

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 ~~(2) The Commission, by rule or order, shall establish a process by which~~
9 ~~an obligated party may apply to the Commission to self-administer clean heat~~
10 ~~programs or measures. The Commission in its rules or order shall establish~~
11 ~~criteria for approval of these applications.~~

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

14 § 8123. DEFINITIONS

15 As used in this chapter:

16 (1) “Carbon intensity value” means the amount of lifecycle greenhouse
17 gas emissions per unit of energy of fuel expressed in grams of carbon dioxide
18 equivalent per megajoule (gCO₂e/MJ).

19 (2) “Clean heat credit” means a tradeable, nontangible commodity that
20 represents the amount of greenhouse gas reduction attributable to a clean heat

1 measure. The Commission shall establish a system of management for clean
2 heat credits pursuant to this chapter.

3 (3) “Clean heat measure” means fuel delivered and technologies
4 installed to end-use customers in Vermont that reduce greenhouse gas
5 emissions from the thermal sector. Clean heat measures shall not include
6 switching from one fossil fuel use to another fossil fuel use. The Commission
7 may adopt a list of acceptable actions that qualify as clean heat measures.

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

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

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

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

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

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

4 (10) “Fuel pathway” means a detailed description of all stages of fuel
5 production and use for any particular fuel, including feedstock generation or
6 extraction, production, transportation, distribution, and combustion of the fuel
7 by the consumer. The fuel pathway is used in the calculation of the carbon
8 intensity value and lifecycle greenhouse gas emissions of each fuel.

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

11 (12) “Obligated party” means:

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

13 (B) for other heating fuels, the entity that imports heating fuel for
14 ultimate consumption within the State, or the entity that produces, refines,
15 manufactures, or compounds heating fuel within the State for ultimate
16 consumption within the State. For the purpose of this section, the entity that
17 imports heating fuel is the entity that has ownership title to the heating fuel at
18 the time it is brought into Vermont.

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

1 § 8124. CLEAN HEAT STANDARD COMPLIANCE

2 (a) Required amounts.

3 (1) The Commission shall establish the number of clean heat credits that
4 each obligated party is required to retire each calendar year. The size of the
5 annual requirement shall be set at a pace sufficient for Vermont’s thermal
6 sector to achieve lifecycle carbon dioxide equivalent (CO₂e) emission
7 reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3)
8 expressed as lifecycle greenhouse gas emissions pursuant to subsection
9 8127(g) of this title.

10 (2) Annual requirements shall be expressed as a percent of each
11 obligated party’s contribution to the thermal sector’s lifecycle CO₂e emissions
12 in the previous year. The annual percentage reduction shall be the same for all
13 obligated parties. To ensure understanding among obligated parties, the
14 Commission shall publicly provide a description of the annual requirements in
15 plain terms.

16 (3) To support the ability of the obligated parties to plan for the future,
17 the Commission shall establish and update annual clean heat credit
18 requirements for the next 10 years. Every three years, the Commission shall
19 extend the requirements three years; shall assess emission reductions actually
20 achieved in the thermal sector; and, if necessary, revise the pace of clean heat
21 credit requirements for future years to ensure that the thermal sector portion of

1 the emission reduction requirements of 10 V.S.A. § 578(a)(2) and (3) for 2030
2 and 2050 will be achieved.

3 (4) The Commission may temporarily, for a period not to exceed 18
4 months, adjust the annual requirements for good cause after notice and
5 opportunity for public process. Good cause may include a shortage of clean
6 heat credits or undue adverse financial impacts on particular customers or
7 demographic segments. The Commission shall ensure that any downward
8 adjustment does not materially affect the State’s ability to comply with the
9 requirements of 10 V.S.A. § 578(a)(2) and (3).

10 (b) Annual registration.

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

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

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

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

1 (C) The Department of Taxes shall further ensure that the fuel tax
2 form requires that each submitting entity list the exact amount of gallons of
3 each fuel type, separated by type, that was sold in Vermont, as well as a list of
4 the exact amount of gallons of each fuel type, separated by type, that was
5 purchased by the submitting entity and the name and location of the entity
6 from which it was purchased.

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

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

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

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

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

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

7 (d) Equitable distribution of clean heat measures.

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

15 (2) Of their annual requirement, each obligated party shall retire at least
16 16 percent from customers with low income and 16 percent from customers
17 with moderate income. For each of these groups, ~~A~~ at least one-half of these
18 credits shall be from installed clean heat measures that require capital
19 investments in homes, have measure lives of 10 years or more, and are
20 estimated by the Technical Advisory Group to lower annual energy bills.
21 Examples shall include weatherization improvements and installation of heat

1 pumps, heat pump water heaters, and advanced wood heating systems. The
2 Commission may identify additional measures that qualify as installed
3 measures.

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

8 (4) With consideration to how to best serve customers with low income
9 and moderate income, the Commission shall have authority to change the
10 percentages established in subdivision (2) of this subsection ~~and the criteria~~
11 ~~used to define customers with low income and moderate income~~ for good
12 cause after ~~consultation with the Equity Advisory Group~~, notice, and
13 opportunity for public process. Good cause may include a shortage of clean
14 heat credits or undue adverse financial impacts on particular customers or
15 demographic segments.

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

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

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

9 (g) Enforcement.

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

15 (2) The Commission shall order an obligated party that fails to retire the
16 number of clean heat credits required in a given year, including the required
17 amounts from customers with low income and moderate income, to make a
18 noncompliance payment to the default delivery agent. The per-credit amount
19 of the noncompliance payment shall be three times the amount established by
20 the Commission under subsection (f) of this section for timely per-credit
21 payments to the default delivery agent.

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

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

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

10 (h) Records. The Commission shall establish requirements for the types of
11 records to be submitted by obligated parties, a record retention schedule for
12 required records, and a process for verification of records and data submitted in
13 compliance with the requirements of this chapter.

14 (i) Reports.

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

18 (2) After the adoption of the rules implementing this chapter, the
19 Commission shall submit a written report to the standing committees detailing
20 the efforts undertaken to establish the Clean Heat Standard pursuant to this
21 chapter.

1 (3) On or before January 15 of each year following the year in which the
2 rules are first adopted under this chapter, the Commission shall submit to the
3 standing committees a written report detailing the implementation and
4 operation of the Clean Heat Standard. This report shall include an assessment
5 on the equitable adoption of clean heat measures required by subsection (d) of
6 this section, along with recommendations to increase participation for the
7 households with the highest energy burdens. The provisions of 2 V.S.A.
8 § 20(d) (expiration of required reports) shall not apply to the report to be made
9 under this subsection.

10 **§ 8125. DEFAULT DELIVERY AGENT**

11 (a) Default delivery agent designated. In place of obligated-party specific
12 programs, the Commission shall provide for the development and
13 implementation of Statewide clean heat programs and measures by one or
14 more default delivery agents appointed by the Commission for these purposes.
15 The Commission may specify that appointment of a default delivery agent to
16 deliver clean heat services, on behalf of obligated entities who pay the per-
17 credit fee to the default delivery agent, satisfies those entities' corresponding
18 obligations under this **section** chapter.

19 (b) **Appointment.** The Commission shall designate the default delivery
20 agent. The default delivery agent shall be one or more statewide entities
21 capable of providing a variety of clean heat measures. The designation of an

1 entity under this subdivision may be by order of appointment or contract. A
2 designation, whether by order of appointment or by contract, may only be
3 issued after notice and opportunity for hearing. An existing order of
4 appointment issued by the Commission under section 209 of this title may be
5 amended to include the responsibilities of the default delivery agent. An order
6 of appointment shall be for a limited duration not to exceed 12 years, although
7 an entity may be reappointed by order or contract. An order of appointment
8 may include any conditions and requirements that the Commission deems
9 appropriate to promote the public good. For good cause, after notice and
10 opportunity for hearing, the Commission may amend or revoke an order of
11 appointment.

12 (b) Supervision. Any entity appointed by order of appointment under this
13 section that is not an electric or gas utility already regulated under this title
14 shall not be considered to be a company as defined under section 201 of this
15 title, but shall be subject to the provisions of sections 18-21, 30-32, 205-208,
16 subsection 209(a), sections 219, 221, and subsection 231(b) of this title, to the
17 same extent as a company as defined under section 201 of this title. The
18 Commission and the Department of Public Service shall have jurisdiction
19 under those sections over the entity, its directors, receivers, trustees, lessees, or
20 other persons or companies owning or operating the entity and of all plants,
21 equipment, and property of that entity used in or about the business carried on

1 by it in this State as covered and included in this section. This jurisdiction
2 shall be exercised by the Commission and the Department so far as may be
3 necessary to enable them to perform the duties and exercise the powers
4 conferred upon them by law. The Commission and the Department each may,
5 when they deem the public good requires, examine the plants, equipment, and
6 property of any entity appointed by order of appointment to serve as a default
7 delivery agent.

8 (c) Use of default delivery agent.

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

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

19 (3) The Commission shall by rule or order establish a standard timeline
20 under which the default delivery agent credit cost or costs are established and
21 by which an obligated party must file its election form. The Commission shall

1 provide no less than 120 days' notice of default delivery agent credit cost or
2 costs prior to the deadline for an obligated party to file its election form so an
3 obligated party can assess options and inform the Commission of its intent to
4 procure credits in whole or in part as fulfillment of its requirement.

5 (4) The default delivery agent shall deliver creditable clean heat
6 measures either directly or indirectly to end-use customer locations in Vermont
7 homes and businesses when: sufficient to meet the total aggregated annual
8 requirement assigned to it pursuant to this subsection, along with any
9 additional amount achievable through noncompliance payments as described in
10 subdivision (g)(2) of this section.

11 (A) an obligated party chooses to assign its annual requirement, in
12 full or in part, to the default delivery agent; or

13 (B) an obligated party fails to produce or acquire its required amount
14 of clean heat credits as described in subdivision (g)(2) of this section.

15 (3) By rule or order, the Commission shall adopt annually the cost per
16 clean heat credit to be paid to the default delivery agent by an obligated party
17 that chooses this option. In adjusting the default delivery agent credit cost, the
18 Commission shall consider the default delivery agent's anticipated costs to
19 deliver clean heat measures and costs borne by customers, among other factors
20 determined by the Commission. Changes to the cost of credits shall take effect
21 not less than 180 days after adoption.

1 (d) Budget.

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

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

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

12 (C) opportunity for public participation.

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

16 (e) Compliance funds. All funds received from noncompliance payments
17 pursuant to subdivision (g)(2) of this section shall be used by the default
18 delivery agent to provide clean heat measures to customers with low income.

19 (f) Specific programs. The default delivery agent shall create specific
20 programs for multiunit dwellings owned or operated by a non-profit

1 organization or condo association and for manufactured homes so these groups
2 have an equal opportunity to benefit from the Clean Heat Standard.

3 § 8126. RULEMAKING

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

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

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

14 (1) provides notice of any proposed changes,

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

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

17 (d) Any order issues under this chapter shall be subject to appeal to the
18 Vermont Supreme Court under section 12 of this title, and the Commission
19 must immediately file any orders and a redline and clean version of the revised
20 rules with the Secretary of State, with notice simultaneously provided to the

1 House Committee on Environment and Energy and the Senate Committees on
2 Finance and on Natural Resources and Energy.

3 § 8127. TRADEABLE CLEAN HEAT CREDITS

4 (a) Credits established. By rule or order, the Commission shall establish or
5 adopt a system of tradeable clean heat credits that are earned by reducing
6 greenhouse gas emissions through the delivery of clean heat measures. While
7 credit denominations may be in simple terms for public understanding and ease
8 of use, the underlying value shall be based on units of carbon dioxide
9 equivalent (CO₂e). The system shall provide a process for the recognition,
10 approval, and monitoring of the clean heat credits. The Department of Public
11 Service shall perform the verification of clean heat credit claims and submit
12 results of the verification and evaluation to the Commission annually.

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

18 (c) Credit values. Clean heat credits shall be based on the accurate and
19 verifiable lifecycle CO₂e emission reductions in Vermont’s thermal sector that
20 result from the delivery of eligible clean heat measures to existing or new end-
21 use customer locations into or in Vermont.

1 (1) For clean heat measures that are installed, credits will be created for
2 each year of the expected life of the installed measure. The annual value of the
3 clean heat credits for installed measures in each year shall be equal to the
4 lifecycle CO2e emissions of the fuel use that is avoided in a given year
5 because of the installation of the measure, minus the lifecycle emissions of the
6 fuel that is used instead in that year.

7 (2) For clean heat measures that are fuels, clean heat credits will be
8 created only for the year the fuel is delivered to the end-use customer. The
9 value of the clean heat credits for fuels shall be the lifecycle CO2e emissions
10 of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel
11 that is used instead.

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

14 (1) thermal energy efficiency improvements and weatherization;

15 (2) cold-climate air, ground source, and other heat pumps, including

16 district, network, grid, microgrid, and building geothermal systems;

17 (3) heat pump water heaters;

18 (4) utility-controlled electric water heaters;

19 (5) solar hot water systems;

20 (6) electric appliances providing thermal end uses;

21 (7) advanced wood heating;

1 (8) noncombustion or renewable energy-based district heating services;

2 (9) the supply of sustainably sourced biofuels;

3 (10) the supply of green hydrogen; and

4 (11) the replacement of a manufactured home with a high efficiency

5 modular home.

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

12 (f) Carbon intensity of fuels.

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

15 (A) below 80 in 2025;

16 (B) below 60 in 2030; and

17 (C) below 20 in 2050, provided the Commission may allow liquid
18 and gaseous clean heat measures with a carbon intensity value greater than 20
19 if excluding them would be impracticable based on the characteristics of
20 Vermont's buildings, the workforce available in Vermont to deliver lower

1 carbon intensity clean heat measures, cost, or the effective administration of
2 the Clean Heat Standard.

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

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

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

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

12 (g) Emissions schedule.

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

1 Vermont thermal sector context, and the requirements of 10 V.S.A. § 578(a)(2)
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 In determining the baseline emission rates for clean heat measures that are
6 fuels, emissions baselines shall fully account for methane emissions reductions
7 or captures already occurring, or expected to occur, for each fuel pathway as a
8 result of local, State, or federal policies that have been enacted or adopted and
9 deforestation.

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 periodically biennially
14 assess 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 may shall include
17 deforestation, conversion of grasslands, damage to watersheds, or the creation
18 of new 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 (CO₂e) 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) assisting the Commission in defining customers with low income
12 and moderate income;

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

17 (6) providing feedback to the Commission on the impact of the Clean
18 Heat Standard on the experience of Vermonters with low income and moderate
19 income; and

1 (7) providing information to the Commission on the challenges renters
2 face in equitably accessing clean heat measures and recommendations to
3 ensure that renters have equitable access to clean heat measures.

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

14 § 8130. SEVERABILITY

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

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

1 § 582. GREENHOUSE GAS INVENTORIES; REGISTRY

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

13 * * *

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

15 § 3102. CONFIDENTIALITY OF TAX RECORDS

16 (a) No present or former officer, employee, or agent of the Department of
17 Taxes shall disclose any return or return information to any person who is not
18 an officer, employee, or agent of the Department of Taxes except in
19 accordance with the provisions of this section. A person who violates this
20 section shall be fined not more than \$1,000.00 or imprisoned for not more than
21 one year, or both; and if the offender is an officer or employee of this State, the

1 offender shall, in addition, be dismissed from office and be incapable of
2 holding any public office for a period of five years thereafter.

3 * * *

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

5 * * *

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

10 * * *

11 Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION

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

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

18 (c) Public engagement process. Before commencing rulemaking, the
19 Commission shall use the forms of public engagement described in this
20 subsection to inform the design and implementation of the Clean Heat
21 Standard. Any failure by the Commission to meet the specific procedural

1 requirements of this section shall not affect the validity of the Commission’s
2 actions.

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

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

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

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

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

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

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

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

19 (h) Funding. On or before January 15, 2024, the Commission shall report
20 to the General Assembly on suggested revenue streams that may be used or

1 created to fund the Commission’s administration of the Clean Heat Standard
2 program.

3 (i) Check-back reports. On or before February 15, 2024 and January 15,
4 2025, the Commission shall submit a written report to and be available to
5 provide oral testimony to the House Committee on Environment and Energy
6 and the Senate Committees on Finance and on Natural Resources and Energy
7 detailing the efforts undertaken to establish the Clean Heat Standard. The
8 reports shall include, to the extent available, estimates of the impact of the
9 Clean Heat Standard on customers, including impacts to customer rates and
10 fuel bills for participating and nonparticipating customers, net impacts on total
11 spending on energy for thermal sector end uses, fossil fuel reductions,
12 greenhouse gas emission reductions, and, if possible, impacts on economic
13 activity and employment. The modeled impacts shall estimate high-, medium-,
14 and low-price impacts. The reports shall recommend any legislative action
15 needed to address enforcement **or other aspects** of the Clean Heat Standard.

16 (j) The Agency of Commerce and Community Development, the
17 Department of Public Service, and other State agencies and departments shall
18 assist the Commission with economic modeling for the required reports and
19 rulemaking process.

20 Sec. 7. PUBLIC UTILITY COMMISSION AND DEPARTMENT OF
21 PUBLIC SERVICE POSITIONS; APPROPRIATION

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

3 (1) one permanent exempt Staff Attorney;

4 (2) one permanent exempt Analyst; and

5 (3) one limited-service exempt Analyst.

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

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

13 (1) one permanent exempt Staff Attorney; and

14 (2) one permanent classified Program Analyst.

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

21 Sec. 8. EFFECTIVE DATE

1 This act shall take effect on passage.

2 and that after passage the title of the bill be amended to read: “An act
3 relating to affordably meeting the mandated greenhouse gas reductions for the
4 thermal sector through efficiency, weatherization measures, electrification, and
5 decarbonization”

6

7 (Committee vote: _____)

8

9

Senator _____

10

FOR THE COMMITTEE