



Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM

When: Sep 21, 2023 05:30 PM Eastern Time (US and Canada)
Topic: Ordinance Committee Meeting

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1. Agenda

Subject	1.1. Motion to amend/adopt agenda
Meeting	September 21, 2023 - Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM
Category	1. Agenda
Department	
Type	
Recommended Action	

2. Adopt Draft Minutes from 6/28

Subject	2.1. Adopt Draft Minutes from 6/28
Meeting	September 21, 2023 - Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM
Category	2. Adopt Draft Minutes from 6/28
Department	Council and Board
Type	
Recommended Action	

3. Public Forum (30 minute cap)

Subject	3.1. Verbal Comments
Meeting	September 21, 2023 - Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM
Category	3. Public Forum (30 minute cap)
Department	Council and Board
Type	

4. Carbon Impact Fee Discussion

Subject	4.1. Carbon Impact Fee Discussion
Meeting	September 21, 2023 - Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM
Category	4. Carbon Impact Fee Discussion
Department	Council and Board
Type	
Recommended Action	

5. Adjournment

Subject	5.1. Motion to adjourn
Meeting	September 21, 2023 - Ordinance Committee Meeting - Thursday, September 21, 2023, 5:30 PM, REMOTE via ZOOM
Category	5. Adjournment
Department	Council and Board
Type	
Recommended Action	

**Ordinance Committee
Wednesday, June 28, 2023
Sharon Bushor Conference Room
at City Hall or Remote via Zoom. Burlington, Vermont
DRAFT MINUTES**

Members Present: Councilor Traverse (Chair), Councilor Carpenter, Councilor Hightower, Councilor Shannon

Staff Present: Kim Sturtevant (Acting City Attorney), Meaghan Tuttle (Director of Planning), Charles Dillard (Principal Planner)

Public Present:

Dan Schillhammer, John Olmsted, Albert Stiamand, Colin Hilliard, Alan Schillhammer, Margaret King, Jon-Patrick Fitch, Kelly Devine

Public Present (Remote): Emily H, Mariella Torres, Bill Calfee, Connor, Eliana, Kelly Krause, Larry Lewark, Nic Anderson, Sharon Bushor, Todd Sarandos, John Caulo, Kelly Devine, Julia Shannon-Grillo

Meeting called to order at 5:39 PM.

1. Adopt the Agenda

1.01 Adopt the Agenda

Motion to Adopt Agenda as is.

Motion by Councilor Carpenter, Seconded by Councilor Hightower

Final Resolution: Motion Passes

Yes: Unanimous

2. Adopt Draft Minutes from June 12th

2.01 Adopt Draft Minutes from June 12th

Motion to Adopt Minutes from 06/12/2023.

Motion by Councilor Carpenter, Seconded by Councilor Shannon

Final Resolution: Motion Passes

Yes: Unanimous

3. Public Forum

3.01 Public Comment

- Dan Schillhammer of Queen City Printers voiced support for solving the housing crisis and this zoning amendment, as more housing would help attract more employees to the business and wanted to know why their business was not involved, how the boundary lines were decided, and if they can be involved at this point.

- Director Tuttle responded that the intent behind establishing the boundary lines as they are now for the SEID was to focus on undeveloped sites and clarified the Maltex building is not included within the current boundaries.
- Colin Hilliard, a Ward 3 resident and Program Director of Burlington Business Association called attention to 2 letters that were sent to Ordinance Committee members representing residents (approx. 60) and businesses (17) in the South End asking for more housing. Hilliard also stated he wanted to caution the Committee against setting zoning and building standards too high, trying to incentivize green building, but ultimately cost the community and stakeholders in time and money.
- John Olmsted asked the Committee to push the proposal forward and not allow the details to stall this ordinance.
- Albert Stiamand of Silverstone Properties expressed concerns about the uses listed in the amendment and the completion of road construction may impact his current business model and in anticipation of future changes, would like to be included in the process.
- Sharon Bushor of Ward 1 said that she hopes all stakeholders were involved and continue to be involved and wanted clarification on the next steps for bringing this ordinance into fruition. Bushor emphasized that the intent behind this area of Burlington was to have a maker and innovation space, and this ordinance needs to protect the district's ability to expand that mission. Additionally, Bushor stated more housing is not the answer to the housing crisis if housing that is built is not affordable.
- Bill Calfee, who works at HULA Lakeside, said housing is a huge issue for all and bringing density to Burlington, rather than building in outlying towns and causing people to commute, will be important for filling jobs.
- Kelly Krause stated she was happy to see references to Human Scale design in public materials on SEID and pointed out that buildings don't need to be built tall for us to build densely. Krause cited her experience living and working in Europe for 10 years as a designer for the physiological, environmental, and planning reasons why 5 stories is a better max height, and anything taller is for luxury, not low-income.

Public Comment closed at 6:05 PM.

4. Discussion of the South End Innovation District (SEID)

4.01 Discussion of the SEID Ordinance

Committee discussed history of zoning amendment and goal to move amendment forward:

- Director Tuttle reviewed the history of this zoning amendment, stating talks started the summer of 2021 after the original request to consider zoning changes in 2020. These

changes were made to align with PlanBTV and recognize the ways this area of Burlington needs to evolve.

- Councilor Shannon asked what stakeholder groups were consulted during the process, to which Director Tuttle answered property owners inside and outside of the proposed SEID, artists, businesses, and Champlain Housing Trust (CHT).
- Councilor Traverse asked what changes would constitute this ordinance needing to go back to the Planning Commission, which worked with the document prior to the Ordinance Committee. Attorney Sturtevant said the Planning Commission will get a copy of changes and can make comments, but the changes will not require it to be “remanded,” it can still move forward to public hearing before the Council.
- Councilor Traverse emphasized the need for this proposal to go forward, as it has been through many engagement sessions and committee meetings, to the point that Councilor Traverse is satisfied this proposal is a true broad representation of what people wanted and thinks this ordinance will maintain the South End’s character. Councilor Traverse reminded the Committee that if this proposal does not go forward tonight, they will need to wait until August.

Committee discussed Councilor Hightower’s recommended changes and revisions made to document since last meeting:

- Councilor Hightower brought recommendations forward to change zoning ordinance language related to building height, green building standards, and frontage, in collaboration with Director Tuttle, Planner Dillard, and other Planning staff.
- Director Tuttle pointed out the FAR was changed from 2.25 to 2.5 as 2.5 is allowable and since the public right-of-way is not counted toward the FAR, 2.5 will make up for this.
- Planner Dillard reviewed changes made to the height map, which includes 3 height tiers, and showed how this new map reduces area where 8 stories is allowed near Lakeside and would preserve Calahan Park views, prompting a discussion amongst Committee members for how the map could be further changed.
- Councilor Hightower reviewed reasons for making a change to the minimum amount of non-residential use required on the ground floor by the ordinance, intending to make it easier for people to take advantage of the incentives listed versus what was required by the ordinance before. Councilor Shannon inquired why the Committee could not just require exactly what the City wants developers to build on these lots, to which Planner Dillard responded that some of the specifications can be costly and by being too specific, would set the standard too high so as to prevent more development, which is really the goal of the ordinance.

Committee discussed remaining concerns:

- As Director Tuttle and Planner Dillard reviewed parking requirements, Councilor Shannon raised concerns over limitations on parking, emphasizing the district needs to be inviting to residents and businesses. Councilor Shannon also expressed concerns over the amount of public space the ordinance would allow and the district's preservation as an enterprise zone. Director Tuttle and Planner Dillard suggested amendments that would allow courtyard space to count toward the Frontage and Activation Standards in Table 4.5.8-2 and emphasized many of the metrics used in the ordinance were designed to follow urban design principles as opposed to suburban design.
- Councilor Shannon asked how this ordinance would support the building of row houses, which was something that was discussed as a desirable development for the South End at one point. Planner Dillard agreed row houses should be explicitly exempt from the non-residential use requirements. The Committee members discussed how to promote home ownership over renting. Director Tuttle said that regulating for ownership versus renter-occupied standards is nearly impossible to administer, so instead, the focus has been to think about this ordinance can drive the development of smaller buildings, which have a better change of being owner-occupied.
- Director Tuttle spoke to why 2 and 3-bedrooms are called out as a way to reduce frontage, stating it encourages a mix of development to accommodate different kinds of households. Councilor Carpenter added the market will want to build 1-bedroom units unless more gets incentivized. Also, in readdressing open space use requirements, Director Tuttle stated the intent was to incentivize more, smaller interspersed public spaces rather than a few large public spaces.
- The Committee debated including 'dorm' and 'lodging' as permitted uses and what limits to impose, if any. Planner Dillard stated the reason why 'dorm' was included was in consideration for Champlain College, as innovation districts are always developed in conjunction with a university. Councilor Carpenter said she doesn't mind adding dorms if it means students will not have to use apartments or co-housing space that other residents could use instead. Director Tuttle stated 'lodging' was not an intended use, so the Planning Commission decided to also include language that limits lodging to no more than 1 lodging use of a building on each lot, as the lots exist today, in anticipation of future subdivision and would even further limit the permissible use of lodging. Councilors Hightower and Shannon state they are not in support of any amount of lodging. Councilor Traverse and Carpenter advocate for lodging to enhance mixed-use development in a way that will not overwhelm the district. Committee members decide to remove lodging from permitted uses for now.

Committee voted on final changes:

- Committee supported changing introductory language, and Councilor Traverse stated Planning is to revise the E-LM clause language.
- Councilors agreed parking needs to be further discussed and will defer to Planning Staff to provide additional language for areas that need more work, such as parking, ahead of the July 24th City Council meeting.
- Councilor Traverse stated open space qualifications did not need to be voted on.

Motion to amend FAR from 2.25 to 2.5.

Motion by Councilor Hightower, Seconded by Councilor Carpenter

Final Resolution: Motion passes

Yes: 3, Councilor Shannon opposed

Motion to accept Councilor Hightower's amendment to keep the Mass Timber standard and eliminate other conditionals.

Motion by Councilor Hightower, Seconded by Councilor Carpenter

Final Resolution: Motion passes

Yes: Unanimous

Motion to amend Building Height Map to limit 8 stories to south of Lakeside Ave and north of Locust St.

Motion by Councilor Carpenter, Seconded by Councilor Hightower

Final Resolution: Motion passes

Yes: Unanimous

Motion to adopt uses as amended.

Motion by COUNCILOR, Seconded by Councilor Carpenter

Final Resolution: Motion passes

Yes: Unanimous

Motion to remove 'Dorm' from permitted uses.

Motion by Councilor Shannon, Seconded by none.

Final Resolution: Motion fails

Committee discussed requirements of Council to hold and warn public hearing:

- Attorney Sturtevant and Director Tuttle clarified a decision needs to be made by the Committee tonight to move proposal to full council in order to meet the deadline to notify the public of a public hearing, which would need to be warned by July 3rd in time for the July 24th meeting. Attorney Sturtevant noted requirements for changing the amendment after posting.
- Director Tuttle stated all changes desired by Councilors should be communicated to Planning by July 6th to post in time.

Committee voted to move proposal to full council:

Motion to warn the SEID zoning amendment for public hearing as amended before Full Council on July 24th with the recommendation that Planning Staff suggest amendments to surface parking at least 14 days in advance of hearing.

Motion by Councilor Hightower, Seconded by Councilor Carpenter

Final Resolution: Motion passes

Yes: Unanimous

5. Any Other Committee Business

6.01 Any Other Committee Business

There was no other committee business.

6. Adjournment

6.01 Adjournment

The meeting was adjourned at 11:04 PM.

CITY OF BURLINGTON

ORDINANCE _____

Sponsor: Councilors Traverse,
Barlow
Public Hearing Dates: _____

In the Year Two Thousand Twenty-Three

First reading: _____

Referred to: _____

Rules suspended and placed in all

An Ordinance in Relation to

stages of passage:

THERMAL ENERGY SYSTEMS AND THE ASSESSMENT OF
A CARBON POLLUTION IMPACT FEE

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Chapter 8, Buildings and Building Constructions, Article V, Heating Systems, of the Code of Ordinances of the City of Burlington be and hereby is amended to read as follows:

ARTICLE V. THERMAL ENERGY~~HEATING~~ SYSTEMS

8-76 Purpose and Authority.

(a) Purpose. It is in the public interest and in the interest of public health and safety to achieve a high degree of conservation of energy and, ~~where possible,~~ reduce emissions of greenhouse gases by requiring buildings to meet specified energy efficiency performance standards and maximum allowable heat loss standards.

(b) Authority. All provisions in this article relating to thermal energy~~heating~~ systems are adopted pursuant to the authority and powers granted by a majority of the legal voters of the City who voted at the annual City meeting on March 7, 2023, in accordance with section 48(66) of the City Charter and its provisions on the regulation of thermal energy systems in residential and commercial buildings, including the assessment of carbon impact or alternative compliance payments, for the purpose of reducing greenhouse gas emissions throughout the City. The provisions in this article are further adopted pursuant to the authority and powers granted by the Vermont Legislature in 24 V.S.A. § 3101 (Chapter 83. Building Inspectors and Regulation of Building; Bylaws and ordinances; penalties), as reasonably necessary to improve the health, safety, and welfare of the public from fuel leaks and explosions, and from air pollution, including that which is causing climate change and thereby threatens the city and its inhabitants.

8-77 Definitions.

(a) A "fossil fuel ~~renewable primary heating~~thermal energy system" shall be subject to the alternative compliance carbon fee, and shall mean any space conditioning, domestic hot water, cooking, appliance, process heat, or other building system that relies on thermal energy from fossil fuels, including coal, oil, propane, kerosene or natural gas. -heating system that meets at least eighty-five (85) percent of the building's design heating load calculated per the Vermont Commercial Building Energy Standards (CBES) Energy Code (Section C403.1) and is fueled by:

(b) A “renewable fuel which reduces greenhouse gas emissions” is, based on the vote at the annual City meeting on March 7, 2023, not subject to the alternative compliance carbon fee, and shall mean any space conditioning, domestic hot water, cooking, appliance, process heat, or other building system that relies on thermal energy from:

- (1) ~~Electric-powered thermal equipment~~ty, including cold-climate air source heat pumps, ground source heat pumps, and other heat pumps including district, network, grid, microgrid, and building geothermal systems; electric appliances providing thermal end uses; and heat pump water heaters (with the exception of electric resistance units prohibited by the Vermont Commercial Building Energy Standards (CBES) Energy Code (Section C403.2.3) or the Vermont Residential Building Energy Standards (RBES) Energy Code (Section 2.4b)); or
- (2) ~~Wood pellets or woodchips~~; Solar water heating systems; or
- (3) ~~Other renewable fuel used by conventional primary heating systems, including renewable gas, biodiesel, and renewable district heating, if the building owner provides a contract demonstrating that the fuel required by the conventional primary heating system is fully sourced from such other renewable fuels for the life of that conventional heating system.~~Renewable energy-based district heating; or
- (4) Green hydrogen sourced exclusively from renewable energy sources; or
- (5) Advanced wood heating systems that meet the 2023 or subsequently issued Vermont Small Scale Renewable Energy Incentive Program (SSREIP) Advanced Wood Heating System (AWHS) terms conditions and requirements, including for efficiency and emission controls; or
- (6) Sustainably-sourced biodiesel; or
- (7) Renewable gas, meaning methane produced by organic material and sourced from landfills, wastewater treatment facilities, and farms as offered under a Vermont Public Utility Commission-approved tariff or supply contract from a gas utility such as Vermont Gas Systems, provided that the gas utility demonstrates that the renewable gas is purchased along with its renewable attributes and has a secured contractual pathway for the physical delivery of the renewable gas from the point of injection in the pipeline to the gas utility’s delivery system; or
- (8) Any other renewable fuel that reduces greenhouse gas emissions, provided the Department of Permitting and Inspections receives sufficient analysis or documentation from the applicant that the fuel reduces greenhouse gas emissions relative to the fossil fuel it is replacing consistent with the requirements of subsection (c) below.

(c) The Department of Permitting and Inspections may ~~shall~~ disqualify any renewable fuel that reduces greenhouse gas emission listed above from being eligible to satisfy the requirements of 8-78 this section if such fuel is subsequently deemed by the Vermont Public Utility Commission not to satisfy the carbon intensity requirements of a State of Vermont Clean Heat Standard or any similar state thermal energy policy.

In addition, the Department may require an applicant seeking to utilize a liquid or gaseous renewable fuel that reduces greenhouse gas emissions to submit documentation or independent analysis - utilizing the Argonne National Laboratory GREET model or modeling of similar rigor adapted to Vermont's thermal energy context - demonstrating that the renewable fuel proposed for compliance under this section reduces greenhouse gas emissions relative to the fossil fuel system or fuel it is replacing.

~~“Renewable gas” shall mean methane produced by the organic material and sourced from landfills, wastewater treatment facilities, and farms as offered under a tariff or supply contract from a utility such as Vermont Gas Systems.~~

(d) A “large existing building” shall mean a building with at least fifty thousand (50,000) feet in total floor area of enclosed conditioned space, including hotels, but excepting the following:

(1) All residential buildings; and

(2) Buildings listed, or eligible to be listed, on the National Historic Register, provided the applicant can demonstrate to the satisfaction of the Department of Permitting and Inspections that there is no thermal energy system that relies on renewable fuel available to the building due to the historic nature of the building and any limitations imposed by the National Historic Register.

(e) A “new building” shall mean the new construction of any building, excepting all additions, alterations, renovations, or repairs to an existing building.

(f) An “existing city building” means all municipal buildings constructed prior to January 1, 2023 and owned by the City of Burlington, regardless of their size or square footage.

~~(b) A “nonprimary heating system” shall include back-up heating system, water heating system, or ventilation/air tempering system.~~

8-78 Applicability.

(a) Applicants seeking permits pursuant to this chapter for a new buildings shall demonstrate that the new building will utilize a renewable primary heatingthermal energy systems that rely on a renewable fuel which reduces greenhouse gas emissions. Applicants seeking permits to replace space conditioning systems or domestic water heating systems that are in large existing buildings shall demonstrate the new space conditioning or domestic water heating systems will utilize a renewable fuel which reduces greenhouse gas emissions. Existing City buildings shall follow the requirements for large existing buildings, but are not subject to the alternative compliance carbon pollution impact fee.

(b) If an applicant for a new building is seeking to use a thermal energy system that does not rely on a renewable fuel which reduces greenhouse gas emissions, or an applicant for a large existing building is seeking to use a space conditioning or domestic water heating system that does not rely on a renewable fuel which reduces greenhouse gas emissions, the applicant shall prior to receiving a permit pursuant to subsection (a) first have to demonstrate that the renewable system is uneconomical. To be determined to be

uneconomical the twenty-five (25) year capital and operational cost of the least expensive renewable primary heating system, including any available incentives from the Burlington electric department or other State or federal entities, must be more than the twenty-five (25) year capital and operational costs of a nonrenewable primary heating system, including the cost of externalities calculated by a building carbon price of one hundred fifty dollars (\$150.00) per ton for the life of the nonrenewable primary heating system. The building carbon price of one hundred fifty dollars (\$150.00) per ton shall be annually adjusted by the program administrator equivalent to one hundred (100) percent of the annual change in the Consumer Price Index For All Urban Consumers (CPI-U) in the Northeast Region, to go into effect January 1 of every ensuing year. A system demonstrating uneconomicability shall be assessed an alternative compliance -carbon pollution impact fee. However, an applicant building a new, residential multi-unit dwelling with four or more units shall not be subject to the alternative compliance carbon pollution impact fee as it applies to domestic water heating systems until January 1, 2026.

(c) Effective January 1, 2024, the alternative compliance carbon pollution impact fee shall be equal to one hundred fifty dollars (\$150.00) per ton of greenhouse gas emissions produced by the thermal energy system over its lifetime, based on a net present value calculation at the time the permit application is submitted. For large existing building applicants, the alternative compliance carbon pollution impact fee is capped at no more than 75 percent of the installed cost of the proposed space conditioning or domestic water heating system. On each subsequent January 1, the alternative compliance carbon pollution impact fee shall be increased by any percentage increase of the Consumer Price Index, CPI-U, U.S. city average, not seasonally adjusted, or successor index, as calculated by the U.S. Department of Labor or successor agency for the 12 months preceding the previous September 1, but in no event shall the increase be greater than five percent. The adjusted alternative compliance carbon pollution impact fee shall be rounded off to the nearest dollar.

(d) For compliance purposes for all thermal energy systems that are capable of utilizing either a fossil fuel or a renewable fuel that reduces greenhouse gas emissions, an applicant shall demonstrate compliance by providing a certificate and supporting documentary proof, including but not limited to a contract, invoices, and subscription or participation in a tariff program, on an annual basis stating that the applicant is purchasing renewable fuel that is being delivered to that building's thermal energy system, that it reduces greenhouse gas emissions, and that the purchases cover the annual need of the thermal energy system. If the applicant fails to provide an annual compliance certification, the applicant will be assessed an alternative compliance carbon pollution impact fee equal to a pro rata share of the remaining expected life of the thermal energy system. For renewable liquid or gaseous fuels used in a thermal appliance or system capable of also using fossil fuels, to count towards compliance, the purchase of enough renewable fuel to fully offset the annual usage for the appliance or thermal system in question is required. such as gas utility services that could utilize fossil fuel or renewable gas, or oilheat systems that could utilize oil or biodiesel, an applicant shall demonstrate compliance either via (i) a contract demonstrating that the fuel required by the thermal energy system is fully sourced from such other renewable fuels or technologies for the life of that thermal energy system; or (ii) annual compliance certification that the applicant is purchasing renewable fuel to cover the entire need of the thermal energy system. If the applicant uses the annual compliance certification, and the applicant fails to provide an annual compliance certification in any year that the applicant is using renewable fuel that reduces greenhouse gas emissions, the applicant will be assessed an alternative

compliance carbon pollution impact fee equal to a pro rata share of the remaining expected life of the thermal energy system.

(e) If an applicant with one or more buildings is seeking a permit pursuant to this chapter, and is already using one or more thermal energy systems that rely on a renewable fuel which reduces greenhouse gas emissions, the applicant may apply for a credit towards any alternative compliance carbon pollution impact fee equal to the carbon value of the renewable fuel which reduces greenhouse gas emissions used for any thermal energy system since January 1, 2023.

(f) All alternative compliance carbon pollution impact fee proceeds except those funds needed to administer this ordinance, shall be placed in a Clean Energy Fund established and managed by the Department of Permitting and Inspections with technical support from the Burlington Electric Department. Clean Energy Fund proceeds shall be made available as follows:

(i) The Department of Permitting and Inspections, with technical support from the Burlington Electric Department, shall determine which initiatives are eligible for funding for property owners or low income renters, but they may include, and shall not be limited to, the installation of new thermal energy systems that rely on renewable fuel, weatherization projects, or subsidizing any increased utility costs associated with purchasing renewable fuel rather than fossil fuel;

(ii) Half of the proceeds paid into the Clean Energy Fund by a large existing building applicant shall be available to the payor for projects to reduce greenhouse gas emissions at any site City of Burlington owned by the payor. The large existing building applicant must request these proceeds within one (1) year following payment of their alternative compliance carbon pollution impact fee, and any proceeds not requested within that year shall be made available under subsection (iii).

(iii) Any remaining proceeds collected from large existing building applicants and all proceeds paid into the Clean Energy Fund by new construction applicants shall be available to either:

1. Provide financial assistance to help low-income Burlington residents with the purposes described in subsection (i), either through direct payments to homeowners and renters who are income-qualified per the most recent income-qualification levels published by the Community and Economic Development Office (“CEDO”), or through payments to property owners of multi-family buildings where at least 25 percent of the tenants in the building are income-qualified, provided that the property owner must commit to not raising the rent of income-qualified tenants as a result of costs associated with the funded initiatives to reduce greenhouse gas emissions.

2. Subsidize the cost of converting the City’s vehicle fleet from fossil fuel to electric.

(g) Nothing in this section prevents or prohibits applicants from utilizing any and all available local, state, or federal incentives, rebates or tax credits that support implementation of renewable fuels listed above for their buildings, and applicants are encouraged to access available incentives or rebates or tax credits.

(h) Any applicant for a permit pursuant to this chapter, for any new or existing building regardless of size, seeking to utilize a wood chip or wood pellet heating system, must demonstrate that the system meets the 2023 or any subsequently issued Vermont Small Scale Renewable Energy Incentive Program (SSREIP) Advanced Wood Heating System (AWHS) terms conditions and requirements, including for efficiency and emission controls.

~~An applicant is permitted to install and utilize nonprimary heating systems in new buildings that use nonrenewable fuels.~~

8-79 Effective DateWaiver.

The provisions of this Article shall take effect on January 1, 2024.

~~The department of permitting and inspections may grant a waiver to Section 8-78 on the grounds that utilizing a renewable primary heating system in a new building would be uneconomical. To be deemed uneconomical, the twenty-five (25) year capital and operational cost of the least expensive renewable primary heating system, including any available incentives from the Burlington electric department or other State or federal entities, must be more than the twenty-five (25) year capital and operational costs of a nonrenewable primary heating system, including the cost of externalities calculated by a building carbon price of one hundred dollars (\$100.00) per ton for the life of the nonrenewable primary heating system. The building carbon price of one hundred dollars (\$100.00) per ton shall be annually adjusted by the program administrator equivalent to one hundred (100) percent of the annual change in the Consumer Price Index For All Urban Consumers (CPI-U) in the Northeast Region, to go into effect January 1 of every ensuing year.~~

CITY OF BURLINGTON

ORDINANCE _____

Sponsor: Councilors Traverse,
Barlow
Public Hearing Dates: _____

In the Year Two Thousand Twenty-Three

First reading: _____

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stages of passage:

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A CARBON POLLUTION IMPACT FEE

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ARTICLE V. THERMAL ENERGY~~HEATING~~ SYSTEMS

8-76 Purpose and Authority.

(a) Purpose. It is in the public interest and in the interest of public health and safety to achieve a high degree of conservation of energy and, ~~where possible,~~ reduce emissions of greenhouse gases by requiring buildings to meet specified energy efficiency performance standards and maximum allowable heat loss standards.

(b) Authority. All provisions in this article relating to thermal energy~~heating~~ systems are adopted pursuant to the authority and powers granted by a majority of the legal voters of the City who voted at the annual City meeting on March 7, 2023, in accordance with section 48(66) of the City Charter and its provisions on the regulation of thermal energy systems in residential and commercial buildings, including the assessment of carbon impact or alternative compliance payments, for the purpose of reducing greenhouse gas emissions throughout the City. The provisions in this article are further adopted pursuant to the authority and powers granted by the Vermont Legislature in 24 V.S.A. § 3101 (Chapter 83. Building Inspectors and Regulation of Building; Bylaws and ordinances; penalties), as reasonably necessary to improve the health, safety, and welfare of the public from fuel leaks and explosions, and from air pollution, including that which is causing climate change and thereby threatens the city and its inhabitants.

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- (1) ~~Electric-powered thermal equipment~~ity, including cold-climate air source heat pumps, ground source heat pumps, and other heat pumps including district, network, grid, microgrid, and building geothermal systems; electric appliances providing thermal end uses; and heat pump water heaters (with the exception of electric resistance units prohibited by the Vermont Commercial Building Energy Standards (CBES) Energy Code (Section C403.2.3) or the Vermont Residential Building Energy Standards (RBES) Energy Code (Section 2.4b)); or
- (2) ~~Wood pellets or woodchips; Solar water heating systems;~~ or
- (3) ~~Other renewable fuel used by conventional primary heating systems, including renewable gas, biodiesel, and renewable district heating, if the building owner provides a contract demonstrating that the fuel required by the conventional primary heating system is fully sourced from such other renewable fuels for the life of that conventional heating system.~~Renewable energy-based district heating; or
- (4) Green hydrogen sourced exclusively from renewable energy sources; or
- (5) Advanced wood heating systems that meet the 2023 or subsequently issued Vermont Small Scale Renewable Energy Incentive Program (SSREIP) Advanced Wood Heating System (AWHS) terms conditions and requirements, including for efficiency and emission controls; or
- (6) Sustainably-sourced biodiesel; or
- (7) Renewable gas, meaning methane produced by organic material and sourced from landfills, wastewater treatment facilities, and farms as offered under a Vermont Public Utility Commission-approved tariff or supply contract from a gas utility such as Vermont Gas Systems, provided that the gas utility demonstrates that the renewable gas is purchased along with its renewable attributes and has a secured contractual pathway for the physical delivery of the renewable gas from the point of injection in the pipeline to the gas utility’s delivery system; or
- (8) Any other renewable fuel that reduces greenhouse gas emissions, provided the Department of Permitting and Inspections receives sufficient analysis or documentation from the applicant that the fuel reduces greenhouse gas emissions relative to the fossil fuel it is replacing consistent with the requirements of subsection (c) below.

(c) The Department of Permitting and Inspections shall disqualify any renewable fuel that reduces greenhouse gas emission from being eligible to satisfy the requirements of 8-78 if such fuel is subsequently deemed by the Vermont Public Utility Commission not to satisfy the carbon intensity requirements of a State of Vermont Clean Heat Standard or any similar state thermal energy policy. In addition, the Department may require an applicant seeking to utilize a liquid or gaseous renewable fuel that reduces greenhouse gas

emissions to submit documentation or independent analysis - utilizing the Argonne National Laboratory GREET model or modeling of similar rigor adapted to Vermont's thermal energy context - demonstrating that the renewable fuel proposed for compliance under this section reduces greenhouse gas emissions relative to the fossil fuel system or fuel it is replacing.

~~“Renewable gas” shall mean methane produced by the organic material and sourced from landfills, wastewater treatment facilities, and farms as offered under a tariff or supply contract from a utility such as Vermont Gas Systems.~~

(d) A “large existing building” shall mean a building with at least fifty thousand (50,000) feet in total floor area of enclosed conditioned space, including hotels, but excepting the following:

(1) All residential buildings; and

(2) Buildings listed, or eligible to be listed, on the National Historic Register, provided the applicant can demonstrate to the satisfaction of the Department of Permitting and Inspections that there is no thermal energy system that relies on renewable fuel available to the building due to the historic nature of the building and any limitations imposed by the National Historic Register.

(e) A “new building” shall mean the new construction of any building, excepting all additions, alterations, renovations, or repairs to an existing building.

(f) An “existing city building” means all municipal buildings constructed prior to January 1, 2023 and owned by the City of Burlington, regardless of their size or square footage.

~~(b) A “nonprimary heating system” shall include back-up heating system, water heating system, or ventilation/air tempering system.~~

8-78 Applicability.

(a) Applicants seeking permits pursuant to this chapter for a new buildings shall demonstrate that the new building will utilize a renewable primary heating thermal energy systems that rely on a renewable fuel which reduces greenhouse gas emissions. Applicants seeking permits to replace space conditioning systems or domestic water heating systems that are in large existing buildings shall demonstrate the new space conditioning or domestic water heating systems will utilize a renewable fuel which reduces greenhouse gas emissions. Existing City buildings shall follow the requirements for large existing buildings, but are not subject to the alternative compliance carbon pollution impact fee.

(b) If an applicant for a new building is seeking to use a thermal energy system that does not rely on a renewable fuel which reduces greenhouse gas emissions, or an applicant for a large existing building is seeking to use a space conditioning or domestic water heating system that does not rely on a renewable fuel which reduces greenhouse gas emissions, the applicant shall prior to receiving a permit pursuant to subsection (a) first have to demonstrate that the renewable system is uneconomical. To be determined to be uneconomical the twenty-five (25) year capital and operational cost of the least expensive renewable primary heating system, including any available incentives from the Burlington electric department or other State or

122 federal entities, must be more than the twenty-five (25) year capital and operational costs of a nonrenewable
123 primary heating system, including the cost of externalities calculated by a building carbon price of one
124 hundred fifty dollars (\$150.00) per ton for the life of the nonrenewable primary heating system. The building
125 carbon price of one hundred fifty dollars (\$150.00) per ton shall be annually adjusted by the program
126 administrator equivalent to one hundred (100) percent of the annual change in the Consumer Price Index For
127 All Urban Consumers (CPI-U) in the Northeast Region, to go into effect January 1 of every ensuing year. A
128 system demonstrating uneconomicability shall be assessed an alternative compliance -carbon pollution
129 impact fee. However, an applicant building a new, residential multi-unit dwelling with four or more units
130 shall not be subject to the alternative compliance carbon pollution impact fee as it applies to domestic water
131 heating systems until January 1, 2026.

132
133 (c) Effective January 1, 2024, the alternative compliance carbon pollution impact fee shall be equal to
134 one hundred fifty dollars (\$150.00) per ton of greenhouse gas emissions produced by the thermal energy
135 system over its lifetime, based on a net present value calculation at the time the permit application is
136 submitted. For large existing building applicants, the alternative compliance carbon pollution impact fee is
137 capped at no more than 75 percent of the installed cost of the proposed space conditioning or domestic water
138 heating system. On each subsequent January 1, the alternative compliance carbon pollution impact fee shall
139 be increased by any percentage increase of the Consumer Price Index, CPI-U, U.S. city average, not
140 seasonally adjusted, or successor index, as calculated by the U.S. Department of Labor or successor agency
141 for the 12 months preceding the previous September 1, but in no event shall the increase be greater than five
142 percent. The adjusted alternative compliance carbon pollution impact fee shall be rounded off to the nearest
143 dollar.

144
145 (d) For compliance purposes for all thermal energy systems that are capable of utilizing either a fossil
146 fuel or a renewable fuel that reduces greenhouse gas emissions, an applicant shall demonstrate compliance
147 by providing a certificate and supporting documentary proof, including but not limited to a contract,
148 invoices, and subscription or participation in a tariff program, on an annual basis stating that the applicant is
149 purchasing renewable fuel that is being delivered to that building's thermal energy system, that it reduces
150 greenhouse gas emissions, and that the purchases cover the annual need of the thermal energy system. If the
151 applicant fails to provide an annual compliance certification, the applicant will be assessed an alternative
152 compliance carbon pollution impact fee equal to a pro rata share of the remaining expected life of the
153 thermal energy system. For renewable liquid or gaseous fuels used in a thermal appliance or system capable
154 of also using fossil fuels, to count towards compliance, the purchase of enough renewable fuel to fully offset
155 the annual usage for the appliance or thermal system in question is required.

156
157 (e) If an applicant with one or more buildings is seeking a permit pursuant to this chapter, and is already
158 using one or more thermal energy systems that rely on a renewable fuel which reduces greenhouse gas
159 emissions, the applicant may apply for a credit towards any alternative compliance carbon pollution impact
160 fee equal to the carbon value of the renewable fuel which reduces greenhouse gas emissions used for any
161 thermal energy system since January 1, 2024.

162
163
164 (f) All alternative compliance carbon pollution impact fee proceeds except those funds needed to
165 administer this ordinance, shall be placed in a Clean Energy Fund established and managed by the

Department of Permitting and Inspections with technical support from the Burlington Electric Department. Clean Energy Fund proceeds shall be made available as follows:

(i) The Department of Permitting and Inspections, with technical support from the Burlington Electric Department, shall determine which initiatives are eligible for funding for property owners or low income renters, but they may include, and shall not be limited to, the installation of new thermal energy systems that rely on renewable fuel, weatherization projects, or subsidizing any increased utility costs associated with purchasing renewable fuel rather than fossil fuel;

(ii) Half of the proceeds paid into the Clean Energy Fund by a large existing building applicant shall be available to the payor for projects to reduce greenhouse gas emissions at any site City of Burlington owned by the payor. The large existing building applicant must request these proceeds within one (1) year following payment of their alternative compliance carbon pollution impact fee, and any proceeds not requested within that year shall be made available under subsection (iii).

(iii) Any remaining proceeds collected from large existing building applicants and all proceeds paid into the Clean Energy Fund by new construction applicants shall be available to provide financial assistance to help low-income Burlington residents with the purposes described in subsection (i), either through direct payments to homeowners and renters who are income-qualified per the most recent income-qualification levels published by the Community and Economic Development Office (“CEDO”), or through payments to property owners of multi-family buildings where at least 25 percent of the tenants in the building are income-qualified, provided that the property owner must commit to not raising the rent of income-qualified tenants as a result of costs associated with the funded initiatives to reduce greenhouse gas emissions.

(g) Nothing in this section prevents or prohibits applicants from utilizing any and all available local, state, or federal incentives, rebates or tax credits that support implementation of renewable fuels listed above for their buildings, and applicants are encouraged to access available incentives or rebates or tax credits.

(h) Any applicant for a permit pursuant to this chapter, for any new or existing building regardless of size, seeking to utilize a wood chip or wood pellet heating system, must demonstrate that the system meets the 2023 or any subsequently issued Vermont Small Scale Renewable Energy Incentive Program (SSREIP) Advanced Wood Heating System (AWHS) terms conditions and requirements, including for efficiency and emission controls.

~~An applicant is permitted to install and utilize nonprimary heating systems in new buildings that use nonrenewable fuels.~~

8-79 Effective DateWaiver.

The provisions of this Article shall take effect on January 1, 2024.

~~The department of permitting and inspections may grant a waiver to Section 8-78 on the grounds that utilizing a renewable primary heating system in a new building would be uneconomical. To be deemed~~

211 ~~uneconomical, the twenty-five (25) year capital and operational cost of the least expensive renewable~~
212 ~~primary heating system, including any available incentives from the Burlington electric department or other~~
213 ~~State or federal entities, must be more than the twenty-five (25) year capital and operational costs of a~~
214 ~~nonrenewable primary heating system, including the cost of externalities calculated by a building carbon~~
215 ~~price of one hundred dollars (\$100.00) per ton for the life of the nonrenewable primary heating system. The~~
216 ~~building carbon price of one hundred dollars (\$100.00) per ton shall be annually adjusted by the program~~
217 ~~administrator equivalent to one hundred (100) percent of the annual change in the Consumer Price Index For~~
218 ~~All Urban Consumers (CPI-U) in the Northeast Region, to go into effect January 1 of every ensuing year.~~