

1 TO THE HONORABLE SENATE:

2 The Committee on Natural Resources and Energy to which was referred  
3 Senate Bill No. 5 entitled “An act relating to affordably meeting the mandated  
4 greenhouse gas reductions for the thermal sector through electrification,  
5 decarbonization, efficiency, and weatherization measures” respectfully reports  
6 that it has considered the same and recommends that the bill be amended by  
7 striking out all after the enacting clause and inserting in lieu thereof the  
8 following:

9 Sec. 1. SHORT TITLE

10 This act shall be known and may be cited as the “Affordable Heat Act.”

11 Sec. 2. FINDINGS

12 The General Assembly finds:

13 (1) All of the legislative findings made in 2020 Acts and Resolves  
14 No. 153, Sec. 2, the Vermont Global Warming Solutions Act of 2020  
15 (GWSA), remain true and are incorporated by reference here.

16 (2) Under the GWSA and 10 V.S.A. § 578, Vermont has a legal  
17 obligation to reduce greenhouse gas emissions to specific levels by 2025, 2030,  
18 and 2050.

19 (3) The Vermont Climate Council was established under the GWSA and  
20 was tasked with, among other things, recommending necessary legislation to  
21 reduce greenhouse gas emissions. The Initial Vermont Climate Action Plan

1 calls for the General Assembly to adopt legislation authorizing the Public  
2 Utility Commission to administer the Clean Heat Standard consistent with the  
3 recommendations of the Energy Action Network’s Clean Heat Standard  
4 Working Group.

5 (4) As required by the GWSA, the Vermont Climate Council published  
6 the Initial Vermont Climate Action Plan on December 1, 2021. As noted in  
7 that plan, over one-third of Vermont’s greenhouse gas emissions in 2018 came  
8 from the thermal sector. In that year, approximately 72 percent of Vermont’s  
9 thermal energy use was fossil based, including 29 percent from the burning of  
10 heating oil, 24 percent from fossil gas, and 19 percent from propane.

11 (5) To meet the greenhouse gas emission reductions required by the  
12 GWSA, Vermont needs to transition away from its current carbon-intensive  
13 building heating practices to lower-carbon alternatives. It also needs to do this  
14 equitably, recognizing economic effects on energy users, especially energy-  
15 burdened users; on the workforce currently providing these services; and on  
16 the overall economy.

17 (6) Vermonters have an unprecedented opportunity to invest in eligible  
18 clean heat measures with funding from new federal laws including, the  
19 Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act  
20 of 2022.

1 Sec. 3. 30 V.S.A. chapter 94 is added to read:

2 CHAPTER 94. CLEAN HEAT STANDARD

3 § 8121. INTENT

4 Pursuant to 2 V.S.A. § 205(a), it is the intent of the General Assembly that  
5 the Clean Heat Standard be designed and implemented in a manner that  
6 achieves Vermont’s thermal sector greenhouse gas emissions reductions  
7 necessary to meet the requirements of 10 V.S.A. § 578(a)(2) and (3),  
8 minimizes costs to customers, and recognizes that affordable heating is  
9 essential for Vermonters. It shall enhance social equity by prioritizing  
10 customers with low income and moderate income and those households with  
11 the highest energy burdens.

12 § 8122. CLEAN HEAT STANDARD

13 (a) The Clean Heat Standard is established. Under this program, obligated  
14 parties shall reduce greenhouse gas emissions attributable to the Vermont  
15 thermal sector by retiring required amounts of clean heat credits to meet the  
16 thermal sector portion of the greenhouse gas emission reduction obligations of  
17 the Global Warming Solutions Act.

18 (b) By rule or order, the Commission shall establish or adopt a system of  
19 tradeable clean heat credits earned from the delivery of clean heat measures  
20 that reduce greenhouse gas emissions.

1       (c) An obligated party may obtain the required amount of clean heat credits  
2       through delivery of eligible clean heat measures, through contracts for delivery  
3       of eligible clean heat measures, through the market purchase of clean heat  
4       credits, or through delivery of eligible clean heat measures by a designated  
5       statewide default delivery agent. An obligated party shall inform the  
6       Commission of how it plans to meet its obligation through the process  
7       described in section 8125 of this title.

8       (d) The Commission shall adopt rules and may issue orders to implement  
9       and enforce the Clean Heat Standard program.

10       § 8123. DEFINITIONS

11       As used in this chapter:

12       (1) “Carbon intensity value” means the amount of lifecycle greenhouse  
13       gas emissions per unit of energy of fuel expressed in grams of carbon dioxide  
14       equivalent per megajoule (gCO<sub>2</sub>e/MJ).

15       (2) “Clean heat credit” means a tradeable, nontangible commodity that  
16       represents the amount of greenhouse gas reduction attributable to a clean heat  
17       measure. The Commission shall establish a system of management for clean  
18       heat credits pursuant to this chapter.

19       (3) “Clean heat measure” means fuel delivered and technologies  
20       installed to end-use customers in Vermont that reduce greenhouse gas  
21       emissions from the thermal sector. Clean heat measures shall not include

1 switching from one fossil fuel use to another fossil fuel use. The Commission  
2 may adopt a list of acceptable actions that qualify as clean heat measures.

3 (4) “Commission” means the Public Utility Commission.

4 (5) “Customer with low income” means a customer with a household  
5 income of up to 60 percent of area median income as published annually by the  
6 U.S. Department of Housing and Urban Development.

7 (6) “Customer with moderate income” means a customer with a  
8 household income between 60 percent and 120 percent of area median income  
9 as published annually by the U.S. Department of Housing and Urban  
10 Development.

11 (7) “Default delivery agent” means an entity designated by the  
12 Commission to provide services that generate clean heat measures.

13 (8) “Energy burden” means the annual spending on thermal energy as a  
14 percentage of household income.

15 (9) “Entity” means any individual, trustee, agency, partnership,  
16 association, corporation, company, municipality, political subdivision, or any  
17 other form of organization.

18 (10) “Fuel pathway” means a detailed description of all stages of fuel  
19 production and use for any particular fuel, including feedstock generation or  
20 extraction, production, transportation, distribution, and combustion of the fuel

1 by the consumer. The fuel pathway is used in the calculation of the carbon  
2 intensity value and lifecycle greenhouse gas emissions of each fuel.

3 (11) “Heating fuel” means fossil-based heating fuel, including oil,  
4 propane, natural gas, coal, and kerosene.

5 (12) “Obligated party” means:

6 (A) a regulated natural gas utility serving customers in Vermont; or

7 (B) for other heating fuels, the entity that imports heating fuel for  
8 ultimate consumption within the State, or the entity that produces, refines,  
9 manufactures, or compounds heating fuel within the State for ultimate  
10 consumption within the State. For the purpose of this section, the entity that  
11 imports heating fuel is the entity that has ownership title to the heating fuel at  
12 the time it is brought into Vermont.

13 (13) “Thermal sector” has the same meaning as the “Residential,  
14 Commercial and Industrial Fuel Use” sector as used in the Vermont  
15 Greenhouse Gas Emissions Inventory and Forecast.

16 § 8124. CLEAN HEAT STANDARD COMPLIANCE

17 (a) Required amounts.

18 (1) The Commission shall establish the number of clean heat credits that  
19 each obligated party is required to retire each calendar year. The size of the  
20 annual requirement shall be set at a pace sufficient for Vermont’s thermal  
21 sector to achieve lifecycle carbon dioxide equivalent (CO<sub>2</sub>e) emission

1 reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3)  
2 expressed as lifecycle greenhouse gas emissions pursuant to subsection  
3 8127(g) of this title.

4 (2) Annual requirements shall be expressed as a percent of each  
5 obligated party's contribution to the thermal sector's lifecycle CO2e emissions  
6 in the previous year. The annual percentage reduction shall be the same for all  
7 obligated parties. To ensure understanding among obligated parties, the  
8 Commission shall publicly provide a description of the annual requirements in  
9 plain terms.

10 (3) To support the ability of the obligated parties to plan for the future,  
11 the Commission shall establish and update annual clean heat credit  
12 requirements for the next 10 years. Every three years, the Commission shall  
13 extend the requirements three years; shall assess emission reductions actually  
14 achieved in the thermal sector; and, if necessary, revise the pace of clean heat  
15 credit requirements for future years to ensure that the thermal sector portion of  
16 the emission reduction requirements of 10 V.S.A. § 578(a)(2) and (3) for 2030  
17 and 2050 will be achieved.

18 (4) The Commission may temporarily, for a period not to exceed 18  
19 months, adjust the annual requirements for good cause after notice and  
20 opportunity for public process. Good cause may include a shortage of clean  
21 heat credits or undue adverse financial impacts on particular customers or

1 demographic segments. The Commission shall ensure that any downward  
2 adjustment does not materially affect the State’s ability to comply with the  
3 requirements of 10 V.S.A. § 578(a)(2) and (3).

4 (b) Annual registration.

5 (1) Each entity that sells heating fuel into or in Vermont shall register  
6 annually with the Commission by an annual deadline established by the  
7 Commission. The first registration deadline is January 31, 2024, and the  
8 annual deadline shall remain January 31 of each year unless a different  
9 deadline is established by the Commission. The form and information required  
10 in the registration shall be determined by the Commission and shall include all  
11 data necessary to establish annual requirements under this chapter. The  
12 Commission shall use the information provided in the registration to determine  
13 whether the entity shall be considered an obligated party and the amount of its  
14 annual requirement.

15 (2) At a minimum, the Commission shall require registration  
16 information to include legal name; doing business as name, if applicable;  
17 municipality; state; types of heating fuel sold; and the volume of sales of  
18 heating fuels into or in the State for final sale or consumption in the State in  
19 the calendar year immediately preceding the calendar year in which the entity  
20 is registering with the Commission.



1           (3)(A) The Department of Taxes shall annually provide to the  
2           Commission a copy of the forms that were submitted by the entities that pay  
3           the existing fuel tax established in 33 V.S.A. § 2503(a)(1) and (2). If any form  
4           contains a Social Security number, the Department of Taxes shall redact that  
5           information before submitting a copy of the form to the Commission.  
6           Notwithstanding any other provision of law, including 33 V.S.A. § 2503(c)  
7           and any confidentiality provisions that would normally apply to tax forms, the  
8           fuel tax forms submitted pursuant to 33 V.S.A. § 2503(a)(1) and (2) shall be  
9           public documents, and the Commission shall make those documents publicly  
10          available.

11           (B) The Department of Taxes shall ensure that the fuel tax form  
12          required under 33 V.S.A. § 2503(a)(1) and (2) includes a prominent notice  
13          explaining that, pursuant to this section, the form will be provided to the Public  
14          Utility Commission and will be made publicly available.

15           (C) The Department of Taxes shall further ensure that the fuel tax  
16          form requires that each submitting entity list the exact amount of gallons of  
17          each fuel type, separated by type, that was sold in Vermont, as well as a list of  
18          the exact amount of gallons of each fuel type, separated by type, that was  
19          purchased by the submitting entity and the name and location of the entity  
20          from which it was purchased.

1           (4) Each year, and not later than 30 days following the annual  
2           registration deadline established by the Commission, the Commission shall  
3           share complete registration information of obligated parties with the Agency of  
4           Natural Resources and the Department of Public Service for purposes of  
5           updating the Vermont Greenhouse Gas Emissions Inventory and Forecast and  
6           meeting the requirements of 10 V.S.A. § 591(b)(3).

7           (5) The Commission shall maintain, and update annually, a list of  
8           registered entities on its website that contains the required registration  
9           information.

10           (6) For any entity not registered on or before January 31, 2024, the first  
11           registration form shall be due 30 days after the first sale of heating fuel to a  
12           location in Vermont.

13           (7) Clean heat requirements shall transfer to entities that acquire an  
14           obligated party.

15           (8) Entities that cease to operate shall retain their clean heat requirement  
16           for their final year of operation.

17           (c) Early action credits. Beginning on January 1, 2023, clean heat  
18           measures that are installed and provide emission reductions are creditable.  
19           Upon the establishment of the clean heat credit system, entities may register  
20           credits for actions taken starting in 2023.

21           (d) Equitable distribution of clean heat measures.

1           (1) The Clean Heat Standard shall be designed and implemented to  
2           enhance social equity by prioritizing customers with low income, moderate  
3           income, those households with the highest energy burdens, and renter  
4           households with tenant-paid energy bills. The design shall ensure all  
5           customers have an equitable opportunity to participate in, and benefit from,  
6           clean heat measures regardless of heating fuel used, income level, geographic  
7           location, residential building type, or homeownership status.

8           (2) Of their annual requirement, each obligated party shall retire at least  
9           16 percent from customers with low income and 16 percent from customers  
10           with moderate income. For each of these groups, at least one-half of these  
11           credits shall be from installed clean heat measures that require capital  
12           investments in homes, have measure lives of 10 years or more, and are  
13           estimated by the Technical Advisory Group to lower annual energy bills.  
14           Examples shall include weatherization improvements and installation of heat  
15           pumps, heat pump water heaters, and advanced wood heating systems. The  
16           Commission may identify additional measures that qualify as installed  
17           measures.

18           (3) The Commission shall consider frontloading the credit requirements  
19           for customers with low income and moderate income so that the greatest  
20           proportion of clean heat measures reach Vermonters with low income and  
21           moderate income in the earlier years.

1           (4) With consideration to how to best serve customers with low income  
2           and moderate income, the Commission shall have authority to change the  
3           percentages established in subdivision (2) of this subsection for good cause  
4           after consultation with the Equity Advisory Group, notice, and opportunity for  
5           public process. Good cause may include a shortage of clean heat credits or  
6           undue adverse financial impacts on particular customers or demographic  
7           segments.

8           (5) In determining whether to exceed the minimum percentages of clean  
9           heat measures that must be delivered to customers with low income and  
10           moderate income, the Commission shall take into account participation in other  
11           government-sponsored low-income and moderate-income weatherization  
12           programs.

13           (6) A clean heat measure delivered to a customer qualifying for a  
14           government-sponsored, low-income energy subsidy shall qualify for clean heat  
15           credits required by subdivision (2) of this subsection.

16           (e) Credit banking. The Commission shall allow an obligated party that  
17           has met its annual requirement in a given year to retain clean heat credits in  
18           excess of that amount for future sale or application to the obligated party's  
19           annual requirements in future compliance periods, as determined by the  
20           Commission.

21           (f) Enforcement.

1           (1) The Commission shall have the authority to enforce the requirements  
2           of this chapter and any rules or orders adopted to implement the provisions of  
3           this chapter. The Commission may use its existing authority under this title.  
4           As part of an enforcement order, the Commission may order penalties and  
5           injunctive relief.

6           (2) The Commission shall order an obligated party that fails to retire the  
7           number of clean heat credits required in a given year, including the required  
8           amounts from customers with low income and moderate income, to make a  
9           noncompliance payment to the default delivery agent. The per-credit amount  
10           of the noncompliance payment shall be three times the amount established by  
11           the Commission for timely per-credit payments to the default delivery agent.

12           (3) False or misleading statements or other representations made to the  
13           Commission by obligated parties related to compliance with the Clean Heat  
14           Standard are subject to the Commission’s enforcement authority, including the  
15           power to investigate and assess penalties, under this title.

16           (4) The Commission’s enforcement authority does not in any way  
17           impede the enforcement authority of other entities, such as the Attorney  
18           General’s office.

19           (5) Failure to register with the Commission as required by this section is  
20           a violation of the Consumer Protection Act in 9 V.S.A. chapter 63.

1        (g) Records. The Commission shall establish requirements for the types of  
2        records to be submitted by obligated parties, a record retention schedule for  
3        required records, and a process for verification of records and data submitted in  
4        compliance with the requirements of this chapter.

5        (h) Reports.

6            (1) As used in this subsection, “standing committees” means the House  
7        Committee on Environment and Energy and the Senate Committees on  
8        Finance and on Natural Resources and Energy.

9            (2) After the adoption of the rules implementing this chapter, the  
10       Commission shall submit a written report to the standing committees detailing  
11       the efforts undertaken to establish the Clean Heat Standard pursuant to this  
12       chapter.

13           (3) On or before January 15 of each year following the year in which the  
14       rules are first adopted under this chapter, the Commission shall submit to the  
15       standing committees a written report detailing the implementation and  
16       operation of the Clean Heat Standard. This report shall include an assessment  
17       on the equitable adoption of clean heat measures required by subsection (d) of  
18       this section, along with recommendations to increase participation for the  
19       households with the highest energy burdens. The provisions of 2 V.S.A.  
20       § 20(d) (expiration of required reports) shall not apply to the report to be made  
21       under this subsection.

1     § 8125. DEFAULT DELIVERY AGENT

2         (a) Default delivery agent designated. In place of obligated-party specific  
3 programs, the Commission shall provide for the development and  
4 implementation of Statewide clean heat programs and measures by one or  
5 more default delivery agents appointed by the Commission for these purposes.  
6 The Commission may specify that appointment of a default delivery agent to  
7 deliver clean heat services, on behalf of obligated entities who pay the per-  
8 credit fee to the default delivery agent, satisfies those entities' corresponding  
9 obligations under this chapter.

10        (b) Appointment. The default delivery agent shall be one or more  
11 statewide entities capable of providing a variety of clean heat measures. The  
12 designation of an entity under this subdivision may be by order of appointment  
13 or contract. A designation, whether by order of appointment or by contract,  
14 may only be issued after notice and opportunity for hearing. An existing order  
15 of appointment issued by the Commission under section 209 of this title may  
16 be amended to include the responsibilities of the default delivery agent. An  
17 order of appointment shall be for a limited duration not to exceed 12 years,  
18 although an entity may be reappointed by order or contract. An order of  
19 appointment may include any conditions and requirements that the  
20 Commission deems appropriate to promote the public good. For good cause,

1 after notice and opportunity for hearing, the Commission may amend or revoke  
2 an order of appointment.

3 (c) Supervision. Any entity appointed by order of appointment under this  
4 section that is not an electric or gas utility already regulated under this title  
5 shall not be considered to be a company as defined under section 201 of this  
6 title, but shall be subject to the provisions of sections 18–21, 30–32, 205–208,  
7 subsection 209(a), sections 219, 221, and subsection 231(b) of this title, to the  
8 same extent as a company as defined under section 201 of this title. The  
9 Commission and the Department of Public Service shall have jurisdiction  
10 under those sections over the entity, its directors, receivers, trustees, lessees, or  
11 other persons or companies owning or operating the entity and of all plants,  
12 equipment, and property of that entity used in or about the business carried on  
13 by it in this State as covered and included in this section. This jurisdiction  
14 shall be exercised by the Commission and the Department so far as may be  
15 necessary to enable them to perform the duties and exercise the powers  
16 conferred upon them by law. The Commission and the Department each may,  
17 when they deem the public good requires, examine the plants, equipment, and  
18 property of any entity appointed by order of appointment to serve as a default  
19 delivery agent.

20 (d) Use of default delivery agent.



1           (1) An obligated party shall meet its annual requirement through a  
2           designated default delivery agent appointed by the Commission, unless the  
3           obligated party elects to meet its requirement, in whole or in part, through one  
4           or more other mechanisms pursuant to subsection 8122(c) of this title.

5           (2) The Commission shall provide a form for an obligated party to  
6           indicate its election to meet its requirement. The form shall require sufficient  
7           information to determine the nature of the credits that the default delivery  
8           agent will be responsible to deliver if the obligated party elects to meet its  
9           obligation in part. The Commission shall make such elections known to the  
10           default delivery agent as soon as practicable.

11           (3) The Commission shall by rule or order establish a standard timeline  
12           under which the default delivery agent credit cost or costs are established and  
13           by which an obligated party must file its election form. The Commission shall  
14           provide not less than 120 days' notice of default delivery agent credit cost or  
15           costs prior to the deadline for an obligated party to file its election form so an  
16           obligated party can assess options and inform the Commission of its intent to  
17           procure credits in whole or in part as fulfillment of its requirement.

18           (4) The default delivery agent shall deliver creditable clean heat  
19           measures either directly or indirectly to end-use customer locations in Vermont  
20           sufficient to meet the total aggregated annual requirement assigned to it  
21           pursuant to this subsection, along with any additional amount achievable

1 through noncompliance payments as described in subdivision (f)(2) of this  
2 section.

3 (e) Budget.

4 (1) The Commission shall open a proceeding on or before July 1, 2023  
5 and every three years thereafter to establish the default delivery agent credit  
6 cost or costs for the subsequent three-year period. That proceeding shall  
7 include:

8 (A) an initial potential study conducted by the Department of Public  
9 Service to include a quantification of available thermal resources, thermal  
10 market conditions, and Statewide and regional thermal workforce  
11 characteristics;

12 (B) the development of a three-year plan and associated proposed  
13 budget by the default delivery agent; and

14 (C) opportunity for public participation.

15 (2) Once the Commission provides the default delivery agent with the  
16 obligated parties' election information, the default delivery agent shall be  
17 granted the opportunity to amend its plan and budget before the Commission.

18 (f) Compliance funds. All funds received from noncompliance payments  
19 pursuant to section 8124 (f)(2) shall be used by the default delivery agent to  
20 provide clean heat measures to customers with low income.

1       (g) Specific programs. The default delivery agent shall create specific  
2       programs for multiunit dwellings, **condo associations, renters,** and for  
3       manufactured homes so these groups have an equal opportunity to benefit from  
4       the Clean Heat Standard.

5       § 8126. RULEMAKING

6       (a) The Commission shall adopt rules and may issue orders to implement  
7       and enforce the Clean Heat Standard program.

8       (b) The requirement to adopt rules does not in any way impair the  
9       Commission’s authority to issue orders or take any other actions, both before  
10       and after final rules take effect, to implement and enforce the Clean Heat  
11       Standard.

12       (c) The Commission’s rules may include a provision that allows the  
13       Commission to revise its Clean Heat Standard rules by order of the  
14       Commission without the revisions being subject to the rulemaking  
15       requirements of the 3 V.S.A. chapter 25, provided the Commission:

16               (1) provides notice of any proposed changes,

17               (2) allows for a 30-day comment period, and

18               (3) responds to all comments received on the proposed change.

19       (d) Any order issued under this chapter shall be subject to appeal to the  
20       Vermont Supreme Court under section 12 of this title, and the Commission  
21       must immediately file any orders, a redline, and clean version of the revised

1 rules with the Secretary of State, with notice simultaneously provided to the  
2 House Committee on Environment and Energy and the Senate Committees on  
3 Finance and on Natural Resources and Energy.

4 § 8127. TRADEABLE CLEAN HEAT CREDITS

5 (a) Credits established. By rule or order, the Commission shall establish or  
6 adopt a system of tradeable clean heat credits that are earned by reducing  
7 greenhouse gas emissions through the delivery of clean heat measures. While  
8 credit denominations may be in simple terms for public understanding and ease  
9 of use, the underlying value shall be based on units of carbon dioxide  
10 equivalent (CO<sub>2</sub>e). The system shall provide a process for the recognition,  
11 approval, and monitoring of the clean heat credits. The Department of Public  
12 Service shall perform the verification of clean heat credit claims and submit  
13 results of the verification and evaluation to the Commission annually.

14 (b) Credit ownership. The Commission, in consultation with the Technical  
15 Advisory Group, shall establish a standard methodology for determining what  
16 party or parties shall be the initial owner of a clean heat credit upon its  
17 creation. The original owner or owners may transfer those credits to a third  
18 party or to an obligated party.

19 (c) Credit values. Clean heat credits shall be based on the accurate and  
20 verifiable lifecycle CO<sub>2</sub>e emission reductions in Vermont's thermal sector that

1 result from the delivery of eligible clean heat measures to existing or new end-  
2 use customer locations into or in Vermont.

3 (1) For clean heat measures that are installed, credits will be created for  
4 each year of the expected life of the installed measure. The annual value of the  
5 clean heat credits for installed measures in each year shall be equal to the  
6 lifecycle CO<sub>2</sub>e emissions of the fuel use that is avoided in a given year  
7 because of the installation of the measure, minus the lifecycle emissions of the  
8 fuel that is used instead in that year.

9 (2) For clean heat measures that are fuels, clean heat credits will be  
10 created only for the year the fuel is delivered to the end-use customer. The  
11 value of the clean heat credits for fuels shall be the lifecycle CO<sub>2</sub>e emissions  
12 of the fuel use that is avoided, minus the lifecycle CO<sub>2</sub>e emissions of the fuel  
13 that is used instead.

14 (d) List of eligible measures. Eligible clean heat measures delivered to or  
15 installed in Vermont shall include:

16 (1) thermal energy efficiency improvements and weatherization;

17 (2) cold-climate air, ground source, and other heat pumps, including  
18 district, network, grid, microgrid, and building geothermal systems;

19 (3) heat pump water heaters;

20 (4) utility-controlled electric water heaters;

21 (5) solar hot water systems;

- 1           (6) electric appliances providing thermal end uses;
- 2           (7) advanced wood heating;
- 3           (8) noncombustion or renewable energy-based district heating services;
- 4           (9) the supply of sustainably sourced biofuels;
- 5           (10) the supply of green hydrogen; and
- 6           (11) the replacement of a manufactured home with a high efficiency  
7 modular home.

8           (e) Renewable natural gas. For pipeline renewable natural gas and other  
9 renewably generated natural gas substitutes to be eligible, an obligated party  
10 shall purchase renewable natural gas and its associated renewable attributes  
11 and demonstrate that it has secured a contractual pathway for the physical  
12 delivery of the gas from the point of injection into the pipeline to the obligated  
13 party’s delivery system.

14           (f) Carbon intensity of fuels.

15           (1) To be eligible as a clean heat measure a liquid or gaseous clean heat  
16 measure shall have a carbon intensity value as follows:

17                   (A) below 80 in 2025;

18                   (B) below 60 in 2030; and

19                   (C) below 20 in 2050, provided the Commission may allow liquid  
20 and gaseous clean heat measures with a carbon intensity value greater than 20  
21 if excluding them would be impracticable based on the characteristics of

1 Vermont’s buildings, the workforce available in Vermont to deliver lower  
2 carbon intensity clean heat measures, cost, or the effective administration of  
3 the Clean Heat Standard.

4 (2) The Commission shall establish and publish the rate at which carbon  
5 intensity values shall decrease annually for liquid and gaseous clean heat  
6 measures consistent with subdivision (1) of this subsection as follows:

7 (A) on or before January 1, 2025 for 2025 to 2030; and

8 (B) on or before January 1, 2030 for 2031 to 2050.

9 (3) For the purpose of this section, the carbon intensity values shall be  
10 understood relative to No. 2 fuel oil delivered into or in Vermont in 2023  
11 having a carbon intensity value of 100. Carbon intensity values shall be  
12 measured based on fuel pathways.

13 (g) Emissions schedule.

14 (1) To promote certainty for obligated parties and clean heat providers,  
15 the Commission shall, by rule or order, establish a schedule of lifecycle  
16 emission rates for heating fuels and any fuel that is used in a clean heat  
17 measure, including electricity, or is itself a clean heat measure, including  
18 biofuels. The schedule shall be based on transparent, verifiable, and accurate  
19 emissions accounting adapting the Argonne National Laboratory GREET  
20 Model, Intergovernmental Panel on Climate Change (IPCC) modeling, or an

1 alternative of comparable analytical rigor to fit the Vermont thermal sector  
2 context, and the requirements of 10 V.S.A. § 578(a)(2) and (3).

3 (2) For each fuel pathway, the schedule shall account for greenhouse gas  
4 emissions from biogenic and geologic sources, including fugitive emissions  
5 and loss of stored carbon. In determining the baseline emission rates for clean  
6 heat measures that are fuels, emissions baselines shall fully account for  
7 methane emissions reductions or captures already occurring, or expected to  
8 occur, for each fuel pathway as a result of local, State, or federal policies that  
9 have been enacted or adopted.

10 (3) The schedule may be amended based upon changes in technology or  
11 evidence on emissions, but clean heat credits previously awarded or already  
12 under contract to be produced shall not be adjusted retroactively.

13 (h) Review of consequences. The Commission shall biennially assess  
14 harmful consequences that may arise in Vermont or elsewhere from the  
15 implementation of clean heat measures and shall set standards or limits to  
16 prevent those consequences. Such consequences shall include deforestation,  
17 conversion of grasslands, damage to watersheds, or the creation of new  
18 methane to meet fuel demand.

19 (i) Time stamp. Clean heat credits shall be “time stamped” for the year in  
20 which the clean heat measure delivered emission reductions. For each  
21 subsequent year during which the measure produces emission reductions,



1 credits shall be generated for that year. Only clean heat credits that have not  
2 been retired shall be eligible to satisfy the current year obligation.

3 (j) Delivery in Vermont. Clean heat credits shall be earned only in  
4 proportion to the deemed or measured thermal sector greenhouse gas emission  
5 reductions achieved by a clean heat measure delivered in Vermont. Other  
6 emissions offsets, wherever located, shall not be eligible measures.

7 (k) Credit eligibility.

8 (1) All eligible clean heat measures that are delivered in Vermont  
9 beginning on January 1, 2023 shall be eligible for clean heat credits and may  
10 be retired and count towards an obligated party's emission reduction  
11 obligations, regardless of who creates or delivers them and regardless of  
12 whether their creation or delivery was required or funded in whole or in part by  
13 other federal or State policies and programs. This includes individual  
14 initiatives, emission reductions resulting from the State's energy efficiency  
15 programs, the low-income weatherization program, and the Renewable Energy  
16 Standard Tier 3 program. Clean heat measures delivered or installed pursuant  
17 to any local, State, or federal program or policy may count both towards goals  
18 or requirements of such programs and policies and be eligible clean heat  
19 measures that count towards the emission reduction obligations of this chapter.

20 (2) The owner or owners of a clean heat credit are not required to sell  
21 the credit.

1           (3) Regardless of the programs or pathways contributing to clean heat  
2           credits being earned, an individual credit may be counted only once towards  
3           satisfying an obligated party’s emission reduction obligation.

4           (l) Credit registration.

5           (1) The Commission shall create an administrative system to register,  
6           sell, transfer, and trade credits to obligated parties. The Commission may hire  
7           a third-party consultant to evaluate, develop, implement, maintain, and support  
8           a database or other means for tracking clean heat credits and compliance with  
9           the annual requirements of obligated parties.

10           (2) The system shall require entities to submit the following information  
11           to receive the credit: the location of the clean heat measure, whether the  
12           customer or tenant has a low or moderate income, the type of property where  
13           the clean heat measure was installed or sold, the type of clean heat measure,  
14           and any other information as required by the Commission.

15           (m) Greenhouse Gas Emissions Inventory and Forecast. Nothing in this  
16           chapter shall limit the authority of the Secretary of Natural Resources to  
17           compile and publish the Vermont Greenhouse Gas Emissions Inventory and  
18           Forecast in accordance with 10 V.S.A. § 582.

1     § 8128. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP

2           (a) The Commission shall establish the Clean Heat Standard Technical  
3     Advisory Group (TAG) to assist the Commission in the ongoing management  
4     of the Clean Heat Standard. Its duties shall include:

5           (1) establishing and revising the lifecycle carbon dioxide equivalent  
6     (CO<sub>2</sub>e) emissions accounting methodology to be used to determine each  
7     obligated party’s annual requirement pursuant to subdivision 8124(a)(2) of this  
8     chapter;

9           (2) establishing and revising the clean heat credit value for different  
10    clean heat measures;

11          (3) periodically assessing and reporting to the Commission on the  
12    sustainability of the production of clean heat measures by considering factors  
13    including greenhouse gas emissions; carbon sequestration and storage; human  
14    health; land use changes; ecological and biodiversity impacts; groundwater and  
15    surface water impacts; air, water, and soil pollution; and impacts on food costs;

16          (4) setting the expected life length of clean heat measures for the  
17    purpose of calculating credit amounts;

18          (5) establishing credit values for each year over a clean heat measure’s  
19    expected life, including adjustments to account for increasing interactions  
20    between clean heat measures over time so as to not double-count emission  
21    reductions;

1           (6) facilitating the program’s coordination with other energy programs;

2           (7) calculating the impact of the cost of clean heat credits and the cost  
3 savings associated with delivered clean heat measures on per-unit heating fuel  
4 prices;

5           (8) coordinating with the Agency of Natural Resources to ensure that  
6 greenhouse gas emissions reductions achieved in another sector through the  
7 implementation of the Clean Heat Standard are not double-counted in the  
8 Vermont Greenhouse Gas Emissions Inventory and Forecast;

9           (9) advising the Commission on the periodic assessment and revision  
10 requirement established in subdivision 8124(a)(3) of this chapter; and

11           (10) any other matters referred to the TAG by the Commission.

12           (b) Members of the TAG shall be appointed by the Commission and shall  
13 include the Department of Public Service, the Agency of Natural Resources,  
14 and parties who have, or whose representatives have, expertise in one or more  
15 of the following areas: technical and analytical expertise in measuring  
16 lifecycle greenhouse gas emissions, energy modeling and data analysis, clean  
17 heat measures and energy technologies, sustainability and non-greenhouse gas  
18 emissions strategies designed to reduce and avoid impacts to the environment,  
19 delivery of heating fuels, land use changes, deforestation, and climate change  
20 mitigation policy and law. The Commission shall accept and review motions  
21 to join the TAG from interested parties who have, or whose representatives

1 have, expertise in one or more of the areas listed in this subsection. Members  
2 who are not otherwise compensated by their employer shall be entitled to per  
3 diem compensation and reimbursement for expenses under 32 V.S.A. § 1010.

4 (c) The Commission shall hire a third-party consultant responsible for  
5 developing clean heat measure characterizations and relevant assumptions,  
6 including CO2e lifecycle emissions analyses. The TAG shall provide input  
7 and feedback on the consultant’s work. The Commission may use  
8 appropriated funds to hire the consultant.

9 (d) Emission analyses and associated assumptions developed by the  
10 consultant shall be reviewed and approved annually by the Commission. In  
11 reviewing the consultant’s work, the Commission shall provide a public  
12 comment period on the work. The Commission may approve or adjust the  
13 consultant’s work as it deems necessary based on its review and the public  
14 comments received.

15 § 8129. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP

16 (a) The Commission shall establish the Clean Heat Standard Equity  
17 Advisory Group to assist the Commission in developing and implementing the  
18 Clean Heat Standard in a manner that ensures an equitable share of clean heat  
19 measures are delivered to Vermonters with low income and moderate income  
20 and that Vermonters with low income and moderate income who are not early

1 participants in clean heat measures are not negatively impacted in their ability  
2 to afford heating fuel. Its duties shall include:

3 (1) providing feedback to the Commission on strategies for engaging  
4 Vermonters with low income and moderate income in the public process for  
5 developing the Clean Heat Standard program;

6 (2) supporting the Commission in assessing whether customers are  
7 equitably served by clean heat measures and how to increase equity;

8 (3) identifying actions needed to provide customers with low income  
9 and moderate income with better service and to mitigate the fuel price impacts  
10 calculated in section 8128 of this title;

11 (4) recommending any additional programs, incentives, or funding  
12 needed to support customers with low income and moderate income and  
13 organizations that provide social services to Vermonters in affording heating  
14 fuel and other heating expenses;

15 (5) providing feedback to the Commission on the impact of the Clean  
16 Heat Standard on the experience of Vermonters with low income and moderate  
17 income; and

18 (6) providing information to the Commission on the challenges renters  
19 face in equitably accessing clean heat measures and recommendations to  
20 ensure that renters have equitable access to clean heat measures.

1        (b) The Clean Heat Standard Equity Advisory Group shall consist of up to  
2        10 members appointed by the Commission and at a minimum shall include at  
3        least one representative from each of the following groups: the Department of  
4        Public Service; the Department for Children and Families’ Office of Economic  
5        Opportunity; community action agencies; Efficiency Vermont; individuals  
6        with socioeconomically, racially, and geographically diverse backgrounds;  
7        renters; rental property owners; the Vermont Housing Finance Agency; and a  
8        member of the Vermont Fuel Dealers Association. Members who are not  
9        otherwise compensated by their employer shall be entitled to per diem  
10       compensation and reimbursement for expenses under 32 V.S.A. § 1010.

11       § 8130. SEVERABILITY

12       If any provision of this chapter or its application to any person or  
13       circumstance is held invalid or in violation of the Constitution or laws of the  
14       United States or in violation of the Constitution or laws of Vermont, the  
15       invalidity or the violation shall not affect other provisions of this chapter that  
16       can be given effect without the invalid provision or application, and to this end,  
17       the provisions of this chapter are severable.

18       Sec. 4. 10 V.S.A. § 582 is amended to read:

19       § 582. GREENHOUSE GAS INVENTORIES; REGISTRY

20       (a) Inventory and forecasting. The Secretary shall work, in conjunction  
21       with other states or a regional consortium, to establish a periodic and consistent

1 inventory of greenhouse gas emissions. The Secretary shall publish the  
2 Vermont Greenhouse Gas Emission Inventory and Forecast by ~~no~~ not later  
3 than June 1, 2010, and updates shall be published annually until 2028, until a  
4 regional or national inventory and registry program is established in which  
5 Vermont participates, or until the federal National Emissions Inventory  
6 includes mandatory greenhouse gas reporting. The Secretary of Natural  
7 Resources shall include a sensitivity analysis in the Vermont Greenhouse Gas  
8 Emissions Inventory and Forecast that measures the lifecycle greenhouse gas  
9 emissions of liquid, gaseous, and solid biogenic fuels combusted in Vermont.

10 \* \* \*

11 Sec. 5. 32 V.S.A. § 3102 is amended to read:

12 § 3102. CONFIDENTIALITY OF TAX RECORDS

13 (a) No present or former officer, employee, or agent of the Department of  
14 Taxes shall disclose any return or return information to any person who is not  
15 an officer, employee, or agent of the Department of Taxes except in  
16 accordance with the provisions of this section. A person who violates this  
17 section shall be fined not more than \$1,000.00 or imprisoned for not more than  
18 one year, or both; and if the offender is an officer or employee of this State, the  
19 offender shall, in addition, be dismissed from office and be incapable of  
20 holding any public office for a period of five years thereafter.

21 \* \* \*



1 (d) The Commissioner shall disclose a return or return information:

2 \* \* \*

3 (9) To the Public Utility Commission and the Department of Public  
4 Service for purposes of providing information related to the fuel tax imposed  
5 under 33 V.S.A. § 2503 necessary to administer the Clean Heat Standard  
6 established in 30 V.S.A. chapter 94.

7 \* \* \*

8 Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION

9 (a) Commencement. On or before August 31, 2023, the Public Utility  
10 Commission shall commence a proceeding to implement Sec. 3 (Clean Heat  
11 Standard) of this act.

12 (b) Facilitator. The Commission may hire a third-party consultant to  
13 design and conduct public engagement. The Commission may use funds  
14 appropriated under this act on hiring the consultant.

15 (c) Public engagement process. Before commencing rulemaking, the  
16 Commission shall use the forms of public engagement described in this  
17 subsection to inform the design and implementation of the Clean Heat  
18 Standard. Any failure by the Commission to meet the specific procedural  
19 requirements of this section shall not affect the validity of the Commission's  
20 actions.

1           (1) The Commission shall allow any person to register at any time in the  
2           Commission’s online case management system, ePUC, as a participant in the  
3           Clean Heat Standard proceeding. All members of the Equity Advisory Group  
4           shall be made automatic participants to that proceeding. All registered  
5           participants in the proceeding, including all members of the Equity Advisory  
6           Group, shall receive all notices of public meetings and all notices of  
7           opportunities to comment in that proceeding.

8           (2) The Commission shall hold at least six public hearings or workshops  
9           that shall be recorded and publicly posted on the Commission’s website or on  
10           ePUC. These meetings shall be open to everyone, including all stakeholders,  
11           members of the public, and all other potentially affected parties.

12           (3) The Commission also shall provide at least three opportunities for  
13           the submission of written comments. Any person may submit written  
14           comments to the Commission.

15           (4) The Commission shall seek input from the Equity Advisory Group  
16           on organizations and communities to invite to participate in the Commission’s  
17           public meetings and opportunities to comment.

18           (d) Advertising. The Commission shall use funding appropriated in this act  
19           on advertising the public meetings in order to provide notice to a wide variety  
20           of segments of the public.

1       (e) Draft proposed rules. The Commission shall publish draft proposed  
2       rules publicly and provide notice of them through the Commission’s online  
3       case management system, ePUC, to the stakeholders in this rulemaking who  
4       registered their names and e-mail addresses with the Commission through  
5       ePUC. The Commission shall provide a 30-day comment period on the draft  
6       and accept written comments from the public and stakeholders. The  
7       Commission shall consider changes in response to the public comments before  
8       filing the proposed rules with the Secretary of State and the Legislative  
9       Committee on Administrative Rules.

10       (f) Final rules. On or before January 15, 2025, the Commission shall  
11       submit to the General Assembly final proposed rules to implement the Clean  
12       Heat Standard. The Commission shall not file the final proposed rules with the  
13       Secretary of State until June 1, 2025.

14       (g) Consultant. The Commission may contract with a consultant to assist  
15       with implementation of 30 V.S.A. § 8127 (clean heat credits).

16       (h) Funding. On or before January 15, 2024, the Commission shall report  
17       to the General Assembly on suggested revenue streams that may be used or  
18       created to fund the Commission’s administration of the Clean Heat Standard  
19       program.

20       (i) Check-back reports. On or before February 15, 2024 and January 15,  
21       2025, the Commission shall submit a written report to and be available to

1 provide oral testimony to the House Committee on Environment and Energy  
2 and the Senate Committees on Finance and on Natural Resources and Energy  
3 detailing the efforts undertaken to establish the Clean Heat Standard. The  
4 reports shall include, to the extent available, estimates of the impact of the  
5 Clean Heat Standard on customers, including impacts to customer rates and  
6 fuel bills for participating and nonparticipating customers, net impacts on total  
7 spending on energy for thermal sector end uses, fossil fuel reductions,  
8 greenhouse gas emission reductions, and, if possible, impacts on economic  
9 activity and employment. The modeled impacts shall estimate high-, medium-,  
10 and low-price impacts. The reports shall recommend any legislative action  
11 needed to address enforcement or other aspects of the Clean Heat Standard.

12 (j) **Assistance.** The Agency of Commerce and Community Development,  
13 the Department of Public Service, and other State agencies and departments  
14 shall assist the Commission with economic modeling for the required reports  
15 and rulemaking process.

16 Sec. 7. PUBLIC UTILITY COMMISSION AND DEPARTMENT OF  
17 PUBLIC SERVICE POSITIONS; APPROPRIATION

18 (a) The following new positions are created in the Public Utility  
19 Commission for the purpose of carrying out this act:

- 20 (1) one permanent exempt Staff Attorney;  
21 (2) one permanent exempt Analyst; and

1           (3) one limited-service exempt Analyst.

2           (b) The sum of \$800,000.00 is appropriated to the Public Utility  
3           Commission from the General Fund in fiscal year 2024 for the positions  
4           established in subsection (a) of this section; for all consultants required by this  
5           act; and for additional operating costs required to implement the Clean Heat  
6           Standard, including marketing and public outreach for Sec. 6 of this act.

7           (c) The following new positions are created in the Department of Public  
8           Service for the purpose of carrying out this act:

9           (1) one permanent exempt Staff Attorney; and

10          (2) one permanent classified Program Analyst.

11          (d) The sum of \$400,000.00 is appropriated to the Department of Public  
12          Service from the General Fund in fiscal year 2024 for the positions established  
13          in subsection (c) of this section, to retain consultants that may be required to  
14          support verification and evaluation required by 30 V.S.A. § 8127(a), and for  
15          associated operating costs related to the implementation of the Clean Heat  
16          Standard.

17          Sec. 8. EFFECTIVE DATE

18          This act shall take effect on passage.

19          and that after passage the title of the bill be amended to read: “An act  
20          relating to affordably meeting the mandated greenhouse gas reductions for the

1 thermal sector through efficiency, weatherization measures, electrification, and  
2 decarbonization”

3

4 (Committee vote: \_\_\_\_\_)

5

\_\_\_\_\_

6

Senator \_\_\_\_\_

7

FOR THE COMMITTEE