1	S.5
2 3 4	An act relating to affordably meeting the mandated greenhouse gas reductions for the thermal sector through efficiency, weatherization measures, electrification, and decarbonization
5	It is hereby enacted by the General Assembly of the State of Vermont:
6	Sec. 1. SHORT TITLE
7	This act shall be known and may be cited as the "Affordable Heat Act."
8	Sec. 2. FINDINGS
9	The General Assembly finds:
10	(1) All of the legislative findings made in 2020 Acts and Resolves
11	No. 153, Sec. 2, the Vermont Global Warming Solutions Act of 2020
12	(GWSA), remain true and are incorporated by reference here.
13	(2) Under the GWSA and 10 V.S.A. § 578, Vermont has a legal
14	obligation to reduce greenhouse gas emissions to specific levels by 2025, 2030
15	and 2050.
16	(3) The Vermont Climate Council was established under the GWSA and
17	was tasked with, among other things, recommending necessary legislation to
18	reduce greenhouse gas emissions. The Initial Vermont Climate Action Plan
19	calls for the General Assembly to adopt legislation authorizing the Public
20	Utility Commission to administer the Clean Heat Standard consistent with the
21	recommendations of the Energy Action Network's Clean Heat Standard
22	Working Group.

1	(4) As required by the GWSA, the Vermont Climate Council published
2	the Initial Vermont Climate Action Plan on December 1, 2021. As noted in
3	that plan, over one-third of Vermont's greenhouse gas emissions in 2018 came
4	from the thermal sector. In that year, approximately 72 percent of Vermont's
5	thermal energy use was fossil based, including 29 percent from the burning of
6	heating oil, 24 percent from fossil gas, and 19 percent from propane.
7	(5) To meet the greenhouse gas emission reductions required by the
8	GWSA, Vermont needs to transition away from its current carbon-intensive
9	building heating practices to lower-carbon alternatives. It also needs to do this
10	equitably, recognizing economic effects on energy users, especially energy-
11	burdened users; on the workforce currently providing these services; and on
12	the overall economy.
13	(6) Vermonters have an unprecedented opportunity to invest in eligible
14	clean heat measures with funding from new federal laws including the
15	Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act
16	<u>of 2022.</u>
17	Sec. 3. 30 V.S.A. chapter 94 is added to read:
18	CHAPTER 94. CLEAN HEAT STANDARD
19	<u>§ 8121. INTENT</u>
20	Pursuant to 2 V.S.A. § 205(a), it is the intent of the General Assembly that
21	the Clean Heat Standard be designed and implemented in a manner that

1	achieves Vermont's thermal sector greenhouse gas emissions reductions
2	necessary to meet the requirements of 10 V.S.A. § 578(a)(2) and (3),
3	minimizes costs to customers, protects public health, and recognizes that
4	affordable heating is essential for Vermonters. It shall enhance social equity
5	by prioritizing customers with low income and moderate income and those
6	households with the highest energy burdens. The Clean Heat Standard shall, to
7	the greatest extent possible, maximize the use of available federal funds to
8	deliver clean heat measures.
9	§ 8122. CLEAN HEAT STANDARD
10	(a) The Clean Heat Standard is established. Under this program, obligated
11	parties shall reduce greenhouse gas emissions attributable to the Vermont
12	thermal sector by retiring required amounts of clean heat credits to meet the
13	thermal sector portion of the greenhouse gas emission reduction obligations of
14	the Global Warming Solutions Act.
15	(b) By rule or order, the Commission shall establish or adopt a system of
16	tradeable clean heat credits earned from the delivery of clean heat measures
17	that reduce greenhouse gas emissions.
18	(c) An obligated party shall obtain the required amount of clean heat credits
19	through delivery of eligible clean heat measures by a default delivery agent,
20	unless the obligated party receives prior approval from the Commission to use
21	another method as described in section 8125 of this title.

1	(d) The Commission shall adopt rules and may issue orders to implement
2	and enforce the Clean Heat Standard program.
3	§ 8123. DEFINITIONS
4	As used in this chapter:
5	(1) "Carbon intensity value" means the amount of lifecycle greenhouse
6	gas emissions per unit of energy of fuel expressed in grams of carbon dioxide
7	equivalent per megajoule (gCO2e/MJ).
8	(2) "Clean heat credit" means a tradeable, nontangible commodity that
9	represents the amount of greenhouse gas reduction attributable to a clean heat
10	measure. The Commission shall establish a system of management for clean
11	heat credits pursuant to this chapter.
12	(3) "Clean heat measure" means fuel delivered and technologies
13	installed to end-use customers in Vermont that reduce greenhouse gas
14	emissions from the thermal sector. Clean heat measures shall not include
15	switching from one fossil fuel use to another fossil fuel use. The Commission
16	may adopt a list of acceptable actions that qualify as clean heat measures.
17	(4) "Commission" means the Public Utility Commission.
18	(5) "Customer with low income" means a customer with a household
19	income of up to 60 percent of the area or statewide median income, whichever
20	is greater, as published annually by the U.S. Department of Housing and Urbar

1	Development or a customer who qualifies for a government-sponsored, low-
2	income energy subsidy.
3	(6) "Customer with moderate income" means a customer with a
4	household income between 60 percent and 120 percent of the area or statewide
5	median income, whichever is greater, as published annually by the U.S.
6	Department of Housing and Urban Development.
7	(7) "Default delivery agent" means an entity designated by the
8	Commission to provide services that generate clean heat measures.
9	(8) "Energy burden" means the annual spending on thermal energy as a
10	percentage of household income.
11	(9) "Entity" means any individual, trustee, agency, partnership,
12	association, corporation, company, municipality, political subdivision, or any
13	other form of organization.
14	(10) "Fuel pathway" means a detailed description of all stages of fuel
15	production and use for any particular fuel, including feedstock generation or
16	extraction, production, transportation, distribution, and combustion of the fuel
17	by the consumer. The fuel pathway is used in the calculation of the carbon
18	intensity value and lifecycle greenhouse gas emissions of each fuel.
19	(11) "Heating fuel" means fossil-based heating fuel, including oil,
20	propane, natural gas, coal, and kerosene.
21	(12) "Obligated party" means:

1	(A) A regulated natural gas utility serving customers in Vermont.
2	(B) For other heating fuels, the entity that imports heating fuel for
3	ultimate consumption within the State, or the entity that produces, refines,
4	manufactures, or compounds heating fuel within the State for ultimate
5	consumption within the State. For the purpose of this section, the entity that
6	imports heating fuel is the entity that has ownership title to the heating fuel at
7	the time it is brought into Vermont.
8	(13) "Thermal sector" has the same meaning as the "Residential,
9	Commercial and Industrial Fuel Use" sector as used in the Vermont
10	Greenhouse Gas Emissions Inventory and Forecast and does not include
11	nonroad diesel or any other transportation or other fuel use categorized
12	elsewhere in the Vermont Greenhouse Gas Emissions Inventory and Forecast.
13	§ 8124. CLEAN HEAT STANDARD COMPLIANCE
14	(a) Required amounts.
15	(1) The Commission shall establish the number of clean heat credits that
16	each obligated party is required to retire each calendar year. The size of the
17	annual requirement shall be set at a pace sufficient for Vermont's thermal
18	sector to achieve lifecycle carbon dioxide equivalent (CO2e) emission
19	reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3)
20	expressed as lifecycle greenhouse gas emissions pursuant to subsection
21	8127(g) of this title.

1	(2) Annual requirements shall be expressed as a percent of each
2	obligated party's contribution to the thermal sector's lifecycle CO2e emissions
3	in the previous year. The annual percentage reduction shall be the same for all
4	obligated parties. To ensure understanding among obligated parties, the
5	Commission shall publicly provide a description of the annual requirements in
6	plain terms.
7	(3) To support the ability of the obligated parties to plan for the future,
8	the Commission shall establish and update annual clean heat credit
9	requirements for the next 10 years. Every three years, the Commission shall
10	extend the requirements three years; shall assess emission reductions actually
11	achieved in the thermal sector; and, if necessary, revise the pace of clean heat
12	credit requirements for future years to ensure that the thermal sector portion of
13	the emission reduction requirements of 10 V.S.A. § 578(a)(2) and (3) for 2030
14	and 2050 will be achieved.
15	(4) The Commission may temporarily, for a period not to exceed 36
16	months, adjust the annual requirements for good cause after notice and
17	opportunity for public process. Good cause may include a shortage of clean
18	heat credits, market conditions as identified by the Department's potential
19	study conducted pursuant to section 8125 of this title, or undue adverse
20	financial impacts on particular customers or demographic segments. The
21	Commission shall ensure that any downward adjustment has the minimum

1	impact possible on the State's ability to comply with the thermal sector portion
2	of the requirements of 10 V.S.A. § 578(a)(2) and (3).
3	(b) Annual registration.
4	(1) Each entity that sells heating fuel into or in Vermont shall register
5	annually with the Commission by an annual deadline established by the
6	Commission. The first registration deadline is January 31, 2024, and the
7	annual deadline shall remain January 31 of each year unless a different
8	deadline is established by the Commission. The form and information required
9	in the registration shall be determined by the Commission and shall include all
10	data necessary to establish annual requirements under this chapter. The
11	Commission shall use the information provided in the registration to determine
12	whether the entity shall be considered an obligated party and the amount of its
13	annual requirement.
14	(2) At a minimum, the Commission shall require registration
15	information to include legal name; doing business as name, if applicable;
16	municipality; state; types of heating fuel sold; and the exact amount of gallons
17	of each type of heating fuels sold into or in the State for final sale or
18	consumption in the State in the calendar year immediately preceding the
19	calendar year in which the entity is registering with the Commission, separated
20	by type, that was purchased by the submitting entity and the name and location
21	of the entity from which it was purchased.

1	(3) Each year, and not later than 30 days following the annual
2	registration deadline established by the Commission, the Commission shall
3	share complete registration information of obligated parties with the Agency of
4	Natural Resources and the Department of Public Service for purposes of
5	updating the Vermont Greenhouse Gas Emissions Inventory and Forecast and
6	meeting the requirements of 10 V.S.A. § 591(b)(3).
7	(4) The Commission shall maintain, and update annually, a list of
8	registered entities on its website that contains the required registration
9	information.
10	(5) For any entity not registered on or before January 31, 2024, the first
11	registration form shall be due 30 days after the first sale of heating fuel to a
12	location in Vermont.
13	(6) Clean heat requirements shall transfer to entities that acquire an
14	obligated party.
15	(7) Entities that cease to operate shall retain their clean heat requirement
16	for their final year of operation.
17	(c) Early action credits. Beginning on January 1, 2023, clean heat
18	measures that are installed and provide emission reductions are creditable.
19	Upon the establishment of the clean heat credit system, entities may register
20	credits for actions taken starting in 2023.
21	(d) Equitable distribution of clean heat measures.

1	(1) The Clean Heat Standard shall be designed and implemented to
2	enhance social equity by prioritizing customers with low income, moderate
3	income, those households with the highest energy burdens, residents of
4	manufactured homes, and renter households with tenant-paid energy bills. The
5	design shall ensure all customers have an equitable opportunity to participate
6	in, and benefit from, clean heat measures regardless of heating fuel used,
7	income level, geographic location, residential building type, or homeownership
8	status.
9	(2) Of their annual requirement, each obligated party shall retire at least
10	16 percent from customers with low income and an additional 16 percent from
11	customers with low or moderate income. For each of these groups, at least
12	one-half of these credits shall be from installed clean heat measures that
13	require capital investments in homes, have measure lives of 10 years or more,
14	and are estimated by the Technical Advisory Group to lower annual energy
15	bills. Examples shall include weatherization improvements and installation of
16	heat pumps, heat pump water heaters, and advanced wood heating systems.
17	The Commission may identify additional measures that qualify as installed
18	measures.
19	(3) The Commission shall, to the extent reasonably possible, frontload
20	the credit requirements for customers with low income and moderate income

1	so that the greatest proportion of clean heat measures reach Vermonters with
2	low income and moderate income in the earlier years.
3	(4) With consideration to how to best serve customers with low income
4	and moderate income, the Commission shall have authority to change the
5	percentages established in subdivision (2) of this subsection for good cause
6	after notice and opportunity for public process. Good cause may include a
7	shortage of clean heat credits or undue adverse financial impacts on particular
8	customers or demographic segments.
9	(5) In determining whether to exceed the minimum percentages of clean
10	heat measures that must be delivered to customers with low income and
11	moderate income, the Commission shall take into account participation in other
12	government-sponsored low-income and moderate-income weatherization
13	programs. Participation in other government-sponsored low-income and
14	moderate-income weatherization programs shall not limit the ability of those
15	households to participate in programs under this chapter.
16	(6) A clean heat measure delivered to a customer qualifying for a
17	government-sponsored, low-income energy subsidy shall qualify for clean heat
18	credits required by subdivision (2) of this subsection.
19	(7) Customer income data collected shall be kept confidential by the
20	Commission, the Department of Public Service, the obligated parties, and any
21	entity that delivers clean heat measures.

1	(e) Credit banking. The Commission shall allow an obligated party that
2	has met its annual requirement in a given year to retain clean heat credits in
3	excess of that amount for future sale or application to the obligated party's
4	annual requirements in future compliance periods, as determined by the
5	Commission.
6	(f) Enforcement.
7	(1) The Commission shall have the authority to enforce the requirements
8	of this chapter and any rules or orders adopted to implement the provisions of
9	this chapter. The Commission may use its existing authority under this title.
10	As part of an enforcement order, the Commission may order penalties and
11	injunctive relief.
12	(2) The Commission shall order an obligated party that fails to retire the
13	number of clean heat credits required in a given year, including the required
14	amounts from customers with low income and moderate income, to make a
15	noncompliance payment to the default delivery agent for the number of credits
16	deficient. The per-credit amount of the noncompliance payment shall be two
17	times the amount established by the Commission for timely per-credit
18	payments to the default delivery agent.
19	(3) However, the Commission may waive the noncompliance payment
20	required by subdivision (2) of this subsection for an obligated party if the
21	Commission:

1	(A) finds that the obligated party made a good faith effort to acquire
2	the required amount and its failure resulted from market factors beyond its
3	control; and
4	(B) directs the obligated party to add the number of credits deficient
5	to one or more future years.
6	(4) False or misleading statements or other representations made to the
7	Commission by obligated parties related to compliance with the Clean Heat
8	Standard are subject to the Commission's enforcement authority, including the
9	power to investigate and assess penalties, under this title.
10	(5) The Commission's enforcement authority does not in any way
11	impede the enforcement authority of other entities such as the Attorney
12	General's office.
13	(6) Failure to register with the Commission as required by this section is
14	a violation of the Consumer Protection Act in 9 V.S.A. chapter 63.
15	(g) Records. The Commission shall establish requirements for the types of
16	records to be submitted by obligated parties, a record retention schedule for
17	required records, and a process for verification of records and data submitted in
18	compliance with the requirements of this chapter.
19	(h) Reports.

1	(1) As used in this subsection, "standing committees" means the House
2	Committee on Environment and Energy and the Senate Committees on
3	Finance and on Natural Resources and Energy.
4	(2) After the adoption of the rules implementing this chapter, the
5	Commission shall submit a written report to the standing committees detailing
6	the efforts undertaken to establish the Clean Heat Standard pursuant to this
7	chapter.
8	(3) On or before January 15 of each year following the year in which the
9	rules are first adopted under this chapter, the Commission shall submit to the
10	standing committees a written report detailing the implementation and
11	operation of the Clean Heat Standard. This report shall include an assessment
12	on the equitable adoption of clean heat measures required by subsection (d) of
13	this section, along with recommendations to increase participation for the
14	households with the highest energy burdens. The provisions of 2 V.S.A.
15	§ 20(d) (expiration of required reports) shall not apply to the report to be made
16	under this subsection.
17	(i) LIHEAP pricing. The Margin Over Rack pricing program for fuel
18	assistance shall reflect the default delivery agent credit cost established by the
19	Commission.

§ 8125.	DEFAULT	DELIVERY	AGENT
S 0123.			TIOLIT

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3	programs, the Commission shall provide for the development and
4	implementation of statewide clean heat programs and measures by one or more
5	default delivery agents appointed by the Commission for these purposes. The
6	Commission may specify that appointment of a default delivery agent to
7	deliver clean heat services, on behalf of obligated entities who pay the per-
8	credit fee to the default delivery agent, satisfies those entities' corresponding
9	obligations under this chapter.
10	(b) Appointment. The default delivery agent shall be one or more
11	statewide entities capable of providing a variety of clean heat measures. The
12	Commission shall designate the first default delivery agent on or before June 1,
13	2024. The designation of an entity under this subsection may be by order of
14	appointment or contract. A designation, whether by order of appointment or
15	by contract, may only be issued after notice and opportunity for hearing. An
16	existing order of appointment issued by the Commission under section 209 of
17	this title may be amended to include the responsibilities of the default delivery
18	agent. An order of appointment shall be for a limited duration not to exceed
19	12 years, although an entity may be reappointed by order or contract. An order
20	of appointment may include any conditions and requirements that the
21	Commission deems appropriate to promote the public good. For good cause,

(a) Default delivery agent designated. In place of obligated-party specific

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

1	(1) An obligated party shall meet its annual requirement through a
2	designated default delivery agent appointed by the Commission. However, the
3	obligated party may seek to meet its requirement, in whole or in part, through
4	one or more of the following ways: by delivering eligible clean heat measures,
5	by contracting for delivery of eligible clean heat measures, or through the
6	market purchase of clean heat credits. An obligated party shall be approved by
7	the Commission to meet its annual requirement using a method other than the
8	default delivery agent if it provides sufficient details on the party's capacity
9	and resources to achieve the emissions reductions. This approval shall not be
10	unreasonably withheld.
11	(2) The Commission shall provide a form for an obligated party to
12	indicate how it intends to meet its requirement. The form shall require
13	sufficient information to determine the nature of the credits that the default
14	delivery agent will be responsible to deliver on behalf of the obligated party. If
15	the Commission approves of a plan for an obligated party to meet its obligation
16	through a mechanism other than payment to a designated default delivery
17	agent, then the Commission shall make such approvals known to the default
18	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 form. The default delivery agent's

1	schedule of costs shall include sufficient costs to deliver installed measures and
2	shall specify separately the costs to deliver measures to customers with low
3	income and customers with moderate income as required by subsection
4	8124(d) of this title. The Commission shall provide not less than 120 days'
5	notice of default delivery agent credit cost or costs prior to the deadline for an
6	obligated party to file its election form so an obligated party can assess options
7	and inform the Commission of its intent to procure credits in whole or in part
8	as fulfillment of its requirement.
9	(4) The default delivery agent shall deliver creditable clean heat
10	measures either directly or indirectly to end-use customer locations in Vermont
11	sufficient to meet the total aggregated annual requirement assigned to it, along
12	with any additional amount achievable through noncompliance payments as
13	described in subdivision 8124(f)(2) of this title. Clean heat credits generated
14	through installed measures delivered by the default delivery agent on behalf of
15	an obligated party are creditable in future years. Those credits not required to
16	meet the obligated party's existing obligations shall be owned by the obligated
17	party.
18	(e) Budget.
19	(1) The Commission shall open a proceeding on or before July 1, 2023
20	and at least every three years thereafter to establish the default delivery agent

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

1	shall be granted the opportunity to amend its plan and budget before the
2	Commission.
3	(f) Compliance funds. All funds received from noncompliance payments
4	pursuant to subdivision 8124(f)(2) of this title shall be used by the default
5	delivery agent to provide clean heat measures to customers with low income.
6	(g) Specific programs. The default delivery agent shall create specific
7	programs for multiunit dwellings, condominiums, rental properties,
8	commercial and industrial buildings, and manufactured homes.
9	§ 8126. RULEMAKING
10	(a) The Commission shall adopt rules and may issue orders to implement
11	and enforce the Clean Heat Standard program.
12	(b) The requirements to adopt rules and any requirements regarding the
13	need for legislative approval before any part of the Clean Heat Standard goes
14	into effect do not in any way impair the Commission's authority to issue orders
15	or take any other actions, both before and after final rules take effect, to
16	implement and enforce the Clean Heat Standard.
17	(c) The Commission's rules may include a provision that allows the
18	Commission to revise its Clean Heat Standard rules by order of the
19	Commission without the revisions being subject to the rulemaking
20	requirements of the 3 V.S.A. chapter 25, provided the Commission:
21	(1) provides notice of any proposed changes;

1	(2) allows for a 30-day comment period;
2	(3) responds to all comments received on the proposed change;
3	(4) provides a notice of language assistance services on all public
4	outreach materials; and
5	(5) arranges for language assistance to be provided to members of the
6	public as requested using professional language services companies.
7	(d) Any order issued under this chapter shall be subject to appeal to the
8	Vermont Supreme Court under section 12 of this title, and the Commission
9	must immediately file any orders, a redline, and clean version of the revised
10	rules with the Secretary of State, with notice simultaneously provided to the
11	House Committee on Environment and Energy and the Senate Committees on
12	Finance and on Natural Resources and Energy.
13	§ 8127. TRADEABLE CLEAN HEAT CREDITS
14	(a) Credits established. By rule or order, the Commission shall establish or
15	adopt a system of tradeable clean heat credits that are earned by reducing
16	greenhouse gas emissions through the delivery of clean heat measures. While
17	credit denominations may be in simple terms for public understanding and ease
18	of use, the underlying value shall be based on units of carbon dioxide
19	equivalent (CO2e). The system shall provide a process for the recognition,
20	approval, and monitoring of the clean heat credits. The Department of Public

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

1	of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel
2	that is used instead.
3	(d) List of eligible measures. Eligible clean heat measures delivered to or
4	installed in residential, commercial, and industrial buildings in Vermont shall
5	include:
6	(1) thermal energy efficiency improvements and weatherization;
7	(2) cold-climate air, ground source, and other heat pumps, including
8	district, network, grid, microgrid, and building geothermal systems;
9	(3) heat pump water heaters;
10	(4) utility-controlled electric water heaters;
11	(5) solar hot water systems;
12	(6) electric appliances providing thermal end uses;
13	(7) advanced wood heating;
14	(8) noncombustion or renewable energy-based district heating services;
15	(9) the supply of sustainably sourced biofuels;
16	(10) the supply of green hydrogen;
17	(11) the replacement of a manufactured home with a high efficiency
18	manufactured home and weatherization or other efficiency or electrification
19	measures in manufactured homes; 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	(l) 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	§ 8128. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP
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	clean heat measures;
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) The Clean Heat Standard Technical Advisory Group shall consist of up
14	to 15 members appointed by the Commission. The Commission shall establish
15	the procedure for the TAG, including member term lengths and meeting
16	procedures. Members of the TAG shall be appointed by the Commission and
17	shall include the Department of Public Service, the Agency of Natural
18	Resources, the Department of Health, and parties who have, or whose
19	representatives have, expertise in one or more of the following areas: technical
20	and analytical expertise in measuring lifecycle greenhouse gas emissions,
21	energy modeling and data analysis, clean heat measures and energy

1	technologies, sustainability and non-greenhouse gas emissions strategies
2	designed to reduce and avoid impacts to the environment, mitigating
3	environmental burdens as defined in 3 V.S.A. § 6002, public health impacts of
4	air quality and climate change, delivery of heating fuels, land use changes,
5	deforestation and forest degradation, and climate change mitigation policy and
6	law. The Commission shall accept and review motions to join the TAG from
7	interested parties who have, or whose representatives have, expertise in one or
8	more of the areas listed in this subsection. Members who are not otherwise
9	compensated by their employer shall be entitled to per diem compensation and
10	reimbursement for expenses under 32 V.S.A. § 1010.
11	(c) The Commission shall hire a third-party consultant responsible for
12	developing clean heat measure characterizations and relevant assumptions,
13	including CO2e lifecycle emissions analyses. The TAG shall provide input
14	and feedback on the consultant's work. The Commission may use
15	appropriated funds to hire the consultant.
16	(d) Emission analyses and associated assumptions developed by the
17	consultant shall be reviewed and approved annually by the Commission. In
18	reviewing the consultant's work, the Commission shall provide a public
19	comment period on the work. The Commission may approve or adjust the
20	consultant's work as it deems necessary based on its review and the public
21	comments received.

1	§ 8129. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP
2	(a) The Commission shall establish the Clean Heat Standard Equity
3	Advisory Group to assist the Commission in developing and implementing the
4	Clean Heat Standard in a manner that ensures an equitable share of clean heat
5	measures are delivered to Vermonters with low income and moderate income
6	and that Vermonters with low income and moderate income who are not early
7	participants in clean heat measures are not negatively impacted in their ability
8	to afford heating fuel. Its duties shall include:
9	(1) providing feedback to the Commission on strategies for engaging
10	Vermonters with low income and moderate income in the public process for
11	developing the Clean Heat Standard program;
12	(2) supporting the Commission in assessing whether customers are
13	equitably served by clean heat measures and how to increase equity;
14	(3) identifying actions needed to provide customers with low income
15	and moderate income with better service and to mitigate the fuel price impacts
16	calculated in section 8128 of this title;
17	(4) recommending any additional programs, incentives, or funding
18	needed to support customers with low income and moderate income and
19	organizations that provide social services to Vermonters in affording heating
20	fuel and other heating expenses;

1	(5) providing feedback to the Commission on the impact of the Clean
2	Heat Standard on the experience of Vermonters with low income and moderate
3	income; and
4	(6) providing information to the Commission on the challenges renters
5	and residents of manufactured homes face in equitably accessing clean heat
6	measures and recommendations to ensure that renters and residents of
7	manufactured homes have equitable access to clean heat measures.
8	(b) The Clean Heat Standard Equity Advisory Group shall consist of up to
9	10 members appointed by the Commission and at a minimum shall include at
10	least one representative from each of the following groups: the Department of
11	Public Service; the Department for Children and Families' Office of Economic
12	Opportunity; a community action agency with expertise in low-income
13	weatherization; a community action agency with expertise in serving residents
14	of manufactured homes; Efficiency Vermont; the Vermont Association of Area
15	Agencies on Aging; individuals with socioeconomically, racially, and
16	geographically diverse backgrounds; renters; rental property owners; the
17	Vermont Housing Finance Agency; and a member of the Vermont Fuel
18	Dealers Association. Members who are not otherwise compensated by their
19	employer shall be entitled to per diem compensation and reimbursement for
20	expenses under 32 V.S.A. § 1010.

1	(c) The Equity Advisory Group shall cease to exist when the initial Clean
2	Heat Standard rules are adopted. Thereafter, the issues described in subsection
3	(a) of this section shall be reviewed by the Commission, in compliance with 3
4	V.S.A. chapter 72.
5	§ 8130. SEVERABILITY
6	If any provision of this chapter or its application to any person or
7	circumstance is held invalid or in violation of the Constitution or laws of the
8	United States or in violation of the Constitution or laws of Vermont, the
9	invalidity or the violation shall not affect other provisions of this chapter that
10	can be given effect without the invalid provision or application, and to this end,
11	the provisions of this chapter are severable.
12	§ 8131. RULEMAKING AUTHORITY
13	Notwithstanding any other provision of law to the contrary, the Commission
14	shall not file proposed rules with the Secretary of State implementing the
15	Clean Heat Standard without specific authorization enacted by the General
16	Assembly.
17	Sec. 4. 10 V.S.A. § 582 is amended to read:
18	§ 582. GREENHOUSE GAS INVENTORIES; REGISTRY
19	(a) Inventory and forecasting. The Secretary shall work, in conjunction
20	with other states or a regional consortium, to establish a periodic and consistent
21	inventory of greenhouse gas emissions. The Secretary shall publish the

1	Vermont Greenhouse Gas Emission Inventory and Forecast by no not later
2	than June 1, 2010, and updates shall be published annually until 2028, until a
3	regional or national inventory and registry program is established in which
4	Vermont participates, or until the federal National Emissions Inventory
5	includes mandatory greenhouse gas reporting. The Secretary of Natural
6	Resources shall include a supplemental accounting in the Vermont Greenhouse
7	Gas Emissions Inventory and Forecast that measures the upstream and
8	lifecycle greenhouse gas emissions of liquid, gaseous, solid geologic and
9	biogenic fuels combusted in Vermont.
10	* * *
11	Sec. 5. CONFIDENTIALITY OF FUEL TAX RETURNS; 2024
12	(a) Notwithstanding 32 V.S.A. § 3102(a), from January 1, 2024 until
13	December 31, 2024, the Commissioner of Taxes shall disclose to the Public
14	<u>Utility Commission and the Department of Public Service a return or return</u>
15	information related to the fuel tax imposed under 33 V.S.A. § 2503, provided
16	the return or return information provided is necessary to verify the identity,
17	fuel tax liability, and registration status of an entity that sells heating fuel into
18	Vermont for purposes of administering the Clean Heat Standard established in
19	30 V.S.A. chapter 94.
20	(b) Pursuant to 32 V.S.A. § 3102(h), the person or persons receiving return
21	or return information under this section shall be subject to the penalty

1	provisions of 32 V.S.A. § 3102(a) for unauthorized disclosure of return or
2	return information as if such person were the agent of the Commissioner.
3	Pursuant to 32 V.S.A. § 3102(g), nothing in this section shall be construed to
4	prohibit the publication of statistical information, rulings, determinations,
5	reports, opinions, policies, or other information, provided the data is disclosed
6	in a form that cannot identify or be associated with a particular person.
7	(c) Pursuant to 1 V.S.A. § 317(c)(6), a fuel tax return and related
8	documents, correspondence, and certain types of substantiating forms that
9	include the same type of information as in the tax return itself filed with or
10	maintained by the Vermont Department of Taxes disclosed to the Public Utility
11	Commission and the Department of Public Service under this section shall be
12	exempt from public inspection and copying.
13	Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION
14	(a) Commencement. On or before August 31, 2023, the Public Utility
15	Commission shall commence a proceeding to implement Sec. 3 (Clean Heat
16	Standard) of this act.
17	(b) Facilitator. The Commission shall hire a third-party consultant with
18	expertise in equity, justice, and diversity to design and conduct public
19	engagement. The Commission and the facilitator shall incorporate the Guiding
20	Principles for a Just Transition into the public engagement process. The
21	Commission may use funds appropriated under this act on hiring the

1	consultant. Public engagement shall be conducted by the facilitator for the
2	<u>purposes of:</u>
3	(1) supporting the Commission in assessing whether customers will be
4	equitably served by clean heat measures and how to increase equity in the
5	delivery of clean heat measures;
6	(2) identifying actions needed to provide customers with low income
7	and moderate income with better service and to mitigate the fuel price impacts
8	calculated in 30 V.S.A. § 8128;
9	(3) recommending any additional programs, incentives, or funding
10	needed to support customers with low income and moderate income and
11	organizations that provide social services to Vermonters in affording heating
12	fuel and other heating expenses; and
13	(4) providing information to the Commission on the challenges renters
14	face in equitably accessing clean heat measures and recommendations to
15	ensure that renters have equitable access to clean heat measures.
16	(c) Public engagement process. Before commencing rulemaking, the
17	Commission shall use the forms of public engagement described in this
18	subsection to inform the design and implementation of the Clean Heat
19	Standard. Any failure by the Commission to meet the specific procedural
20	requirements of this section shall not affect the validity of the Commission's
21	actions.

1	(1) The Commission shall allow any person to register at any time in the
2	Commission's online case management system, ePUC, as a participant in the
3	Clean Heat Standard proceeding. All members of the Equity Advisory Group
4	shall be made automatic participants to that proceeding. All registered
5	participants in the proceeding, including all members of the Equity Advisory
6	Group, shall receive all notices of public meetings and all notices of
7	opportunities to comment in that proceeding.
8	(2) The Commission shall hold at least six public hearings or workshops
9	that shall be recorded and publicly posted on the Commission's website or on
10	ePUC. These meetings shall be open to everyone, including all stakeholders,
11	members of the public, and all other potentially affected parties, with
12	translation services available to those attending.
13	(3) The Commission also shall provide at least three opportunities for
14	the submission of written comments. Any person may submit written
15	comments to the Commission.
16	(d) Advertising. The Commission shall use funding appropriated in this act
17	on advertising the public meetings in order to provide notice to a wide variety
18	of segments of the public. All advertisements of public meetings shall include
19	a notice of language assistance services. The Commission shall arrange for
20	language assistance to be provided to members of the public as requested using
21	the services of professional language services companies.

1	(e) Draft proposed rules. The Commission shall publish draft proposed
2	rules publicly and provide notice of them through the Commission's online
3	case management system, ePUC, to the stakeholders in this rulemaking who
4	registered their names and e-mail addresses with the Commission through
5	ePUC. The Commission shall provide a 30-day comment period on the draft
6	and accept written comments from the public and stakeholders. The
7	Commission shall consider changes in response to the public comments before
8	filing the proposed rules with the Secretary of State and the Legislative
9	Committee on Administrative Rules.
10	(f) Final rules.
11	(1) On or before January 15, 2025, the Commission shall submit to the
12	General Assembly final proposed rules to implement the Clean Heat Standard.
13	The Commission shall not file the final proposed rules with the Secretary of
14	State until specific authorization is enacted by the General Assembly to do so.
15	(2) Notwithstanding 3 V.S.A. §§ 820, 831, 836–840, and 841(a), upon
16	affirmative authorization enacted by the General Assembly authorizing the
17	adoption of rules implementing the Clean Heat Standard, the Commission shall
18	file, as the final proposed rule, the rules implementing the Clean Heat Standard
19	approved by the General Assembly with the Secretary of State and Legislative
20	Committee on Administrative Rules pursuant to 3 V.S.A. § 841. The filing

1	shall include everything that is required under 3 V.S.A. §§ 838(a)(1)–(5), (8)–
2	(13), (15), and (16), (b), (c), and 841(b)(1).
3	(3) The review, adoption, and effect of the rules implementing the Clear
4	Heat Standard shall be governed by 3 V.S.A. §§ 841(c); 842, exclusive of
5	subdivision (b)(4); 843; 845; and 846, exclusive of subdivision (a)(3).
6	(4) Once adopted and effective, any amendments to the rules
7	implementing the Clean Heat Standard shall be made in accordance with the
8	Administrative Procedure Act, 3 V.S.A. chapter 25, unless the adopted rules
9	allow for amendments through a different process in accordance with
10	30 V.S.A. § 8126(c) and (d).
11	(5) The final proposed rules shall contain the first set of annual required
12	amounts for obligated parties as described in 30 V.S.A. § 8124(a)(1). The first
13	set of annual required amounts shall only be adopted through the rulemaking
14	process established in this section, not through an order.
15	(g) Consultant. The Commission may contract with a consultant to assist
16	with implementation of 30 V.S.A. § 8127 (clean heat credits).
17	(h) Funding. On or before February 15, 2024, the Commission shall report
18	to the General Assembly on suggested revenue streams that may be used or
19	created to fund the Commission's administration of the Clean Heat Standard
20	program and shall include programs to support market transformation such as

1	workforce development, market uplift, and training that may be administered
2	by a third party.
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	including how to ensure fuel use that occurs outside the thermal sector is not
17	impacted under the program.
18	(j) Assistance. The Agency of Commerce and Community Development,
19	the Department of Public Service, and other State agencies and departments
20	shall assist the Commission with economic modeling for the required reports
21	and rulemaking process.

1	(k) Report on equity issues. On or before January 15, 2025, the Equity
2	Advisory Group shall report to the General Assembly on the Group's findings
3	from the review of issues under 30 V.S.A. § 8129(a).
4	Sec. 7. PUBLIC UTILITY COMMISSION AND DEPARTMENT OF
5	PUBLIC SERVICE POSITIONS; APPROPRIATION
6	(a) The following new positions are created in the Public Utility
7	Commission for the purpose of carrying out this act:
8	(1) one permanent exempt Staff Attorney;
9	(2) one permanent exempt Analyst; and
10	(3) one limited-service exempt Analyst.
11	(b) The sum of \$825,000.00 is appropriated to the Public Utility
12	Commission from the General Fund in fiscal year 2024 for the positions
13	established in subsection (a) of this section; for all consultants required by this
14	act; and for additional operating costs required to implement the Clean Heat
15	Standard, including marketing and public outreach for Sec. 6 of this act.
16	(c) The following new positions are created in the Department of Public
17	Service for the purpose of carrying out this act:
18	(1) one permanent exempt Staff Attorney; and
19	(2) two permanent classified Program Analysts.
20	(d) The sum of \$900,000.00 is appropriated to the Department of Public
21	Service from the General Fund in fiscal year 2024 for the positions established

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- 1 in subsection (c) of this section, to retain consultants that may be required to
- 2 <u>support verification and evaluation required by 30 V.S.A. § 8127(a), for</u>
- 3 conducting the potential study, and for associated operating costs related to the
- 4 <u>implementation of the Clean Heat Standard.</u>
- 5 Sec. 8. EFFECTIVE DATE
- 6 This act shall take effect on passage.