1	TO THE HOUSE OF REPRESENTATIVES:
2	The Committee on Environment and Energy to which was referred Senate
3	Bill No. 5 entitled "An act relating to affordably meeting the mandated
4	greenhouse gas reductions for the thermal sector through efficiency,
5	weatherization measures, electrification, and decarbonization" respectfully
6	reports that it has considered the same and recommends that the House propose
7	to the Senate that the bill be amended by striking out all after the enacting
8	clause and inserting in lieu thereof the 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	<u>of 2022.</u>

1	Sec. 3. 30 V.S.A. chapter 94 is added to read:
2	CHAPTER 94. CLEAN HEAT STANDARD
3	<u>§ 8121. INTENT</u>
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, protects public health, and recognizes that
9	affordable heating is essential for Vermonters. It shall enhance social equity
10	by prioritizing customers with low income and moderate income and those
11	households with the highest energy burdens. The Clean Heat Standard shall, to
12	the greatest extent possible, maximize the use of available federal funds to
13	deliver clean heat measures.
14	<u>§ 8122. CLEAN HEAT STANDARD</u>
15	(a) The Clean Heat Standard is established. Under this program, obligated
16	parties shall reduce greenhouse gas emissions attributable to the Vermont
17	thermal sector by retiring required amounts of clean heat credits to meet the
18	thermal sector portion of the greenhouse gas emission reduction obligations of
19	the Global Warming Solutions Act.

1	(b) By rule or order, the Commission shall establish or adopt a system of
2	tradeable clean heat credits earned from the delivery of clean heat measures
3	that reduce greenhouse gas emissions.
4	(c) An obligated party shall obtain the required amount of clean heat credits
5	through delivery of eligible clean heat measures by a default delivery agent,
6	unless the obligated party receives prior approval from the Commission to use
7	another method as 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	<u>§ 8123. DEFINITIONS</u>
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 (gCO2e/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 the area or statewide median income, whichever
6	is greater, as published annually by the U.S. Department of Housing and Urban
7	Development or a customer who qualifies for a government-sponsored, low-
8	income energy subsidy.
9	(6) "Customer with moderate income" means a customer with a
10	household income between 60 percent and 120 percent of the area or statewide
11	median income, whichever is greater, as published annually by the U.S.
12	Department of Housing and Urban Development.
13	(7) "Default delivery agent" means an entity designated by the
14	Commission to provide services that generate clean heat measures.
15	(8) "Energy burden" means the annual spending on thermal energy as a
16	percentage of household income.
17	(9) "Entity" means any individual, trustee, agency, partnership,
18	association, corporation, company, municipality, political subdivision, or any
19	other form of organization.
20	(10) "Fuel pathway" means a detailed description of all stages of fuel
21	production and use for any particular fuel, including feedstock generation or

1	extraction, production, transportation, distribution, and combustion of the fuel
2	by the consumer. The fuel pathway is used in the calculation of the carbon
3	intensity value and lifecycle greenhouse gas emissions of each fuel.
4	(11) "Heating fuel" means fossil-based heating fuel, including oil,
5	propane, natural gas, coal, and kerosene.
6	(12) "Obligated party" means:
7	(A) A regulated natural gas utility serving customers in Vermont.
8	(B) For other heating fuels, the entity that imports heating fuel for
9	ultimate consumption within the State, or the entity that produces, refines,
10	manufactures, or compounds heating fuel within the State for ultimate
11	consumption within the State. For the purpose of this section, the entity that
12	imports heating fuel is the entity that has ownership title to the heating fuel at
13	the time it is brought into Vermont.
14	(13) "Thermal sector" has the same meaning as the "Residential,
15	Commercial and Industrial Fuel Use" sector as used in the Vermont
16	Greenhouse Gas Emissions Inventory and Forecast and does not include
17	nonroad diesel or any other transportation or other fuel use categorized
18	elsewhere in the Vermont Greenhouse Gas Emissions Inventory and Forecast.
19	<u>§ 8124. CLEAN HEAT STANDARD COMPLIANCE</u>
20	(a) Required amounts.

1	(1) The Commission shall establish the number of clean heat credits that
2	each obligated party is required to retire each calendar year. The size of the
3	annual requirement shall be set at a pace sufficient for Vermont's thermal
4	sector to achieve lifecycle carbon dioxide equivalent (CO2e) emission
5	reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3)
6	expressed as lifecycle greenhouse gas emissions pursuant to subsection
7	8127(g) of this title.
8	(2) Annual requirements shall be expressed as a percent of each
9	obligated party's contribution to the thermal sector's lifecycle CO2e emissions
10	in the previous year. The annual percentage reduction shall be the same for all
11	obligated parties. To ensure understanding among obligated parties, the
12	Commission shall publicly provide a description of the annual requirements in
13	<u>plain terms.</u>
14	(3) To support the ability of the obligated parties to plan for the future,
15	the Commission shall establish and update annual clean heat credit
16	requirements for the next 10 years. Every three years, the Commission shall
17	extend the requirements three years; shall assess emission reductions actually
18	achieved in the thermal sector; and, if necessary, revise the pace of clean heat
19	credit requirements for future years to ensure that the thermal sector portion of
20	the emission reduction requirements of 10 V.S.A. § 578(a)(2) and (3) for 2030
21	and 2050 will be achieved.

1	(4) The Commission may temporarily, for a period not to exceed 36
2	months, adjust the annual requirements for good cause after notice and
3	opportunity for public process. Good cause may include a shortage of clean
4	heat credits, market conditions as identified by the Department's potential
5	study conducted pursuant to section 8125 of this title, or undue adverse
6	financial impacts on particular customers or demographic segments. The
7	Commission shall ensure that any downward adjustment does not materially
8	affect the State's ability to comply with the requirements of 10 V.S.A.
9	<u>§ 578(a)(2) and (3).</u>
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 exact amount of gallons
4	of each type of heating fuels sold into or in the State for final sale or
5	consumption in the State in the calendar year immediately preceding the
6	calendar year in which the entity is registering with the Commission, separated
7	by type, that was purchased by the submitting entity and the name and location
8	of the entity from which it was purchased.
9	(3) Each year, and not later than 30 days following the annual
10	registration deadline established by the Commission, the Commission shall
11	share complete registration information of obligated parties with the Agency of
12	Natural Resources and the Department of Public Service for purposes of
13	updating the Vermont Greenhouse Gas Emissions Inventory and Forecast and
14	meeting the requirements of 10 V.S.A. § 591(b)(3).
15	(4) The Commission shall maintain, and update annually, a list of
16	registered entities on its website that contains the required registration
17	information.
18	(5) For any entity not registered on or before January 31, 2024, the first
19	registration form shall be due 30 days after the first sale of heating fuel to a
20	location in Vermont.

1	(6) Clean heat requirements shall transfer to entities that acquire an
2	obligated party.
3	(7) Entities that cease to operate shall retain their clean heat requirement
4	for their final year of operation.
5	(c) Early action credits. Beginning on January 1, 2023, clean heat
6	measures that are installed and provide emission reductions are creditable.
7	Upon the establishment of the clean heat credit system, entities may register
8	credits for actions taken starting in 2023.
9	(d) Equitable distribution of clean heat measures.
10	(1) The Clean Heat Standard shall be designed and implemented to
11	enhance social equity by prioritizing customers with low income, moderate
12	income, those households with the highest energy burdens, and renter
13	households with tenant-paid energy bills. The design shall ensure all
14	customers have an equitable opportunity to participate in, and benefit from,
15	clean heat measures regardless of heating fuel used, income level, geographic
16	location, residential building type, or homeownership status.
17	(2) Of their annual requirement, each obligated party shall retire at least
18	16 percent from customers with low income and an additional 16 percent from
19	customers with low or moderate income. For each of these groups, at least
20	one-half of these credits shall be from installed clean heat measures that
21	require capital investments in homes, have measure lives of 10 years or more,

and are estimated by the Technical Advisory Group to lower annual energy
bills. Examples shall include weatherization improvements and installation of
heat pumps, heat pump water heaters, and advanced wood heating systems.
The Commission may identify additional measures that qualify as installed
measures.
(3) The Commission shall, to the extent reasonably possible, frontload
the credit requirements for customers with low income and moderate income
so that the greatest proportion of clean heat measures reach Vermonters with
low income and moderate income in the earlier years.
(4) With consideration to how to best serve customers with low income
and moderate income, the Commission shall have authority to change the
percentages established in subdivision (2) of this subsection for good cause
after notice and opportunity for public process. Good cause may include a
shortage of clean heat credits or undue adverse financial impacts on particular
customers or demographic segments.
(5) In determining whether to exceed the minimum percentages of clean
heat measures that must be delivered to customers with low income and
moderate income, the Commission shall take into account participation in other
government-sponsored low-income and moderate-income weatherization
programs. Participation in other government-sponsored low-income and

1	moderate-income weatherization programs shall not limit the ability of those
2	households to participate in programs under this chapter.
3	(6) A clean heat measure delivered to a customer qualifying for a
4	government-sponsored, low-income energy subsidy shall qualify for clean heat
5	credits required by subdivision (2) of this subsection.
6	(7) Customer income data collected shall be kept confidential by the
7	Commission, the Department of Public Service, the obligated parties, and any
8	entity that delivers clean heat measures.
9	(e) Credit banking. The Commission shall allow an obligated party that
10	has met its annual requirement in a given year to retain clean heat credits in
11	excess of that amount for future sale or application to the obligated party's
12	annual requirements in future compliance periods, as determined by the
13	Commission.
14	(f) Enforcement.
15	(1) The Commission shall have the authority to enforce the requirements
16	of this chapter and any rules or orders adopted to implement the provisions of
17	this chapter. The Commission may use its existing authority under this title.
18	As part of an enforcement order, the Commission may order penalties and
19	injunctive relief.
20	(2) The Commission shall order an obligated party that fails to retire the
21	number of clean heat credits required in a given year, including the required

1	amounts from customers with low income and moderate income, to make a
2	noncompliance payment to the default delivery agent for the number of credits
3	deficient. The per-credit amount of the noncompliance payment shall be three
4	times the amount established by the Commission for timely per-credit
5	payments to the default delivery agent.
6	(3) However, the Commission may waive the noncompliance payment
7	required by subdivision (2) of this subsection for an obligated party if the
8	Commission:
9	(A) finds that the obligated party made a good faith effort to acquire
10	the required amount and its failure resulted from market factors beyond its
11	control; and
12	(B) directs the obligated party to add the number of credits deficient
13	to one or more future years.
14	(4) False or misleading statements or other representations made to the
15	Commission by obligated parties related to compliance with the Clean Heat
16	Standard are subject to the Commission's enforcement authority, including the
17	power to investigate and assess penalties, under this title.
18	(5) The Commission's enforcement authority does not in any way
19	impede the enforcement authority of other entities such as the Attorney
20	General's office.

1	(6) Failure to register with the Commission as required by this section is
2	a violation of the Consumer Protection Act in 9 V.S.A. chapter 63.
3	(g) Records. The Commission shall establish requirements for the types of
4	records to be submitted by obligated parties, a record retention schedule for
5	required records, and a process for verification of records and data submitted in
6	compliance with the requirements of this chapter.
7	(h) Reports.
8	(1) As used in this subsection, "standing committees" means the House
9	Committee on Environment and Energy and the Senate Committees on
10	Finance and on Natural Resources and Energy.
11	(2) After the adoption of the rules implementing this chapter, the
12	Commission shall submit a written report to the standing committees detailing
13	the efforts undertaken to establish the Clean Heat Standard pursuant to this
14	chapter.
15	(3) On or before January 15 of each year following the year in which the
16	rules are first adopted under this chapter, the Commission shall submit to the
17	standing committees a written report detailing the implementation and
18	operation of the Clean Heat Standard. This report shall include an assessment
19	on the equitable adoption of clean heat measures required by subsection (d) of
20	this section, along with recommendations to increase participation for the
21	households with the highest energy burdens. The provisions of 2 V.S.A.

1	§ 20(d) (expiration of required reports) shall not apply to the report to be made
2	under this subsection.
3	(i) LIHEAP pricing. The Margin Over Rack pricing program for fuel
4	assistance shall reflect the default delivery agent credit cost established by the
5	Commission.
6	<u>§ 8125. DEFAULT DELIVERY AGENT</u>
7	(a) Default delivery agent designated. In place of obligated-party specific
8	programs, the Commission shall provide for the development and
9	implementation of statewide clean heat programs and measures by one or more
10	default delivery agents appointed by the Commission for these purposes. The
11	Commission may specify that appointment of a default delivery agent to
12	deliver clean heat services, on behalf of obligated entities who pay the per-
13	credit fee to the default delivery agent, satisfies those entities' corresponding
14	obligations under this chapter.
15	(b) Appointment. The default delivery agent shall be one or more
16	statewide entities capable of providing a variety of clean heat measures. The
17	Commission shall designate the first default delivery agent on or before June 1,
18	2024. The designation of an entity under this subsection may be by order of
19	appointment or contract. A designation, whether by order of appointment or
20	by contract, may only be issued after notice and opportunity for hearing. An
21	existing order of appointment issued by the Commission under section 209 of

1	this title may be amended to include the responsibilities of the default delivery
2	agent. An order of appointment shall be for a limited duration not to exceed 12
3	years, although an entity may be reappointed by order or contract. An order of
4	appointment may include any conditions and requirements that the
5	Commission deems appropriate to promote the public good. For good cause,
6	after notice and opportunity for hearing, the Commission may amend or revoke
7	an order of appointment.
8	(c) Supervision. Any entity appointed by order of appointment under this
9	section that is not an electric or gas utility already regulated under this title
10	shall not be considered to be a company as defined under section 201 of this
11	title but shall be subject to the provisions of sections 18-21, 30-32, 205-208;
12	subsection 209(a); sections 219 and 221; and subsection 231(b) of this title, to
13	the same extent as a company as defined under section 201 of this title. The
14	Commission and the Department of Public Service shall have jurisdiction
15	under those sections over the entity, its directors, receivers, trustees, lessees, or
16	other persons or companies owning or operating the entity and of all plants,
17	equipment, and property of that entity used in or about the business carried on
18	by it in this State as covered and included in this section. This jurisdiction
19	shall be exercised by the Commission and the Department so far as may be
20	necessary to enable them to perform the duties and exercise the powers
21	conferred upon them by law. The Commission and the Department each may,

1	when they deem the public good requires, examine the plants, equipment, and
2	property of any entity appointed by order of appointment to serve as a default
3	delivery agent.
4	(d) Use of default delivery agent.
5	(1) An obligated party shall meet its annual requirement through a
6	designated default delivery agent appointed by the Commission. However, the
7	obligated party may seek to meet its requirement, in whole or in part, through
8	one or more for the following ways: by delivering eligible clean heat
9	measures, by contracting for delivery of eligible clean heat measures, or
10	through the market purchase of clean heat credits. An obligated party shall be
11	approved by the Commission to meet its annual requirement using a method
12	other than the default delivery agent if it provides sufficient details on the
13	party's capacity and resources to achieve the emissions reductions.
14	(2) The Commission shall provide a form for an obligated party to
15	indicate how it intends to meet its requirement, The form shall require
16	sufficient information to determine the nature of the credits that the default
17	delivery agent will be responsible to deliver on behalf of the obligated party. If
18	the Commission approves of a plan for an obligated party to meet its obligation
19	through a mechanism other than payment to a designated default delivery
20	agent, then the Commission shall make such approvals known to the default
21	delivery agent as soon as practicable.

1	(3) The Commission shall by rule or order establish a standard timeline
2	under which the default delivery agent credit cost or costs are established and
3	by which an obligated party must file its form. The default delivery agent's
4	schedule of costs shall include sufficient costs to deliver installed measures and
5	shall specify separately the costs to deliver measures to customers with low
6	income and customers with moderate income as required by subsection
7	8124(d) of this title. The Commission shall provide not less than 120 days'
8	notice of default delivery agent credit cost or costs prior to the deadline for an
9	obligated party to file its election form so an obligated party can assess options
10	and inform the Commission of its intent to procure credits in whole or in part
11	as fulfillment of its requirement.
12	(4) The default delivery agent shall deliver creditable clean heat
13	measures either directly or indirectly to end-use customer locations in Vermont
14	sufficient to meet the total aggregated annual requirement assigned to it, along
15	with any additional amount achievable through noncompliance payments as
16	described in subdivision 8124(f)(2) of this title. Clean heat credits generated
17	through installed measures delivered by the default delivery agent on behalf of
18	an obligated party are creditable in future years. Those credits not required to
19	meet the obligated party's existing obligations shall be owned by the obligated
20	party.
21	(e) Budget

21 <u>(e) Budget.</u>

1	(1) The Commission shall open a proceeding on or before July 1, 2023
2	and at least every three years thereafter to establish the default delivery agent
3	credit cost or costs and the quantity of credits to be generated for the
4	subsequent three-year period. That proceeding shall include:
5	(A) a potential study conducted by the Department of Public Service,
6	the first of which shall be completed not later than September 1, 2024, to
7	include an assessment and quantification of technically available, maximum
8	achievable, and program achievable thermal resources. The results shall
9	include a comparison to the legal obligations of the thermal sector portion of
10	the requirements of 10 V.S.A. § 578(a)(2) and (3). The potential study shall
11	consider and evaluate market conditions for delivery of clean heat measures
12	within the State, including an assessment of workforce characteristics capable
13	of meeting consumer demand and meeting the obligations of 10 V.S.A.
14	<u>§ 578(a)(2) and (3);</u>
15	(B) the development of a three-year plan and associated proposed
16	budget by the default delivery agent to be informed by the final results of the
17	Department's potential study. The default delivery agent may propose a
18	portion of its budget towards promotion and market uplift, workforce
19	development, and trainings for clean heat measures; and
20	(C) opportunity for public participation.

1	(2) Once the Commission provides the default delivery agent with the
2	obligated parties' plan to meet the requirements, the default delivery agent
3	shall be granted the opportunity to amend its plan and budget before the
4	Commission.
5	(f) Compliance funds. All funds received from noncompliance payments
6	pursuant to subdivision 8124(f)(2) of this title shall be used by the default
7	delivery agent to provide clean heat measures to customers with low income.
8	(g) Specific programs. The default delivery agent shall create specific
9	programs for multiunit dwellings, condominiums, rental properties,
10	commercial and industrial buildings, and manufactured homes.
11	<u>§ 8126. RULEMAKING</u>
12	(a) The Commission shall adopt rules and may issue orders to implement
13	and enforce the Clean Heat Standard program.
14	(b) The requirements to adopt rules and any requirements regarding the
15	need for legislative approval before any part of the Clean Heat Standard goes
16	into effect do not in any way impair the Commission's authority to issue orders
17	or take any other actions, both before and after final rules take effect, to
18	implement and enforce the Clean Heat Standard.
19	(c) The Commission's rules may include a provision that allows the
20	Commission to revise its Clean Heat Standard rules by order of the

1	Commission without the revisions being subject to the rulemaking
2	requirements of the 3 V.S.A. chapter 25, provided the Commission:
3	(1) provides notice of any proposed changes;
4	(2) allows for a 30-day comment period;
5	(3) responds to all comments received on the proposed change;
6	(4) provides a notice of language assistance services on all public
7	outreach materials; and
8	(5) arranges for language assistance to be provided to members of the
9	public as requested using professional language services companies.
10	(d) Any order issued under this chapter shall be subject to appeal to the
11	Vermont Supreme Court under section 12 of this title, and the Commission
12	must immediately file any orders, a redline, and clean version of the revised
13	rules with the Secretary of State, with notice simultaneously provided to the
14	House Committee on Environment and Energy and the Senate Committees on
15	Finance and on Natural Resources and Energy.
16	<u>§ 8127. TRADEABLE CLEAN HEAT CREDITS</u>
17	(a) Credits established. By rule or order, the Commission shall establish or
18	adopt a system of tradeable clean heat credits that are earned by reducing
19	greenhouse gas emissions through the delivery of clean heat measures. While
20	credit denominations may be in simple terms for public understanding and ease
21	of use, the underlying value shall be based on units of carbon dioxide

1	equivalent (CO2e). The system shall provide a process for the recognition,
2	approval, and monitoring of the clean heat credits. The Department of Public
3	Service shall perform the verification of clean heat credit claims and submit
4	results of the verification and evaluation to the Commission annually.
5	(b) Credit ownership. The Commission, in consultation with the Technical
6	Advisory Group, shall establish a standard methodology for determining what
7	party or parties shall be the owner of a clean heat credit upon its creation. The
8	owner or owners may transfer those credits to a third party or to an obligated
9	<u>party.</u>
10	(c) Credit values. Clean heat credits shall be based on the accurate and
11	verifiable lifecycle CO2e emission reductions in Vermont's thermal sector that
12	result from the delivery of eligible clean heat measures to existing or new end-
13	use customer locations into or in Vermont.
14	(1) For clean heat measures that are installed, credits will be created for
15	each year of the expected life of the installed measure. The annual value of the
16	clean heat credits for installed measures in each year shall be equal to the
17	lifecycle CO2e emissions of the fuel use that is avoided in a given year
18	because of the installation of the measure, minus the lifecycle emissions of the
19	fuel that is used instead in that year.
20	(2) For clean heat measures that are fuels, clean heat credits will be
21	created only for the year the fuel is delivered to the end-use customer. The

1	value of the clean heat credits for fuels shall be the lifecycle CO2e emissions
2	of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel
3	that is used instead.
4	(d) List of eligible measures. Eligible clean heat measures delivered to or
5	installed in residential, commercial, and industrial buildings in Vermont shall
6	include:
7	(1) thermal energy efficiency improvements and weatherization;
8	(2) cold-climate air, ground source, and other heat pumps, including
9	district, network, grid, microgrid, and building geothermal systems;
10	(3) heat pump water heaters;
11	(4) utility-controlled electric water heaters;
12	(5) solar hot water systems;
13	(6) electric appliances providing thermal end uses;
14	(7) advanced wood heating;
15	(8) noncombustion or renewable energy-based district heating services;
16	(9) the supply of sustainably sourced biofuels;
17	(10) the supply of green hydrogen;
18	(11) the replacement of a manufactured home with a high efficiency
19	manufactured home; and
20	(12) line extensions that connect facilities with thermal loads to the grid.

1	(e) Renewable natural gas. For pipeline renewable natural gas and other
2	renewably generated natural gas substitutes to be eligible, an obligated party
3	shall purchase renewable natural gas and its associated renewable attributes
4	and demonstrate that it has secured a contractual pathway for the physical
5	delivery of the gas from the point of injection into the pipeline to the obligated
6	party's delivery system.
7	(f) Carbon intensity of fuels.
8	(1) To be eligible as a clean heat measure, a liquid or gaseous clean heat
9	measure shall have a carbon intensity value as follows:
10	(A) below 80 in 2025;
11	(B) below 60 in 2030; and
12	(C) below 20 in 2050, provided the Commission may allow liquid
13	and gaseous clean heat measures with a carbon intensity value greater than 20
14	if excluding them would be impracticable based on the characteristics of
15	Vermont's buildings, the workforce available in Vermont to deliver lower
16	carbon intensity clean heat measures, cost, or the effective administration of
17	the Clean Heat Standard.
18	(2) The Commission shall establish and publish the rate at which carbon
19	intensity values shall decrease annually for liquid and gaseous clean heat
20	measures consistent with subdivision (1) of this subsection as follows:
21	(A) on or before January 1, 2025 for 2025 to 2030; and

1	(B) on or before January 1, 2030 for 2031 to 2050.
2	(3) For the purpose of this section, the carbon intensity values shall be
3	understood relative to No. 2 fuel oil delivered into or in Vermont in 2023
4	having a carbon intensity value of 100. Carbon intensity values shall be
5	measured based on fuel pathways.
6	(g) Emissions schedule.
7	(1) To promote certainty for obligated parties and clean heat providers,
8	the Commission shall, by rule or order, establish a schedule of lifecycle
9	emission rates for heating fuels and any fuel that is used in a clean heat
10	measure, including electricity, or is itself a clean heat measure, including
11	biofuels. The schedule shall be based on transparent, verifiable, and accurate
12	emissions accounting adapting the Argonne National Laboratory GREET
13	Model, Intergovernmental Panel on Climate Change (IPCC) modeling, or an
14	alternative of comparable analytical rigor to fit the Vermont thermal sector
15	context, and the requirements of 10 V.S.A. § 578(a)(2) and (3).
16	(2) For each fuel pathway, the schedule shall account for greenhouse gas
17	emissions from biogenic and geologic sources, including fugitive emissions
18	and loss of stored carbon. In determining the baseline emission rates for clean
19	heat measures that are fuels, emissions baselines shall fully account for
20	methane emissions reductions or captures already occurring, or expected to
21	occur, for each fuel pathway as a result of local, State, or federal legal

1	requirements that have been enacted or adopted that reduce greenhouse gas
2	emissions.
3	(3) The schedule may be amended based upon changes in technology or
4	evidence on emissions, but clean heat credits previously awarded or already
5	under contract to be produced shall not be adjusted retroactively.
6	(h) Review of consequences. The Commission shall biennially assess
7	harmful consequences that may arise in Vermont or elsewhere from the
8	implementation of specific types of clean heat measures and shall set standards
9	or limits to prevent those consequences. Such consequences shall include
10	environmental burdens as defined in 3 V.S.A. § 6002, public health,
11	deforestation or forest degradation, conversion of grasslands, increased
12	emissions of criteria pollutants, damage to watersheds, or the creation of new
13	methane to meet fuel demand.
14	(i) Time stamp. Clean heat credits shall be "time stamped" for the year in
15	which the clean heat measure delivered emission reductions. For each
16	subsequent year during which the measure produces emission reductions,
17	credits shall be generated for that year. Only clean heat credits that have not
18	been retired shall be eligible to satisfy the current year obligation.
19	(j) Delivery in Vermont. Clean heat credits shall be earned only in
20	proportion to the deemed or measured thermal sector greenhouse gas emission

1	reductions achieved by a clean heat measure delivered in Vermont. Other
2	emissions offsets, wherever located, shall not be eligible measures.
3	(k) Credit eligibility.
4	(1) All eligible clean heat measures that are delivered in Vermont
5	beginning on January 1, 2023 shall be eligible for clean heat credits and may
6	be retired and count towards an obligated party's emission reduction
7	obligations, regardless of who creates or delivers them and regardless of
8	whether their creation or delivery was required or funded in whole or in part by
9	other federal or State policies and programs. This includes individual
10	initiatives, emission reductions resulting from the State's energy efficiency
11	programs, the low-income weatherization program, and the Renewable Energy
12	Standard Tier 3 program. Clean heat measures delivered or installed pursuant
13	to any local, State, or federal program or policy may count both towards goals
14	or requirements of such programs and policies and be eligible clean heat
15	measures that count towards the emission reduction obligations of this chapter.
16	(2) The owner or owners of a clean heat credit are not required to sell
17	the credit.
18	(3) Regardless of the programs or pathways contributing to clean heat
19	credits being earned, an individual credit may be counted only once towards
20	satisfying an obligated party's emission reduction obligation.
21	(1) Credit registration.

1	(1) The Commission shall create an administrative system to register,
2	sell, transfer, and trade credits to obligated parties. The Commission may hire
3	a third-party consultant to evaluate, develop, implement, maintain, and support
4	a database or other means for tracking clean heat credits and compliance with
5	the annual requirements of obligated parties.
6	(2) The system shall require entities to submit the following information
7	to receive the credit: the location of the clean heat measure, whether the
8	customer or tenant has a low or moderate income, the type of property where
9	the clean heat measure was installed or sold, the type of clean heat measure,
10	and any other information as required by the Commission. Customer income
11	data collected shall be kept confidential by the Commission, the Department of
12	Public Service, the obligated parties, and any entity that delivers clean heat
13	measures.
14	(m) Greenhouse Gas Emissions Inventory and Forecast. Nothing in this
15	chapter shall limit the authority of the Secretary of Natural Resources to
16	compile and publish the Vermont Greenhouse Gas Emissions Inventory and
17	Forecast in accordance with 10 V.S.A. § 582.
18	<u>§ 8128. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP</u>
19	(a) The Commission shall establish the Clean Heat Standard Technical
20	Advisory Group (TAG) to assist the Commission in the ongoing management
21	of the Clean Heat Standard. Its duties shall include:

1	(1) establishing and revising the lifecycle carbon dioxide equivalent
2	(CO2e) emissions accounting methodology to be used to determine each
3	obligated party's annual requirement pursuant to subdivision 8124(a)(2) of this
4	chapter;
5	(2) establishing and revising the clean heat credit value for different
6	<u>clean heat measures;</u>
7	(3) periodically assessing and reporting to the Commission on the
8	sustainability of the production of clean heat measures by considering factors
9	including greenhouse gas emissions; carbon sequestration and storage; human
10	health impacts; land use changes; ecological and biodiversity impacts;
11	groundwater and surface water impacts; air, water, and soil pollution; and
12	impacts on food costs;
13	(4) setting the expected life length of clean heat measures for the
14	purpose of calculating credit amounts;
15	(5) establishing credit values for each year over a clean heat measure's
16	expected life, including adjustments to account for increasing interactions
17	between clean heat measures over time so as to not double-count emission
18	reductions;
19	(6) facilitating the program's coordination with other energy programs;

1	(7) calculating the impact of the cost of clean heat credits and the cost
2	savings associated with delivered clean heat measures on per-unit heating fuel
3	prices;
4	(8) calculating the savings associated with public health benefits due to
5	clean heat measures;
6	(9) coordinating with the Agency of Natural Resources to ensure that
7	greenhouse gas emissions reductions achieved in another sector through the
8	implementation of the Clean Heat Standard are not double-counted in the
9	Vermont Greenhouse Gas Emissions Inventory and Forecast;
10	(10) advising the Commission on the periodic assessment and revision
11	requirement established in subdivision 8124(a)(3) of this chapter; and
12	(11) any other matters referred to the TAG by the Commission.
13	(b) Members of the TAG shall be appointed by the Commission and shall
14	include the Department of Public Service, the Agency of Natural Resources,
15	the Department of Health, and parties who have, or whose representatives
16	have, expertise in one or more of the following areas: technical and analytical
17	expertise in measuring lifecycle greenhouse gas emissions, energy modeling
18	and data analysis, clean heat measures and energy technologies, sustainability
19	and non-greenhouse gas emissions strategies designed to reduce and avoid
20	impacts to the environment, mitigating environmental burdens as defined in 3
21	V.S.A. § 6002, public health impacts of air quality and climate change,

1	delivery of heating fuels, land use changes, deforestation and forest
2	degradation, and climate change mitigation policy and law. The Commission
3	shall accept and review motions to join the TAG from interested parties who
4	have, or whose representatives have, expertise in one or more of the areas
5	listed in this subsection. Members who are not otherwise compensated by their
6	employer shall be entitled to per diem compensation and reimbursement for
7	expenses under 32 V.S.A. § 1010.
8	(c) The Commission shall hire a third-party consultant responsible for
9	developing clean heat measure characterizations and relevant assumptions,
10	including CO2e lifecycle emissions analyses. The TAG shall provide input
11	and feedback on the consultant's work. The Commission may use
12	appropriated funds to hire the consultant.
13	(d) Emission analyses and associated assumptions developed by the
14	consultant shall be reviewed and approved annually by the Commission. In
15	reviewing the consultant's work, the Commission shall provide a public
16	comment period on the work. The Commission may approve or adjust the
17	consultant's work as it deems necessary based on its review and the public
18	comments received.
19	<u>§ 8129. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP</u>
20	(a) The Commission shall establish the Clean Heat Standard Equity
21	Advisory Group to assist the Commission in developing and implementing the

1	Clean Heat Standard in a manner that ensures an equitable share of clean heat
2	measures are delivered to Vermonters with low income and moderate income
3	and that Vermonters with low income and moderate income who are not early
4	participants in clean heat measures are not negatively impacted in their ability
5	to afford heating fuel. Its duties shall include:
6	(1) providing feedback to the Commission on strategies for engaging
7	Vermonters with low income and moderate income in the public process for
8	developing the Clean Heat Standard program;
9	(2) supporting the Commission in assessing whether customers are
10	equitably served by clean heat measures and how to increase equity;
11	(3) identifying actions needed to provide customers with low income
12	and moderate income with better service and to mitigate the fuel price impacts
13	calculated in section 8128 of this title;
14	(4) recommending any additional programs, incentives, or funding
15	needed to support customers with low income and moderate income and
16	organizations that provide social services to Vermonters in affording heating
17	fuel and other heating expenses;
18	(5) providing feedback to the Commission on the impact of the Clean
19	Heat Standard on the experience of Vermonters with low income and moderate
20	income; and

1	(6) 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; rental property owners; the Vermont Housing Finance Agency; and a
11	member of the Vermont Fuel Dealers Association. Members who are not
12	otherwise compensated by their employer shall be entitled to per diem
13	compensation and reimbursement for expenses under 32 V.S.A. § 1010.
14	(c) The Equity Advisory Group shall cease to exist when the initial Clean
15	Heat Standard rules are adopted. Thereafter, the issues described in subsection
16	(a) of this section shall be reviewed by the Commission, in compliance with 3
17	V.S.A. chapter 72.
18	<u>§ 8130. SEVERABILITY</u>
19	If any provision of this chapter or its application to any person or
20	circumstance is held invalid or in violation of the Constitution or laws of the
21	United States or in violation of the Constitution or laws of Vermont, the

1	invalidity or the violation shall not affect other provisions of this chapter that
2	can be given effect without the invalid provision or application, and to this end,
3	the provisions of this chapter are severable.
4	<u>§ 8131. RULEMAKING AUTHORITY</u>
5	Notwithstanding any other provision of law to the contrary, the Commission
6	shall not file proposed rules with the Secretary of State implementing the
7	Clean Heat Standard without specific authorization enacted by the General
8	Assembly.
9	Sec. 4. 10 V.S.A. § 582 is amended to read:
10	§ 582. GREENHOUSE GAS INVENTORIES; REGISTRY
11	(a) Inventory and forecasting. The Secretary shall work, in conjunction
12	with other states or a regional consortium, to establish a periodic and consistent
13	inventory of greenhouse gas emissions. The Secretary shall publish the
14	Vermont Greenhouse Gas Emission Inventory and Forecast by no not later
15	than June 1, 2010, and updates shall be published annually until 2028, until a
16	regional or national inventory and registry program is established in which
17	Vermont participates, or until the federal National Emissions Inventory
18	includes mandatory greenhouse gas reporting. The Secretary of Natural
19	Resources shall include a supplemental accounting in the Vermont Greenhouse
20	Gas Emissions Inventory and Forecast that measures the upstream and

1	lifecycle greenhouse gas emissions of liquid, gaseous, solid geologic and
2	biogenic fuels combusted in Vermont.
3	* * *
4	Sec. 5. CONFIDENTIALITY OF FUEL TAX RETURNS; 2024
5	(a) Notwithstanding 32 V.S.A. § 3102(a), from January 1, 2024 until
6	December 31, 2024, the Commissioner of Taxes shall disclose to the Public
7	Utility Commission and the Department of Public Service a return or return
8	information related to the fuel tax imposed under 33 V.S.A. § 2503, provided
9	the return or return information provided is necessary to verify the identity,
10	fuel tax liability, and registration status of an entity that sells heating fuel into
11	Vermont for purposes of administering the Clean Heat Standard established in
12	<u>30 V.S.A. chapter 94.</u>
13	(b) Pursuant to 32 V.S.A. § 3102(h), the person or persons receiving return
14	or return information under this section shall be subject to the penalty
15	provisions of 32 V.S.A. § 3102(a) for unauthorized disclosure of return or
16	return information as if such person were the agent of the Commissioner.
17	Pursuant to 32 V.S.A. § 3102(g), nothing in this section shall be construed to
18	prohibit the publication of statistical information, rulings, determinations,
19	reports, opinions, policies, or other information, provided the data is disclosed
20	in a form that cannot identify or be associated with a particular person.

1	(c) Pursuant to 1 V.S.A. § 317(c)(6), a fuel tax return and related
2	documents, correspondence, and certain types of substantiating forms that
3	include the same type of information as in the tax return itself filed with or
4	maintained by the Vermont Department of Taxes disclosed to the Public Utility
5	Commission and the Department of Public Service under this section shall be
6	exempt from public inspection and copying.
7	Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION
8	(a) Commencement. On or before August 31, 2023, the Public Utility
9	Commission shall commence a proceeding to implement Sec. 3 (Clean Heat
10	Standard) of this act.
11	(b) Facilitator. The Commission shall hire a third-party consultant with
12	expertise in equity, justice, and diversity to design and conduct public
13	engagement. The Commission and the facilitator shall incorporate the Guiding
14	Principles for a Just Transition into the public engagement process. The
15	Commission may use funds appropriated under this act on hiring the
16	consultant. Public engagement shall be conducted by the facilitator for the
17	purposes of:
18	(1) supporting the Commission in assessing whether customers will be
19	equitably served by clean heat measures and how to increase equity in the
20	delivery of clean heat measures;

1	(2) identifying actions needed to provide customers with low income
2	and moderate income with better service and to mitigate the fuel price impacts
3	calculated in 30 V.S.A. § 8128;
4	(3) recommending any additional programs, incentives, or funding
5	needed to support customers with low income and moderate income and
6	organizations that provide social services to Vermonters in affording heating
7	fuel and other heating expenses; and
8	(4) providing information to the Commission on the challenges renters
9	face in equitably accessing clean heat measures and recommendations to
10	ensure that renters have equitable access to clean heat measures.
11	(c) Public engagement process. Before commencing rulemaking, the
12	Commission shall use the forms of public engagement described in this
13	subsection to inform the design and implementation of the Clean Heat
14	Standard. Any failure by the Commission to meet the specific procedural
15	requirements of this section shall not affect the validity of the Commission's
16	actions.
17	(1) The Commission shall allow any person to register at any time in the
18	Commission's online case management system, ePUC, as a participant in the
19	Clean Heat Standard proceeding. All members of the Equity Advisory Group
20	shall be made automatic participants to that proceeding. All registered
21	participants in the proceeding, including all members of the Equity Advisory

1	Group, shall receive all notices of public meetings and all notices of
2	opportunities to comment in that proceeding.
3	(2) The Commission shall hold at least six public hearings or workshops
4	that shall be recorded and publicly posted on the Commission's website or on
5	ePUC. These meetings shall be open to everyone, including all stakeholders,
6	members of the public, and all other potentially affected parties, with
7	translation services available to those attending.
8	(3) The Commission also shall provide at least three opportunities for
9	the submission of written comments. Any person may submit written
10	comments to the Commission.
11	(d) Advertising. The Commission shall use funding appropriated in this act
12	on advertising the public meetings in order to provide notice to a wide variety
13	of segments of the public. All advertisements of public meetings shall include
14	a notice of language assistance services. The Commission shall arrange for
15	language assistance to be provided to members of the public as requested using
16	the services of professional language services companies.
17	(e) Draft proposed rules. The Commission shall publish draft proposed
18	rules publicly and provide notice of them through the Commission's online
19	case management system, ePUC, to the stakeholders in this rulemaking who
20	registered their names and e-mail addresses with the Commission through
21	ePUC. The Commission shall provide a 30-day comment period on the draft

1	and accept written comments from the public and stakeholders. The
2	Commission shall consider changes in response to the public comments before
3	filing the proposed rules with the Secretary of State and the Legislative
4	Committee on Administrative Rules.
5	(f) Final rules.
6	(1) On or before January 15, 2025, the Commission shall submit to the
7	General Assembly final proposed rules to implement the Clean Heat Standard.
8	The Commission shall not file the final proposed rules with the Secretary of
9	State until specific authorization is enacted by the General Assembly to do so.
10	(2) Notwithstanding 3 V.S.A. §§ 820, 831, 836–840, and 841(a), upon
11	affirmative authorization enacted by the General Assembly authorizing the
12	adoption of rules implementing the Clean Heat Standard, the Commission shall
13	file, as the final proposed rule, the rules implementing the Clean Heat Standard
14	approved by the General Assembly with the Secretary of State and Legislative
15	Committee on Administrative Rules pursuant to 3 V.S.A. § 841. The filing
16	shall include everything that is required under 3 V.S.A. §§ 838(a)(1)–(5), (8)–
17	(13), (15), and (16), (b), (c), and 841(b)(1).
18	(3) The review, adoption, and effect of the rules implementing the Clean
19	Heat Standard shall be governed by 3 V.S.A. §§ 841(c); 842, exclusive of
20	subdivision (b)(4); 843; 845; and 846, exclusive of subdivision (a)(3).

1	(4) Once adopted and effective, any amendments to the rules
2	implementing the Clean Heat Standard shall be made in accordance with the
3	Administrative Procedure Act, 3 V.S.A. chapter 25, unless the adopted rules
4	allow for amendments through a different process in accordance with
5	<u>30 V.S.A. § 8126(c) and (d).</u>
6	(g) Consultant. The Commission may contract with a consultant to assist
7	with implementation of 30 V.S.A. § 8127 (clean heat credits).
8	(h) Funding. On or before February 15, 2024, the Commission shall report
9	to the General Assembly on suggested revenue streams that may be used or
10	created to fund the Commission's administration of the Clean Heat Standard
11	program and shall include programs to support market transformation such as
12	workforce development, market uplift, and training that may be administered
13	by a third party.
14	(i) Check-back reports. On or before February 15, 2024 and January 15,
15	2025, the Commission shall submit a written report to and be available to
16	provide oral testimony to the House Committee on Environment and Energy
17	and the Senate Committees on Finance and on Natural Resources and Energy
18	detailing the efforts undertaken to establish the Clean Heat Standard. The
19	reports shall include, to the extent available, estimates of the impact of the
20	Clean Heat Standard on customers, including impacts to customer rates and
21	fuel bills for participating and nonparticipating customers, net impacts on total

1	spending on energy for thermal sector end uses, fossil fuel reductions,
2	greenhouse gas emission reductions, and, if possible, impacts on economic
3	activity and employment. The modeled impacts shall estimate high-, medium-,
4	and low-price impacts. The reports shall recommend any legislative action
5	needed to address enforcement or other aspects of the Clean Heat Standard,
6	including how to ensure fuel use that occurs outside the thermal sector is not
7	impacted under the program.
8	(j) Assistance. The Agency of Commerce and Community Development,
9	the Department of Public Service, and other State agencies and departments
10	shall assist the Commission with economic modeling for the required reports
11	and rulemaking process.
12	Sec. 7. PUBLIC UTILITY COMMISSION AND DEPARTMENT OF
13	PUBLIC SERVICE POSITIONS; APPROPRIATION
14	(a) The following new positions are created in the Public Utility
15	Commission for the purpose of carrying out this act:
16	(1) one permanent exempt Staff Attorney;
17	(2) one permanent exempt Analyst; and
18	(3) one limited-service exempt Analyst.
19	(b) The sum of \$825,000.00 is appropriated to the Public Utility
20	Commission from the General Fund in fiscal year 2024 for the positions
21	established in subsection (a) of this section; for all consultants required by this

1	act; and for additional operating costs required to implement the Clean Heat
2	Standard, including marketing and public outreach for Sec. 6 of this act.
3	(c) The following new positions are created in the Department of Public
4	Service for the purpose of carrying out this act:
5	(1) one permanent exempt Staff Attorney; and
6	(2) two permanent classified Program Analysts.
7	(d) The sum of \$900,000.00 is appropriated to the Department of Public
8	Service from the General Fund in fiscal year 2024 for the positions established
9	in subsection (c) of this section, to retain consultants that may be required to
10	support verification and evaluation required by 30 V.S.A. § 8127(a), for
11	conducting the potential study, and for associated operating costs related to the
12	implementation of the Clean Heat Standard.
13	Sec. 8. EFFECTIVE DATE
14	This act shall take effect on passage.
15	
16	
17	
18	(Committee vote:)
19	
20	Representative
21	FOR THE COMMITTEE

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