mineral soils dominated by clay, silt, or sand, as well as organic soils such as peats and mucks. No agricultural soils or prime farmland are located within the Seattle corporate limits. As a densely urbanized area, many of Seattle's native soils have been extensively altered by filling, grading, and other activity.
- The Seattle area is known to be in an active seismic area, as is the entire Puget Sound region.
- Seattle's surface waters include marine areas (Puget Sound), rivers, lakes, and creeks. Rivers and creeks include but are not limited to the Duwamish waterway, Longfellow, Fauntleroy, Taylors, Thornton, and Pipers Creek. Freshwater lakes include the Lake Union/Ship Canal, Green, Haller, and Bitter Lakes and numerous ponds and wetlands.

The current non-project proposal is focused on the causing the reduction of GHG emissions in Seattle over time in existing covered buildings, aiming for net-zero emissions by 2050. Building owners could reach their GHGIT by selecting from a variety of compliance options including: switching from carbon-intensive fuels to less carbon-intensive fuels; and using more energyefficient space heating, water heating, lighting fixtures, and appliances.

This would result in no direct adverse significant adverse impacts to earth and water resources because it does not propose development of new buildings but rather would indirectly lead to retrofitting of existing buildings' features and systems. These kinds of actions are unlikely to result in significant building expansions or other substantial disturbance of outdoor features of affected lots, which would limit the potential for future discharge of pollutants to water resources and habitats, or creation of new damage to environmentally critical areas such as steep slopes.

Plants/Animals/Fisheries/Marine Life

Reductions in the on-site and off-site combustion of fossil fuels are expected, over the long-term, to help reduce the potential magnitude and severity of GHG emissions such as carbon dioxide, methane, and nitrogen dioxide, which would be a continuing benefit to all things living including

plant, animal, and human well-being. The proposal is unlikely to create significant adverse impacts directly, indirectly, or cumulatively on plants, animals, fish, or marine life in Seattle's environment, due to a lack of probable pathways for such adversely damaging processes to occur. As noted above, significant building expansions or other substantial disturbance of outdoor features of affected lots are not likely to occur, which limits the potential for physical disturbances to the environment.

Also, for environmentally critical areas such as steep slope and landslide hazards, the proposal would not affect existing City regulatory protections that prevent or minimize the potential for significant alteration of these areas.

Air Quality, Noise, Energy, Natural Resources Depletion, Environmental Health

This non-project action would result in no direct significant adverse impacts to these environmental elements because it does not directly propose development. Similarly, this analysis identifies no probable significant adverse indirect or cumulative environmental impacts of these kinds.

Air Quality and Energy/Natural Resources Depletion

This proposal would not increase pollutant emissions to air; rather the Building Emissions Performance Standard action by itself would result in an estimated cumulative 27% reduction in overall GHG emissions citywide by 2050, thus aiding air quality. GHG emissions contribute to global increases in temperature, extreme weather and affect air quality, which affects the use and quality of parks, wilderness, wild and scenic rivers, wetlands, floodplains and farmlands, and habitats for threatened and endangered species. According to the Washington State Department of Ecology, potential costs from climate change impacts are projected to reach \$16 billion per year by 2040.^v The City's goal is to reduce GHG emissions from covered buildings to net-zero by 2050 and to help mitigate the acceleration of climate change and associated effects at a local, regional, state, and global level, including government-protected natural resources.

Solar access

The proposal would not likely directly or indirectly affect the use of solar energy on adjacent properties. Covered buildings are expected to undergo energy-related retrofits to comply with the proposal but such retrofits are not expected to affect the use of solar energy by adjacent properties. For example, to comply with proposed emission standards, it is possible that rooftop mechanical equipment such as heat pumps would be installed or replaced on existing building rooftops. But the replacement of existing equipment is not likely to affect the use of solar energy on adjacent properties, primarily because existing Land Use Code regulations for rooftop features would continue to not allow rooftop features to be placed where they may interfere with adjacent properties' solar access.

Toxic Substances/Environmental Health

This non-project proposal would not directly result in additional toxic/hazardous substances use or probable impacts. Indirectly, future conversion away from natural gas sources for space heating and water heating could increase the amount of heat pumps installed in or on buildings in the future. These technologies use hydrofluorocarbons as part of their heat exchange process, which would represent an adverse probable increase in use of a toxic substance, as well as relating to a possible increased potential for spillage or releases over time.

Noise

Temporary construction noise associated with future required energy-related building retrofits would indirectly result from the proposal. This could vary greatly from site to site depending on the extent of work in and around covered buildings, and the timing of the activity. Noise, including construction noise and daytime and night-time noise levels, is regulated by City codes at certain levels, which accommodate temporarily higher daytime noise levels from construction activities. Potential noise impacts due to retrofit/renovation work would be subject to enforcement and mitigation according to the city noise ordinance on a project-by-project and complaint basis.

Built Environment

Land and Shoreline Use, Height/Bulk/Scale, Housing, Relationship to Plans and Policies

Land Use and Shoreline Use, Height/Bulk/Scale

This proposal would not directly, indirectly, or cumulatively impact land use or shoreline use in a significant adverse manner within the City of Seattle. The proposal would influence the energy fuel type (or fuel product, like renewable natural gas) used, and the energy efficiency and design of energy-related systems used in the retrofits of existing covered buildings but would have no direct or indirect effect or impact on the height, Floor Area Ratio density, use, or any other aspect of existing or future buildings. This proposal would not rezone any property nor amend any land use provisions that would alter the size, height, layout, location, or use of any future new or existing building. The proposal does not include any provisions that would create incompatibilities between adjacent uses or lead to the demolition of any existing structures or uses. The proposal also would not encourage land uses or shoreline uses that would be incompatible with existing plans, but rather would support future development in a manner promoting sustainable environmental outcomes consistent with the City's comprehensive plan objectives (see Comprehensive Plan Goal EN G3 and Policy EN 3.4 for carbon neutrality goal and promotion of energy efficiency and low-carbon energy sources^{vi}).

The evaluation below focuses on the potential for indirect, cumulative impacts to land use patterns encouraged by the Comprehensive Plan, potentially related to the long-term effects of the proposal. Conceptually, if the proposal's requirements for building upgrades would be so pervasive and generate major cost burdens upon a large proportion of building owners, and/or would affect the viability or attractiveness of certain business types due to building upgrade costs, adverse alteration of Seattle's land use patterns might be possible. This might occur if it spurred long-term patterns of redevelopment of existing buildings that contribute to land use variety and character and help define the form and mix of uses present in Seattle's neighborhood centers and business districts; or if it led to greater trends in building owner choices regarding building obsolescence and potential disinvestment, which conceivably could contribute to economic and functional decline of neighborhood quality.

However, the facts related to the proposal do not support making these findings as probable significant adverse land use impacts on a neighborhood or citywide scale. Energy benchmarking information from a City of Seattle website includes a map that shows all or nearly all buildings in Seattle in the size range and types that would be affected by this proposal (e.g., covered buildings). This map suggests that, while there is an extensive distribution of covered buildings across the city, their mere presence plus the effects of the proposal would not likely be extensive enough to significantly impact overall land use patterns over the long-term. Pertinent factors in this evaluation:

- The proposal excluding buildings less than 20,000 square feet in floor area would not result in large consecutive groupings of covered buildings occurring in the heart of most neighborhood business districts, probably due to the presence of a typical finer-grain pattern of buildings less than 20,000 square feet in size in many neighborhoods. Rather, many of the covered buildings are institutional uses (like schools and hospitals), larger multifamily residential buildings many of which are of relatively newer vintage, or that comprise a dense mix of commercial buildings in places like the Downtown Urban Center and First Hill. These categories of buildings, due to their size, typically younger age, and value as real estate assets. Also, the geographic pattern of affected buildings, while including concentrations most notably in Urban Centers and the SODO area, are typically fairly scattered and intermittently located rather than concentrated.
- Compliance with the proposal should be achievable in most cases without affecting the long-term viability of the building and its use. Therefore, substantial adverse changes to the physical composition of building mix or related land use patterns within any given neighborhood are not a probable outcome, either as individual events or as trends that might adversely affect any particular neighborhood center.
- The proposal's effects on regulating building emissions performance would occur in phases over time, staggered to affect different sizes of buildings at different times. These are intentionally arranged to allow sufficient time for building owners to take a series of steps (starting with simpler upgrades in building efficiencies) that would collectively lead to improved energy efficiencies and GHG emission reductions. This arrangement would contribute to a gradual pace of change that is less likely to induce adverse patterns of redevelopment or other tangible adverse changes to the physical built environment in Seattle's neighborhoods. To the extent that building (and if the proposal's requirements are an influencing factor), they might be more likely to occur later in the compliance period such as 15-25 years from now when greater numbers of smaller buildings would need to comply with the more stringent emission performance standards.

The proposal includes code provisions and mitigation strategies that would help reduce the potential risk that the proposed standards would pose degrees of difficulty for individual building owners to comply with. These include strategies around defining a series of actions owners can take to comply, strategies addressing cost implications, alternative compliance options, and providing degrees of flexibility in the regulations with respect to accommodating potential complications that might affect individual buildings and institutions' ability to comply. Certain strategies address uses such as subsidized low-income housing, historic buildings and districts, institutions, hotels, and laboratories. For restaurants in covered buildings, the option to purchase renewable natural gas (RNG) likely would be among the strategies available to restaurant operators, which could reduce chances of disruption of these uses. The descriptions of the range of these strategies in the Director's Report are incorporated here by reference. While these strategies and elements would provide flexibility, there would still remain some possibility that individual owners or entities might face some practical concerns about costs and the manner in which they would provide compliant improvements while also meeting their continuing operational needs. But it would remain likely that these possible individual situations would not be likely to generate significant adverse land use impacts on the built environment, due to the overall probable capability of uses to reasonably

achieve improvements in emissions performance, given the totality of the elements and mitigation strategies included in the proposal.

Housing

This proposal is a non-project action and does not include any specific development proposal and the proposed Building Emissions Performance Standard is thus not likely to directly eliminate any existing housing units, only require existing building owners to undertake energy-related retrofits of existing buildings greater than 20,000 square feet of gross floor area.

The proposal would apply to an estimated 1,884^{vii} existing multifamily buildings over 20,000 square feet, starting in 2031 with an end goal of net-zero GHG emissions by 2050. Of these 1,884 buildings, approximately 55%, or about 1,000 buildings, use some fossil fuels (primarily gas) and would need to implement building improvement measures to reduce emissions. The remaining 45% already use cleaner electricity-based methods for all of their space heating, hot water, and appliances. The proposal recognizes that these all-electric buildings are already achieving net-zero emissions and therefore they would be fully exempt from meeting the GHGIT or having to report GHG emissions, although they would be required to conduct and report on benchmarking verification. The estimated 1,000 buildings that would likely_need to make upgrades under this proposal represent less than 4% of the more than 26,400 multifamily buildings in the city.^{viii} The proposal would have no impact on the approximately 155,600 single family buildings in the city.^{ix}

The most common configuration for a multifamily building in Seattle is to have electric resistance heating in the units and a central gas hot water system. Other gas uses might include corridor and common area space heating, gas cooking, or gas dryers. In these buildings, owners would make incremental improvements for each compliance interval until the building has achieved consistency with net-zero emissions standards (or authorized alternative performance levels), after which no further improvements would be required. For instance, if the only emissions from a building come from gas cooking in residential units, once those appliances are replaced with electric cooking equipment, the building will have achieved consistency with net-zero emissions standards.

For buildings with multiple gas end uses, initial actions might include replacing any gas appliances, such as stoves and clothes dryers, with electric appliances. Next would be improving water heating efficiency with low-flow fixtures such as showerheads, faucets and clothes washing machines, and adding piping insulation. Next steps could include replacing gas heating systems serving corridor or common areas, with electric heat pumps, in combination with heat recovery ventilation. Finally, replacing the central gas water heating equipment would likely bring the building to consistency with net-zero emissions standards. As possible alternatives to these actions, some customers could choose to purchase renewable natural gas (RNG) through Puget Sound Energy's voluntary program and replace a portion or all (up to 100%) of their conventional natural gas with RNG. Except for minimal entries into residential units for installing low-flow fixtures or replacing appliances, most of the work could occur in common spaces or central mechanical rooms and no tenant relocation may be necessary.

In multifamily buildings that have gas water heating, it would most likely be a central system, which could include steam systems. Energy efficiency measures such as corridor and in-unit heat recovery ventilation, window replacements and/or wall insulation could be implemented to improve efficiency and reduce emissions. Alternative, low-carbon fuels such as renewable natural gas could replace some or all natural gas use, or the water heating system could be replaced by either

upgrading the gas-fired boiler to a central heat pump or by replacing the central gas-fired boiler or steam system with in-unit heat pumps.

The proposal includes specific approaches to provide multifamily buildings with a reasonable timeframe for compliance and to recognize potential extenuating circumstances. The proposed ordinance sets the first compliance interval for multifamily buildings as 2031-2035, and the compliance dates for achieving net-zero GHG emissions to 2046-2050. The proposal includes alternative compliance options for multifamily buildings. Owners may choose to comply during one performance interval by completing certain pre-defined actions, such as replacing one of the two main types of systems (either gas water heating or gas space heating systems) with electric heat pumps, in lieu of meeting greenhouse gas intensity targets. This option alleviates the need to perform energy modeling to project for greenhouse gas intensity and provides assurance to building owners that the improvement will be deemed sufficient for compliance for that interval before any investments are made in building upgrades. Owners may also choose to pay into an alternative compliance fund, in lieu of meeting targets for the 2031-2035 compliance interval, allowing an owner a deferral in implementing certain building upgrades until timing is more appropriate.

Other proposed accommodations include customized hardship compliance plans (or alternative performance levels higher than net-zero) when compliance would impact historic features or the integrity of landmarks or historic buildings, when upgrades necessary to meet net-zero emissions in a low-income housing multifamily building are infeasible, when buildings would need significant electrical infrastructure to comply, such as new electrical transformer vaults, for buildings with unreinforced masonry, when there are no practicable low and zero GHG emissions alternatives available on the market for a necessary function, and for buildings triggering substantial alteration (per Energy Code, section 307).

Of the approximately 1,000 multifamily buildings that would need to make building improvements to comply with the proposal, approximately 150 are considered subsidized low-income housing, that is, they are under a regulatory agreement to keep rents affordable to low-income households. The proposal delays initial GHGIT compliance for these buildings until the 2036-2040 compliance interval to allow low-income housing providers more time to plan and secure funding, as well as to allow greater time for the City to provide technical and financial support. Non-profit housing providers may also choose to comply with the GHGITs at a portfolio scale (multiple buildings under same ownership), which provides greater flexibility to make improvements in any individual building according to a provider's own asset improvement timing and needs. The proposal also allows for a delay if the subsidized affordable multifamily building has not yet reached its first refinancing date.

There are also approximately 110 multifamily buildings that could be considered unsubsidized affordable housing^x, that is, there are no regulatory restrictions on rents in these privately owned buildings but the rents are below average and considered affordable to lower-income households. The proposal would allow owners of these lower-rent buildings to delay compliance to allow for greater flexibility and to access technical support and incentives.

The SEPA responsible official acknowledges the methods used to identify unsubsidized affordable housing stock. The minimum size parameter may help in supporting the accuracy of its estimate, because it distinguishes the affected class of residential buildings as larger buildings that are more readily identifiable and countable within Seattle's development patterns. However, it is also

SEPA Threshold Determination 2023 Building Emissions Performance Standard Page 11

possible that the number of unsubsidized housing stock with affordable units affected by the proposal could be higher than the 110 identified multifamily buildings.

A review of the City of Seattle energy benchmarking building maps suggests that the affected residential buildings include a large proportion that are of relatively newer vintage and larger than average size. (As noted on Figure 9, page 29 of the Director's Report, the categories of buildings approximately 40 years old or less tend to generate more emissions than the previous generation of housing.)

In terms of long-term cumulative indirect impact possibilities, the proposal might contribute toward more frequent and sooner judgments of existing multifamily building obsolescence to be made by building owners based on potentially significant cost burdens to upgrade the buildings to meet the emissions targets. This is perhaps most likely in buildings that are older or in poorer physical condition. To the extent these conditions correlate to affordable residential building stock across the city, the proposal could lead indirectly lead to increased numbers of affordable housing demolition and redevelopment over time, or selling of such buildings for renovations. These could lead to additional cost burdens on renters in the form of possible residential rent increases to defray additional costs on building owners, for either major or minor renovations or replacement with new housing.

The potential indirect effects of the proposal could also cumulatively lead to building owner choices to disinvest and delay maintenance in residential buildings for which the owner has no intent to keep the building in a viable greenhouse-gas-reduction code-compliant condition past their effective latest compliance date. This may contribute toward the likelihood of future renovations or redevelopment of these sites with new multifamily or mixed-use housing. This phenomenon could ultimately increase the supply of multifamily residential units over time, but at a probable higher rent-cost structure than occurs in the existing housing stock that would be replaced over time.

To the extent that a large proportion of the affected residential buildings may be of newer vintage and larger in size, these building categories may be less susceptible to disinvestment and demolition because they on average are more likely to be in good physical condition with a significant real estate asset value.

The documentation for the proposal, including the Director's Report, discloses that a variety of funding sources and assistance opportunities are or will be provided by the City to help encourage multifamily building renovations and actions that will meet the standards. This SEPA analysis concludes that the impact-mitigation value of the full range of programs, in totality, would likely provide sufficient mitigation for the identified range of potential adverse housing-related impacts. The programs represent a broad and strategic response that would encourage the retention of existing housing stock by assisting building owners to make choices that would best fit with the individual circumstances of each affected residential building with affordable housing resources. See the following information below.

The proposal recognizes that multiple existing tenant protection laws are in place in the city, including financial and technical assistance programs to minimize displacement and relocation burdens on residential tenants, such as the Economic Displacement Relocation Assistance, and Tenant Relocation Assistance Ordinance. To further help mitigate financial impacts on landlords and potential increases in rents, the City has already implemented a technical and financial support

program with more than \$4.5 million in 2024 alone for grants to buildings serving low-income and frontline communities, and the proposal includes a new Clean Buildings Opportunity fund with anticipated revenue from Alternative Compliance Payments and penalties to be used to support under-resourced buildings. Additionally, the City has already acquired \$2.3 million in federal funds to support rent restricted buildings serving low-income tenants and intends to pursue multiple additional funding streams from state and federal programs to further support both subsidized and unsubsidized affordable housing. The Inflation Reduction Act will deploy more than \$166 million to Washington State in the coming years for direct rebates to residential households and landlords of multifamily buildings.^{xi} (See Director's Report for more discussion of resources and strategies.)

The proposal is expected to result in additional costs to building owners to complete necessary energy-related retrofits, which could indirectly lead to pass-through costs to tenants in the form of increased rents. Some of the energy-related retrofits may temporarily displace residents or other occupants during the time of the retrofit construction work. Thus, the proposal could indirectly and cumulatively lead to future instances of temporary displacements of multifamily residents for construction purposes, and to permanent displacements if increased rents occurred and economically displaced residential tenants.

However, the limited number of multifamily buildings, out of the total inventory of housing buildings in Seattle, the limited scope of the building upgrades required overall and the limited number of cases requiring in-unit work, the gradual and incremental implementation of building improvements over an extended timeframe over almost 25 years between now and 2046-2050, the multiple mitigation measures incorporated in the proposal, outlined above, and the existing and future availability of technical and financial assistance to support building improvements to minimize rent increases and displacement risk all mean that the cumulative effect of the proposal on the city's multifamily housing stock is not expected to generate significant adverse impacts.

Relationship to Plans and Policies

The City's Comprehensive Plan includes multiple goals and policies directing the reduction of GHG emissions in Seattle. Below is a summary of specific selected goals and policies in Seattle's comprehensive plan that support this proposal:

- Environmental Goal 3: Reduce Seattle's greenhouse gas emissions by 58% from 2008 levels by 2030 and become carbon neutral by 2050.
- Environmental Policy 3.4: Encourage energy efficiency and the use of low-carbon energy sources, such as waste heat and renewables, in both existing and new buildings.
- Housing Goal 4: Achieve healthy, safe, and environmentally sustainable housing that is adaptable to changing demographic conditions.
- Housing Policy 4.2: Encourage innovation in residential design, construction, and technology, and implement regulations to conserve water, energy, and materials; reduce greenhouse gas emissions; and otherwise limit environmental and health impacts.
- Utility Goal 2: Conserve potable water, electricity, and material resources through the actions of the utilities and their customers.
- Utility Policy 2.3: Remain carbon neutral in the generation of electricity by relying first on energy efficiency, second on renewable resources, and third, when fossil fuel use is

necessary, on offsetting the release of greenhouse gases.

Additionally, the proposal would operate in harmony with the State's Climate Commitment Act, chapter 70A.45 RCW, as well as the State's Clean Buildings Act, particularly RCW 19.27A.210.

Historic Preservation and Cultural Preservation

Seattle contains numerous landmarks, properties, and districts that are listed on, or proposed for, national, state, and local preservation registers. In addition, while Seattle today comprises a highly urbanized and developed area, it is also an area with potential for the presence of cultural artifacts from indigenous peoples.

The proposal would seek net-zero emissions upgrades wherever possible in historic buildings, but would provide for alternative approaches, such as exceptions, customized compliance plans, and alternative performance levels (e.g., above net-zero). The proposal assumes the continuation of policies, processes and regulations addressing historic preservation, historic districts, and landmarks, with due consideration for protecting and preserving the historic fabric of designated Landmark buildings and historic buildings within Seattle's historic districts.

The proposal also includes a compliance delay for historic properties in meeting the GHGITs for one compliance interval; and the City would allow a landmark or historic building to comply with an individualized alternative compliance performance level if building upgrades to achieve netzero emissions requirements will not be practically achievable because they would adversely affect the special features and characteristics of a landmark or compromise the historic integrity of a building in a historic district. This would help ensure the ability for covered buildings' future upgrades to be accomplished if possible while allowing necessary flexibility so as to remain in compliance with existing City ordinances for historic preservation. Any retrofits made to buildings are most likely to be completed to the interior of the building and any work proposed would require review and approval by the applicable landmark or Historic Preservation Board on a case-by-case basis.

Most cultural sites and resources at risk from future development in Seattle are in unknown locations due to their being buried under soils, although certain vicinities such as near-shore areas are known to have greater potential for presence of such resources given past activities of indigenous peoples. The current proposal does not include provisions that would specifically alter the likelihood of future development occurring in any given location or type of vicinity such as near-shore areas. And the action does not include provisions that are likely to increase total site clearing and grading of future permanent development.

Existing provisions addressing known or unknown cultural resources would also continue to apply, to the extent discovery of cultural resources might be possible during improvement projects mandated by the proposal. Also, implementation of the current proposal would not affect the strength of the City's regulatory protection of cultural sites or resources if they are discovered during future development, which is addressed by other State and local regulations, policies, and practices. With or without the current proposal, such processes are mandated to stop construction, assess the resources, and take appropriate next steps for the cultural resources' protection or preservation.

Transportation, Parking, Public Services

The proposal is not likely to directly, indirectly, or cumulatively generate adverse impacts on these environmental elements. The proposed policy would influence the energy fuel type used, energy efficiency qualities of buildings, building features such as windows, and design of energy-related systems used in future remodeled buildings. These types of actions would occur through renovation, replacement, and updating of existing building fixtures and systems gradually over time. The proposal would not directly or indirectly induce increased numbers of occupants or businesses in existing covered buildings and so is not likely to increase demands on transportation systems, parking resources, or delivery of public services such as parks, schools, fire/emergency services, or police protection. Similarly, it would not likely directly generate additional new development of residential or non-residential buildings or floor area that might generate additional transportation system volumes. Therefore, the proposal is not likely to result in measurable adverse or significant adverse impacts on transportation systems, parking resources, or public services.

Utilities

Electricity

Implementation of the proposal is likely to result in building owners reducing their GHG emissions through a variety of actions taken over time. These include: improving the energy efficiency of the building and equipment, switching from equipment that uses fossil fuels to energy-efficient electric equipment, purchasing renewable natural gas through their gas utility, using biodiesel or other renewable energy if applicable, or a combination of these actions. The gradual transition of this group of existing buildings toward achieving lower emissions is consistent with state-level requirements in the Clean Energy Transformation Act^{xii} to transition electric utilities to providing carbon-neutral electricity by 2030 and 100% non-emitting electricity by 2045.

The City of Seattle's electric utility provider is Seattle City Light (SCL). The low emissions already associated with SCL's electricity would increase the likelihood that building owners would transition to electric equipment in order to meet their emission targets, which is likely to increase SCL's load and demand. SCL is obligated by state law^{xiii} to provide reliable electricity to its customers and has extensive resource and system planning processes in place to meet future increases in demand, including any increases in demand associated with this proposal.

SCL is planning for an electrified future and is actively engaged in research and analysis of many future scenarios to gain insights on the potential impacts of customer electrification. SCL has developed a 20-year Integrated Resource Plan (IRP)^{xiv} that outlines the utility's long-term strategies to supply reliable electricity to customers at a reasonable cost and risk, while protecting the environment and ensuring service equity. The IRP relies on only new renewables (e.g., solar and wind), energy efficiency, and demand response to meet future increases in electricity demand, so as to meet state regulations including the Clean Energy Transformation Act, Climate Commitment Act and Energy Independence Act. In early 2022, SCL published the results of an Electrification Assessment conducted with the industry-leading Electric Power Research Institute (EPRI). The Electrification Assessment found that electrification will increase SCL's load, but the impact to the distribution grid will vary based on time and location. It also found that SCL's distribution system has significant capacity available for much of the year, but

there are areas for which a transition to greater electric building operations could lead to the need for localized improvements in SCL's electrical distribution facilities. Thus, awareness of when and where loads are emerging, and implementing strategies to impact how they align with grid capacity, will be important to help SCL continue planning for a satisfactory combination of actions that will sufficiently address future electrification impacts. Implementation of the proposal would provide a probable greater predictability about future scenarios that would help SCL identify and plan for emerging electrification loads in the 2030s and beyond.

Natural Gas

The proposal is unlikely to increase demands on natural gas supplied by Puget Sound Energy (PSE), and it is expected that natural gas usage would decrease over time as a result of more energy-efficiency upgrades and building owners switching to less carbon-intensive energy sources. In Seattle, PSE reported approximately 129,495 residential customers and 11,932 commercial customers.^{xv} The 2,686 covered buildings subject to the proposal that are using natural gas (excluding all-electric buildings), make up approximately 1.6% of PSE's total customer base in Seattle. Statewide, the covered buildings using natural gas make up 0.28% of PSE's approximately 800,000 gas customers (customer count source: PSE webpage^{xvi}). Due to the small percentage of impacted PSE's customers from this proposal (residential uses smaller than 20,000 square feet in size, and those with already all-electric buildings, would not be affected), at a programmatic level the probability of significant adverse impacts to PSE appears to be low. However, a possible shrinking customer base for PSE natural gas could lead to cost recovery actions through rate increases and or other actions. Any future such actions pursued by PSE that might be an indirect consequence of this proposal would be subject to approval by the Utility and Transportation Commission (UTC), the regulatory authority for gas utilities in Washington state.

Like SCL, PSE also conducts integrated resource planning. The 2021 and 2023 versions of their IRP were reviewed for this analysis. The planning for both IRPs already considers and factors in a variety of implications for future increased electrification and the consequences for PSE's planning for long-term emissions reduction strategies. This includes with respect to its long-term supply side and demand side for natural gas, with specific references to City of Seattle matters such as the recent Energy Code update and emission reduction interests. PSE also considers the effects related to conservation and energy efficiencies gained. They describe their efforts to ensure provision of natural gas to their customers over the long-term. To the extent that the City proposal's probable effect is to gradually <u>reduce</u> natural gas demand from portions of PSE's customer base over the next 25+ years, it is not likely that the City proposal would cause PSE's systems to experience system capacity impacts, at least due to having inadequate physical capacity to serve customers. However, as noted above, there could be utility rate increase implications; and other implications regarding system operations, engineering, or management might be possible.

2021 PSE IRP modeling of future customer growth rate, and other measures

A review of PSE's 2021 IRP future natural gas demand modeling analysis for 2021-2041 indicates that "fuel switching" from gas to electric was a factor in their sensitivity analysis that reflected on their low demand growth scenario. The comparison between their "low demand forecast" and "base demand forecast" for a "firm natural gas peak day forecast scenario" is an annual growth rate of 0.6% versus 0.8% for the 2041 forecast (PSE 2021 IRP, page 6-19).

Also of note are findings with respect to customer-type distribution and related trend forecasts.

- Within PSE's service area, approximately 93% of its natural gas customers are residential, and 6.5% are commercial users.
- Through 2041, the annual demand for natural gas per residential customer is forecasted to remain approximately the same (-0.1%), while the demand for gas per commercial customer will increase by about +0.6% per year.
- Through 2041, overall population growth will be an important factor leading to forecasted increases in natural gas demand of 0.9% per year for the residential user class and 1.2% per year for the commercial user class.

(PSE 2021 IRP, pages 6-24 – 6-26)

The selected information above from the PSE 2021 IRP suggests that the overall interpretable utility customer demand effects of the City's proposal would be to slightly diminish the future projected rate of growth in demand for natural gas to be provided by PSE, perhaps on the order of 0.1-0.2% per year. Within the framework of typical SEPA impact analysis concerns, the City of Seattle's conclusions do not identify the potential for the current Building Emissions Performance Standard proposal to generate significant adverse environmental impacts on the PSE natural gas utility. This is based on review and our observations about the PSE 2021 IRP, and other discussion below about the PSE 2023 IRP.

2023 PSE IRP modeling of future customer growth rate, and other measures

The 2023 IRP acknowledges this is a time of great change in regulatory outlook and planning for the future "*as policymakers, the utility industry, and the public confront the challenge of climate change and work toward decarbonizing the gas sector.*" Further, the IRP describes some of these elements of change:

This IRP includes updates that respond to new legislation and regulations enacted since PSE's 2021 Gas Utility IRP. These new laws include the CCA [Climate Commitment] Act], the City of Seattle's limits on natural gas in large commercial and residential buildings, Washington State building code efficiency improvements as of May 2022, and portions of the Inflation Reduction Act (IRA). We studied the impact of the CCA on the gas portfolio in two ways: as a price cap and as an emissions cap. We also studied electrification scenarios to reduce emissions and meet the requirements of the CCA. The Washington State Legislature passed the CCA in 2021, and significant portions went into effect on January 1, 2023. The CCA is a cap-and-invest program that places a declining limit on the quantity of greenhouse gas emissions generated within Washington State. The CCA established a marketplace to trade allowances of permitted emissions, and the resulting market created an opportunity cost for emitting greenhouse gases. The CCA has two pathways to reduce PSE gas customers' emissions. First, the CCA makes a direct price impact that drives decarbonization. We put a direct price on greenhouse gases (GHG) and the social cost of GHG (SCGHG) in this IRP, resulting in more conservation, RNG, and green hydrogen that will drive down emissions. The second impact of the CCA is new revenue from consigned allowances. In the consignment process, PSE's customers will pay for allowances, but the Department of Ecology (Ecology) will return a large portion of the revenue to PSE, an amount that diminishes over time. We must first use the consigned allowance revenue to eliminate bill impacts on low-income customers.

The 2023 IRP has one comparison of future scenarios that expresses at a high level the difference that could occur in future gas use and customer base through year 2050. It compares a "base demand forecast" scenario and a "zero-customer-demand-growth forecast" scenario. (PSE 2023 IRP, pages 5.7 - 5.12). While the year 2024 estimated gas demand is approximately 94,000 MDth (thousand dekatherms) for both scenarios, by 2050 the base demand forecast leads to a projected 103,611 MDth of demand, while the zero-customer-growth scenario leads to a projected 86,816 MDth of demand. These are before other Demand Side Resources (DSR) are taken into account. These estimates further compare in terms of annual demand growth rate: +0.4% per year growth in gas demand under the base demand forecast scenario and -0.3% per year reduction in gas demand under the zero-customer-growth scenario. While this is just one finding in a much more extensive planning analysis, it illustrates a differential comparison of the possible net effects on gas demand if several elements promoting greenhouse gas reduction efforts are pursued. These include City of Seattle efforts such as the current proposal, which factor into the entire PSE IRP's analysis.

We also note that planning for the peak day of gas demand (in cold weather conditions) remains targeted as serving a low-temperature day of 13 degrees Fahrenheit, even after analysis to consider whether that assumption should change. This suggests consistent future planning considerations that ultimately lead to a future peak day demand in 2050 that is almost identical to the 2024 forecast peak demand level, which is approximately 1,000 MDth under the zero-customer-growth scenario. These are also before other DSR factors are taken into account.

When DSR factors <u>are</u> taken into account (within the IRP's modeling analysis), the IRP makes the following conclusions under the zero-customer-growth scenario:

- Gas system peak demand in 2050 would be reduced by 19 percent from 2024 conditions, to 809 MDth.
- Gas system peak demand would decrease at an average annual rate of 0.76 percent from 2024 to 2050.

While there are many more detailed analyses conducted in the 2023 IRP, these comparisons appear to be valid portrayals of projected future demand outcomes if several greenhouse gas reduction efforts are pursued and have resulting multiple kinds of effects on the entire span of supply and demand elements that PSE is considering in their future planning. While the range of many kinds of effects on systems planning will be relevant to PSE, the findings speak to an overall projected moderation of future demand for gas over the next 25+ years to 2050, due to the projected combined effects of all GHG planning efforts, of which the current City proposal is a part. Given this information, our conclusions about a lack of probable significant adverse impacts from the current proposal on the PSE gas system are supported.

The 2023 IRP also evaluated costs related to more electrification, with high-level summary observations including:

"As part of the analysis for this IRP, we evaluated the impacts of electrification on the gas and electric portfolio. We found that electrification would significantly increase energy costs on a system level. In addition to the cost of electrification equipment, a portion of this change is due to reduced demand, costs to sustain the gas system and concurrently growing capacity on the electric system with additional infrastructure. The

cost to increase resources and infrastructure on the electric system is greater than the social cost of greenhouse gases² saved by electrifying the gas loads. Converting gas appliances to electric can be expensive, and no policies currently address who will pay such expenses. From a societal perspective, therefore, it may cost more to electrify gas loads than society saves from the reduced emissions, as represented by the social cost of greenhouse gases.

Footnote 2: The social cost of greenhouse gasses (SCGHG) is the societal cost of emitting carbon. If a reduction of carbon costs more than the SCGHG, then as a society we are paying more to reduce carbon than the damage caused by emissions."

Water, Sewer, and other utilities

No probable adverse impacts are anticipated for city water, sewer, solid waste, or other utilities. This relates to a probable lack of substantial relationship between the proposal's effects of inducing building energy efficiency and reduced emissions (and associated work that would predominantly occur within or adjacent to existing buildings). In other words, a probable minimal degree of outdoor land disturbance associated with implementation of the proposal would minimize the potential for added increments of stormwater runoff impacts, and no particular adverse impacts from water consumption or sewer volumes, or solid waste collection are identified.

DECISION – SEPA

This decision was made after review by the responsible official on behalf of the lead agency of a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and form. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21C), including the requirement to inform the public of agency decisions pursuant to SEPA.

- [X] Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030(2)(c).
- [] Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. An EIS is required under RCW 43.21C.030(2)(c).

Signature: <u>/s/</u> Date: June 8, 2023 Gordon Clowers, Sr. Planner

Seattle Department of Construction and Inspections

References

ⁱ Understanding Our Emissions - Environment | seattle.gov

ⁱⁱ <u>Seattle Building Performance Standards Policy Development - Environment | seattle.gov</u>

^{III} Based on 2017 data from the King County Department of Assessments, as reported in the Zero Cities Project, Preliminary Assessment Report, Seattle, Washington, Architecture 2030 et. al., 2018.

^{iv} Energy Benchmarking - Environment | seattle.gov

^v Preparing for a Changing Climate: Washington State's Integrated Climate Response Strategy

vi ComprehensivePlanCouncilAdopted2021.pdf (seattle.gov)

vii 2019 Building Energy Benchmarking | City of Seattle Open Data portal

^{viii} Number of multifamily buildings over 20,000 SF is from 2019 energy benchmarking data. Total number of multifamily buildings is from 2017 data from the King County Department of Assessments, as reported in the *Zero Cities Project, Preliminary Assessment Report, Seattle, Washington*, Architecture 2030 et. al., 2018.

^{ix} Number of single-family buildings is from 2017 data from the King County Department of Assessments, as reported in the Zero Cities Project, Preliminary Assessment Report, Seattle, Washington, Architecture 2030 et. al., 2018.

^x OSE used CoStar 1- and 2-star rated buildings and rent averages to estimate privately-owned, affordable properties. OSE matched 77% of buildings benchmarked as 'multifamily' to CoStar data (a commercial real estate analytics provider) to estimate the number of affordable – unsubsidized housing >20,000 SF.

^{xi} <u>Biden-Harris Administration Announces State And Tribe Allocations For Home Energy Rebate Program</u> <u>Department of Energy</u>

xii <u>Clean Energy Transformation Act - Washington State Department of Commerce</u>

xiii <u>RCW 80.28.110</u> (Definition of "Electrical Company" includes "every city or town owning, operating or managing any electric plant for hire within this state." <u>RCW 80.04.010</u>)

xiv 2022IntegratedResourcePlan.pdf (seattle.gov)

^{xv} 2020 Community Greenhouse Gas Emissions Inventory (seattle.gov)

xvi PSE | Our Natural Gas Supply

SEATTLE BUILDING EMISSIONS PERFORMANCE STANDARD

SUMMARY OF MAJOR CHANGES

COMPLIANCE SCHEDULE AND TARGETS			
1.17.23 Version	5.30.23 Version	Section	
GHGI Targets Schedule: Non-residential compliance for meeting GHGIT starts in 2027.Multifamily compliance for meeting GHGIT starts in 2031	New Schedule Table B: First compliance period now starts in 2031 for all covered buildings including multifamily. Non-residential has three compliance periods but multifamily has four.	22.925.060	
GHGI targets (Table A)	New GHGI targets Table A: Recalculated targets to exclude all electric buildings from the dataset. And to revise targets based on three intervals instead of four intervals for nonresidential buildings.	22.925.070	
GHGI target for laboratory: listed in Table A.	Added provision that laboratory 2031-2035 GHGIT shall be revised by rule (vs. in legislation as for other building types) by December 31, 2026 based on further evaluation of the unique characteristics of laboratory spaces and any relevant industry standards.	22.925.070	
Campus & Portfolio Compliance: Allowed for only public and non-profit entities to pursue this pathway.	Added private entities as eligible to comply as building portfolios.	22.925.020	
EXEMPTIONS & EXTENSIONS			
Affordable Housing Extension: Exempt from meeting the first compliance period for subsidized low-income and un- subsidized low-rent housing.	Changed from "affordable housing" to "low-income housing." Still exempt from meeting GHGIT for first compliance period but added language that building must still meet benchmarking verification and reporting. Added human service use, including shelters, as eligible for compliance extension.	22.925.110	
High vacancy rate compliance extension: No provision	Added a compliance extension option when buildings have high rental vacancy rates during a consecutive 12-month period.	22.925.110 Rulemaking: detail criteria for high vacancy rate	
DEDUCTIONS OF EMISSIONS FROM END USES			

SEATTLE BUILDING EMISSIONS PERFORMANCE STANDARD

DELIBERATIVE DRAFT

SUMMARY OF MAJOR CHANGES

District Energy emissions deduction from GHGI: No provision in 1.17 version	Added an emissions end use deduction allowance for one compliance cycle (2031-2035) for district energy only for buildings that have an active energy contract with CenTrio as of June 1, 2024.	22.925.120
Deductions for emissions for condominium units: No provision. 1.17 version would have required individually owned residential units in condos to comply.	Added an emissions end use deduction for equipment located in privately owned residential condominium units. Common areas of condos must still comply.	22.925.120
Deductions for emissions from cooking equipment: allowed only for commercial cooking for one compliance interval.	Expanded end use deduction for cooking to include both commercial cooking and residential cooking for 2031-2040 Expanded deduction to two compliance intervals instead of one.	22.925.120
ALTERNATIVE COMPLIANCE OPTIONS		
Alternative Compliance Payment: covered buildings could pay \$94/MTCO2e (social cost of carbon) for the five years of the first compliance period.	Increased the social cost of carbon used to determine the Alternative Compliance Payment to \$190/MTCO2e (consistent with most recent EPA proposal).	22.925.100
Prescriptive Options: multifamily buildings can use a prescriptive option for one compliance interval such as replacing DHW and fossil fuel HVAC to electric heat pumps.	Added a provision to clarify that a condo satisfies this pathway by replacing the equipment in common areas (not individual units).	22.925.100
Alternative Pathway for Extenuating Circumstances: Hardship plan that includes an audit, individual GHGIT for each compliance interval, cost estimates for achieving the GHGIT for each interval.	Changed from Hardship Plan to "Decarbonization compliance plan." Expands on situations when a building owner can utilize a decarbonization plan. See specific items below:	22.925.100
	Added provision 'equipment at less than life expectancy' to circumstances under which owner can utilize a decarbonization compliance plan.	22.925.100 Rulemaking: establish life
		expectancy table(s) based on industry standards
	Added 'the incremental cost of meeting BEPS net-zero emissions creates a significant financial hardship' to	22.925.100
	circumstances under which owner can utilize a decarbonization compliance plan.	Rulemaking: detail criteria for cost prohibitive

SEATTLE BUILDING EMISSIONS PERFORMANCE STANDARD

DELIBERATIVE DRAFT

SUMMARY OF MAJOR CHANGES

	Added 'non-interruptible disruption to research function' to circumstances under which owner can utilize a decarbonization compliance plan.	22.925.100 Rulemaking: detail criteria for non-tenable disruption
	Added 'tenant lease constraints' to circumstances under which owner can utilize a decarbonization compliance plan, through 2035.	22.925.100
	Added 'structural and electrical constraints' to meeting net- zero emissions to circumstances under which owner can utilize a decarbonization compliance plan.	22.925.100 Rulemaking: detail criteria for lease constraints
PENALTIES AND REVENUE		
Penalties: Penalty for not reporting - \$5,000 for buildings more than 50,000 SF and \$2,500 for buildings under 50,000 SF. Penalty for not meeting GHGIT: \$2.50/SF for non-residential and MF buildings (\$10/SF over four compliance intervals).	Increased reporting penalty to \$15k for buildings more than 50,000 SF and \$7,500 for buildings under 50,000 SF. Penalties for not meeting GHGIT for nonresidential changed to \$3.33/SF per each of three compliance intervals.	22.925.180
Incentives/Technical Assistance: No provisions in 1.17 version	Added provision directing establishment of an early adopter incentive program and technical assistance.	22.925.140
Clean Buildings Opportunity Account. Use of Revenue from Penalties and Alternative Compliance Payment: 1.17 version directs revenue to be used broadly for emission reductions in buildings.	Changed title to "Revenue Expenditures" based on CBO feedback. Added single family homes to be eligible for revenue expenditures.	22.925.140