1	S.5
2	Introduced by Senators Bray, Baruth, Campion, Clarkson, Cummings, Gulick,
3	Hardy, MacDonald, McCormack, Perchlik, Ram Hinsdale,
4	Watson and White
5	Referred to Committee on Natural Resources and Energy
6	Date: January 6, 2023
7	Subject: Climate change; air pollution; renewable energy; heating; fuel
8	Statement of purpose of bill as introduced: This bill proposes to establish the
9	Clean Heat Standard to reduce Vermont's greenhouse gas emissions from the
10	thermal sector. The Clean Heat Standard shall be administered by the Public
11	Utility Commission with assistance from the Clean Heat Standard Technical
12	Advisory Group and the Equity Advisory Group.
	An act relating to affordably meeting the mandated greenhouse gas reductions for the thermal sector through efficiency, weatherization measures. An act relating to affordably meeting the mandated greenhouse gas reductions for the thermal sector through efficiency, weatherization measures, electrification, and decarbonization
13	It is hereby enacted by the General Assembly of the State of Vermont:
14	Soc 1 SHOPT TITLE
15	This act shall be known and may be cited as the "Affordable Heat Act."
16	Sec. 2. FINDINGS
17	The General Assembly linus.

1	(1) All of the logislative findings made in 2020. Acts and Decolves
2	No. 153, Sec. 2, the Vermont Global Warming Solutions Act of 2020
3	(GWSA), remain true and are incorporated by reference here.
4	(2) Under the GWSA and 10 V.S.A. § 578, Vermont has a legal
5	obligation to reduce greenhouse gas emissions to specific levels by 2025,
6	2030, and 2050.
7	(3) The Vermont Climate Council was established under the GWSA and
8	was tasked with, among other things, recommending necessary legislation to
9	reduce greenhouse gas emissions. The Initial Vermont Climate Action Plan
10	calls for the General Assembly to a lopt legislation authorizing the Public
11	Utility Commission to administer the Cean Heat Standard consistent with the
12	recommendations of the Energy Action Network's Clean Heat Standard
13	Working Group.
14	(4) As required by the GWSA, the Vermont Climate Council published
15	the Initial Vermont Climate Action Plan on December 1 2021. As noted in
16	that plan, over one-third of Vermont's greenhouse gas emissions in 2018 came
17	from the thermal sector. In that year, approximately 72 percent of Vermont's
18	thermal energy use was fossil based, including 29 percent from the turning of
19	heating oil, 24 percent from fossil gas, and 19 percent from propane.
20	(5) To meet the greenhouse gas emission reductions required by the
21	OWSA, Vermont needs to transition away from its current carbon-intensive

1	building heating practices to lower earbon alternatives. It also needs to do this
2	equitably, recognizing economic effects on energy users, especially energy-
3	burdened users; on the workforce currently providing these services; and on
4	the overall exonomy.
5	Sec. 3. 30 V.S.A chapter 94 is added to read:
6	CHAPTER 94. CLEAN HEAT STANDARD
7	<u>§ 8121. INTENT</u>
8	It is the intent of the General Assembly that the Clean Heat Standard be
9	designed and implemented in a manner that achieves Vermont's thermal sector
10	greenhouse gas emissions reductions recessary to meet the requirements of
11	10 V.S.A. § 578(a), minimizes costs to cultomers, and recognizes that
12	affordable heating is essential for Vermonters. It shall minimize adverse
13	impacts to customers with low income and moderate income and those
14	households with the highest energy burdens.
15	§ 8122. CLEAN HEAT STANDARD
16	(a) The Clean Heat Standard is established. Under this program, obligated
17	parties shall reduce greenhouse gas emissions attributable to the Vermont
18	thermal sector by retiring required amounts of clean heat credits to meet the
19	thermal sector portion of the greenhouse gas emission reduction obligations of
20	the Global Warning Solutions Act.

1	(h) Provide or order the Commission shall establish as adopt a system of
2	traceable clean heat credits earned from the delivery of clean heat measures
3	that reduce greenhouse gas emissions.
4	(c) An obligated party may obtain the required amount of clean heat credits
5	through delivery of eligible clean heat measures, through contracts for delivery
6	of eligible clean heat measures, through the market purchase of clean heat
7	credits, or through delivery of eligible clean heat measures by a designated
8	statewide default delivery avent.
9	(d) The Public Utility Compussion shall adopt rules and may issue orders
10	to implement the Clean Heat Standard program.
11	§ 8123. DEFINITIONS
12	As used in this chapter:
13	(1) "Carbon intensity value" means the amount of lifecycle greenhouse
14	gas emissions per unit of energy of fuel expressed it grams of carbon dioxide
15	equivalent per megajoule (gCO2e/MJ).
16	(2) "Clean heat credit" means a tradeable, nontangible commodity that
17	represents the amount of greenhouse gas reduction attributable o a clean heat
18	measure. The Commission shall establish a system of management for clean
19	heat credits pursuant to this chapter.
20	(3) "Clean heat measure" means fuel and technologies delivered and
21	installed to end-use customers in vermont that reduce greenhouse gas

1	emissions. Clean heat measures shall not include switching from using one
2	fost I fuel to another fossil fuel. The Commission may adopt a list of
3	acceptable actions that qualify as clean heat measures.
4	(4) "Commission" means the Public Utility Commission.
5	(5) "Default delivery agent" means the entity designated by the
6	Commission to provide services that generate clean heat measures.
7	(6) "Energy burder" means the annual spending on thermal energy as a
8	percentage of household income.
9	(7) "Entity" means any individual, trustee, agency, partnership,
10	association, corporation, company, municipality, political subdivision, or any
11	other form of organization.
12	(8) "Fuel pathway" means a detailed description of all stages of fuel
13	production and use for any particular fuel, including feedstock generation or
14	extraction, production, transportation, distribution, and combustion of the fuel
15	by the consumer. The fuel pathway is used in the calculation the carbon
16	intensity value and lifecycle greenhouse gas emissions of each fuel.
17	(9) "Heating fuel" means fossil-based heating fuel, including oil,
18	propane, natural gas, coal, and kerosene.
19	(10) "Obligated party" means:
20	(A) a regulated natural gas utility serving customers in vermont, or

1	(D) for other heating fuels, the entity that makes the first sale of the
2	hearing fuel into or in the State for consumption within the State.
3	(1) "Thermal sector" has the same meaning as the "Residential,
4	Commercial and Industrial Fuel Use" sector as used in the Vermont
5	Greenhouse Ga. Emissions Inventory and Forecast.
6	§ 8124. CLEAN HEAT STANDARD COMPLIANCE
7	(a) Required amounts.
8	(1) The Commission shall establish the number of clean heat credits that
9	each obligated party is required to retire each calendar year. The size of the
10	annual requirement shall be set at a pace sufficient for Vermont's thermal
11	sector to achieve lifecycle carbon dioxide equivalent (CO2e) emission
12	reductions consistent with the requirements of 10 V.S.A. § 578(a) expressed as
13	lifecycle greenhouse gas emissions pursuant to subsection 8125(f) of this title.
14	(2) Annual requirements shall be expressed at a percent of each
15	obligated party's contribution to the thermal sector's linecycle CO2e emissions
16	in the previous year with the annual percentages being the same for all parties.
17	To ensure understanding among obligated parties, the Commiss on shall
18	publicly provide a description of the annual requirements in plain terms.
19	(3) To support the ability of the obligated parties to plan for the luture,
20	the Commission shall establish and update annual clean heat credit
21	requirements for the next to years. Every three years, the Commission shan

1 2 acheved in the thermal sector; and, if necessary, revise the pace of clean heat 3 credit requirements for future years to ensure that the thermal sector portion of the emission reduction requirements of 10 V.S.A. § 578(a) for 2030 and 2050 4 5 will be achieved 6 (4) The Commission may temporarily adjust the annual requirements for good cause after notice and opportunity for public process. Good cause 7 8 may include a shortage of dean heat credits or undue adverse financial impacts 9 on particular customers or dem graphic segments. 10 (b) Annual registration. (1) Each entity that sells heating fuel into or in Vermont shall register 11 annually with the Commission by an annual deadline established by the 12 Commission. The form and information required in the registration shall be 13 determined by the Commission and shall include an data necessary to establish 14 annual requirements under this chapter. The Commission shall use the 15 16 information provided in the registration to determine whether the entity shall be considered an obligated party and the amount of its annual requirement. 17 18 (2) At a minimum, the Commission shall require registration 19 information to include legal name; doing business as name, if applicable 20 municipality; state; type of heating fuel sold; and the volume of sales of 21 heating fuels into or in the State for final sale or consumption in the State in

1	the colonder year immediately preceding the colonder year in which the entity
2	is registering with the Commission.
3	(a) Each year, and not later than 30 days following the annual
4	registration deadline established by the Commission, the Commission shall
5	share complete registration information of obligated parties with the Agency
6	of Natural Resources and the Department of Public Service for purposes of
7	conducting the Vermon Greenhouse Gas Emissions Inventory and Forecast
8	and meeting the requirements of 10 V.S.A. § 591(b)(3).
9	(4) The Commission shall maintain, and update annually, a list of
10	registered entities on its website that contains the required registration
11	information, except that the public list shall not include heating fuel volumes
12	reported.
13	(5) For any entity not registered, the first registration form shall be due
14	30 days after the first sale of heating fuel to a location in Vermont.
15	(6) Clean heat requirements shall transfer to entities that acquire an
16	obligated party.
17	(7) Entities that cease to operate shall retain their clean heat requirement
18	for their final year of operation.
19	(c) Early action credits. Beginning on January 1, 2023, clean heat
20	measures that are installed and provide emission reductions are creditable and
21	Shair count towards the future clean heat credit requirements of an obligated

1	party. Upon the establishment of the clean heat credit system, antities may
2	register credits for actions taken starting in 2023.
3	(d) Equitable distribution of clean heat measures.
4	(1) The Clean Heat Standard shall be designed and implemented to
5	enhance social quity by minimizing adverse impacts to customers with low
6	income and moderate income and those households with the highest energy
7	burdens. The design shall ensure all customers have an equitable opportunity
8	to participate in, and benefit from, clean heat measures regardless of heating
9	fuel used, income level, geographic location, or homeownership status.
10	(2) Of their annual requirement, each obligated party shall retire at least
11	16 percent from customers with low income and 16 percent from customers
12	with moderate income. At least one-half of these credits shall be from
13	installed clean heat measures that require capital investments in homes, have
14	measure lives of 10 years or more, and are estimated by the Technical
15	Advisory Group to lower annual energy bills. Example shall include
16	weatherization improvements and installation of heat pump heat pump water
17	heaters, and advanced wood heating systems. The Commission may identify
18	additional measures that qualify as installed measures.
19	(3) The definitions of customer with low income and customer with
20	moderate income shall be set by the Commission in consultation with the
21	Equity Advisory Group and in alignment with other existing definitions.

1	(1) The Commission may consider frontleading the gradit requirements
2	for justomers with low income and moderate income so that the greatest
3	proportion of clean heat measures reach Vermonters with low income and
4	moderate in ome in the earlier years.
5	(5) In order to best serve customers with low income and moderate
6	income, the Commission shall have authority to change the percentages
7	established in subdivision (2) of this subsection and the criteria used to define
8	customers with low income and moderate income for good cause after notice
9	and opportunity for public process.
10	(6) In determining whether to exceed the minimum percentages of clean
11	heat measures that must be delivered to customers with low income and
12	moderate income, the Commission shall take into account participation in
13	other government-sponsored low-income and moderate-income weatherization
14	programs.
15	(7) A clean heat measure delivered to a customer qualifying for a
16	government-sponsored, low-income energy subsidy shall quality for clean heat
17	credits required by subdivision (2) of this subsection.
18	(e) Credit banking. The Commission shall allow an obligated party that
19	has met its annual requirement in a given year to retain clean heat credits in
20	excess of that amount for future sale of application to the obligated party's

1	annual requirements in future compliance periods as determined by the
2	Columission.
3	(f) Default delivery agent.
4	(1) An obligated party may meet its annual requirement through a
5	designated default delivery agent appointed by the Commission. The default
6	delivery agent shall deliver creditable clean heat measures to Vermont homes
7	and businesses when:
8	(A) an obligated party chooses to assign its annual requirement to the
9	default delivery agent; or
10	(B) an obligated party fair to produce or acquire its required amount
11	of clean heat credits as described in subdivision (g)(2) of this section.
12	(2) The Commission shall designate the default delivery agent. The
13	default delivery agent shall be a single statewid, entity capable of providing a
14	variety of clean heat measures and contracted for a pultiyear period through a
15	competitive procurement process. The entity selected at the default delivery
16	agent may also be a market participant but shall not be an obligated party.
17	(3) By rule or order, the Commission shall adopt annually the cost per
18	clean heat credit to be paid to the default delivery agent by an obligated party
19	that chooses this option. In adjusting the default delivery agent credit cost, the
20	Commission shall consider the default delivery agent's anticipated costs to
21	deliver clean heat measures and costs borne by customers, among other factors

1	determined by the Commission. Changes to the cost of credits shall take offer
2	not less than 180 days after adoption.
3	(4) All funds received from noncompliance payments pursuant to
4	subdivision (g)(2) of this section shall be used by the default delivery agent to
5	provide clean heat measures to customers with low income.
6	(g) Enforcement.
7	(1) The Commission shall have the authority to enforce the
8	requirements of this chapter and any rules or orders adopted to implement the
9	provisions of this chapter. The Commission may use its existing authority
10	under this title. As part of an enforcement order, the Commission may order
11	penalties and injunctive relief.
12	(2) The Commission may order an obliquated 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. The per-credit amount
16	of the noncompliance payment shall be three times the amount established by
17	the Commission under subsection (f) of this section for timely per-tredit
18	payments to the default delivery agent.
19	(3) Any statements or other representations made by obligated partie
20	related to compliance with the Clean Heat Standard are subject to the

1	Commission's enforcement outhority including the power to investigate and
2	assess penalties, under this title.
3	(h) 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 record, and a process for verification of records and data submitted
6	in compliance with the requirements of this chapter.
7	(i) Reports.
8	(1) As used in this subsection, "standing committees" means the House
9	Committee on Natural Resources, Fish, and Wildlife and the Senate
10	Committees on Finance and on Natural Resources and Energy.
11	(2) After the adoption of the rule 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 August 31 of each year following the year in which the
16	rules are first adopted under this section, 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	nouseholus with the highest energy burdens. The provisions of 2 v.s.A.

1 2 under this subsection. 3 § 8125. TRADEABLE CLEAN HEAT CREDITS (a) Creats established. By rule or order, the Commission shall establish or 4 5 adopt a system of tradeable clean heat credits that are earned by reducing 6 greenhouse gas emissions through the delivery of clean heat measures. While 7 credit denominations may be in simple terms for public understanding and 8 ease of use, the underlying value shall be based on units of carbon dioxide 9 equivalent (CO2e). The system shall provide a process for the recognition, approval, and monitoring of the clean heat credits. The Department of Public 10 11 Service shall perform the verification of dean heat credit claims and submit results of the verification and evaluation to the Commission annually. 12 13 (b) Credit values. Clean heat credits shall be based on the accurate and verifiable lifecycle CO2e emission reductions in Vermant's thermal sector that 14 result from the delivery of eligible clean heat measures to ind-use customer 15 16 locations into or in Vermont. (1) For clean heat measures that are installed, credits will be created for 17 each year of the expected life of the installed measure. The annual value of 18 19 the clean heat credits for installed measures in each year shall be equal to the 20 mecycle CO2e emissions of the fuel use that is avoided in a given year

1	hasays of the installation of the massure, minus the lifecycle emissions of the
2	fue that is used instead in that year.
3	(2) For clean heat measures that are fuels, clean heat credits will be
4	created only for the year the fuel is delivered to the end-use customer. The
5	value of the clean heat credits for fuels shall be the lifecycle CO2e emissions
6	of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel
7	that is used instead.
8	(c) List of eligible measures. Eligible clean heat measures delivered to or
9	installed in Vermont shall include:
10	(1) thermal energy efficiency improvements and weatherization;
11	(2) cold-climate air, ground source, and other heat pumps, including
12	district, network, grid, microgrid, and building geothermal systems;
13	(3) heat pump water heaters;
14	(4) controlled electric water heaters;
15	(5) solar hot water systems;
16	(6) electric appliances providing thermal end uses;
17	(7) renewable electricity systems paired with heat pumps or electric
18	appliances providing thermal end uses, including on-site and community-scale
19	renewable electricity systems;
20	(8) advanced wood heating;
21	(9) noncombustion of renewable energy-based district heating services,

1	(10) the cumby of custoinably coursed histuals, and
2	(11) the supply of green hydrogen.
3	(d) Renewable natural gas. For pipeline renewable natural gas and other
4	renewably generated natural gas substitutes to be eligible, an obligated party
5	shall purchase relewable natural gas and its associated renewable attributes
6	and demonstrate that It has secured a contractual pathway for the physical
7	delivery of the gas from the point of injection into the pipeline to the obligated
8	party's delivery system.
9	(e) Carbon intensity of fuels.
10	(1) To be eligible as a clean heat measure a liquid or gaseous clean heat
11	measure shall have a carbon intensity value is follows:
12	(A) below 80 in 2025;
13	(B) below 60 in 2030; and
14	(C) below 20 in 2050, provided the Commission may allow liquid
15	and gaseous clean heat measures with a carbon intensity value greater than 20
16	if excluding them would be impracticable based on the characteristics of
17	Vermont's buildings, the workforce available in Vermont to deliver lover
18	carbon intensity clean heat measures, cost, or the effective administration of
19	the Clean Fleat Standard.

1	(2) The Commission shall establish and publish the rate at which carbon
2	intensity values shall decrease annually for liquid and gaseous clean heat
3	measures consistent with subdivision (1) of this section as follows:
4	(A) on or before January 1, 2025 for 2025 to 2030; and
5	(B) of or before January 1, 2030 for 2031 to 2050.
6	(3) For the perpose of this section, the carbon intensity values shall be
7	understood relative to No. 2 fuel oil delivered into or in Vermont in 2022
8	having a carbon intensity value of 100. Carbon intensity values shall be
9	measured based on fuel pathways.
10	(f) Emissions schedule.
11	(1) To promote certainty for obligated parties and clean heat providers,
12	the Commission shall, by rule or order, establish a schedule of lifecycle
13	emission rates for heating fuels, biofuels, electricity, and any other fuel used
14	by a clean heat measure. The schedule shall be based on transparent,
15	verifiable, and accurate emissions accounting adapting the Argonne National
16	Laboratory GREET Model, Intergovernmental Panel on Chinate Change
17	(IPCC) modeling, or an alternative of comparable analytical right to fit the
18	Vermont thermal sector context, and the requirements of 10 V.S.A. \$578(a).
19	(2) For each fuel pathway, the schedule shall account for greenhouse gas
20	emissions from biogenic and geologic sources, including fugitive emissions
21	In determining the baseline emission rates for clean heat measures that are

1	fuels, amissions hasalines shall fully account for methons amissions reduction
2	or captures already occurring, or expected to occur, for each fuel pathway as a
3	result of local, State, or federal policies that have been enacted or adopted.
4	(3) The schedule may be amended based upon changes in technology or
5	evidence on emissions, but clean heat credits previously awarded or already
6	under contract to be produced shall not be adjusted retroactively.
7	(g) Review of consequences. The Commission shall periodically assess
8	harmful consequences that may arise in Vermont or elsewhere from the
9	implementation of clean heat measures and shall set standards or limits to
10	prevent those consequences. Such consequences may include deforestation,
11	conversion of grasslands, or the creation of new methane to meet fuel demand
12	(h) Time stamp. Clean heat credits shall be "time stamped" for the year in
13	which the clean heat measure delivered emission reductions. For each
14	subsequent year during which the measure produces ensission reductions,
15	credits shall be generated for that year. Only clean heat credits that have not
16	been retired shall be eligible to satisfy the current year obligation.
17	(i) Delivery in Vermont. Clean heat credits shall be earned only in
18	proportion to the deemed or measured thermal sector greenhouse gas envission
19	reductions achieved by a clean heat measure delivered in Vermont. Other
20	emissions offsets, wherever located, shall not be engible measures.

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Vernont shall be eligible for clean heat credits and may be retired and count toward an obligated party's emission reduction obligations, regardless of who creates or delivers them and regardless of whether their creation or delivery was required by other State policies and programs. This includes individual initiatives, emission reductions resulting from the State's energy efficiency programs, the low-income weatherization program, and the Renewable Energy Standard Tier 3 program. (k) Credit registration. (1) The Commission shall create an administrative system to register, sell, transfer, and trade credits to obligated parties. The Commission may hire a third-party consultant to evaluate, develor implement, maintain, and support a database or other means for tracking clean heat credits and compliance with the annual requirements of obligated parties. (2) The system shall require entities to submit the following information to receive the credit: the location of the clean heat measure whether the customer or tenant has a low or moderate income, the type of property where the clean heat measure was installed or sold, the type of clean heat measure, and any other information as required by the Commission. (1) Greenhouse Gas Emissions Inventory and Forecast. Nothing in this chapter shall limit the authority of the Secretary of Ivatural Resources to

1	compile and publish the Vermont Greenhouse Gas Emissions Inventory and
2	For cast in accordance with 10 V.S.A. § 582.
3	§ 8126. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP
4	(a) The Commission shall establish the Clean Heat Standard Technical
5	Advisory Group (TAG) to assist the Commission in the ongoing management
6	of the Clean Heat Sandard. Its duties shall include:
7	(1) establishing and revising the lifecycle carbon dioxide equivalent
8	(CO2e) emissions accounting methodology to be used to determine each
9	obligated party's annual requirement pursuant to subdivision 8124(a)(2) of this
10	chapter;
11	(2) establishing and revising the lean heat credit value for different
12	clean heat measures;
13	(3) periodically assessing and reporting to the Commission on the
14	sustainability of the production of clean heat measures by considering factors
15	including greenhouse gas emissions; carbon sequestration and storage; human
16	health; land use changes; ecological and biodiversity impacts; groundwater and
17	surface water impacts; air, water, and soil pollution; and impact on food costs;
18	(4) setting the expected life length of clean heat measures for the
19	purpose of calculating credit amounts;
20	(5) establishing credit values for each year over a clean heat measure is
21	expected fire, including adjustments to account for increasing interactions

1	between clean heat measures over time so as to not double count emission
2	reductions;
3	facilitating the program's coordination with other energy programs;
4	(7) calculating the impact of the cost of clean heat credits and the cost
5	savings associated with delivered clean heat measures on per-unit heating fuel
6	prices;
7	(8) coordinating with the Agency of Natural Resources to ensure that
8	greenhouse gas emissions reductions achieved in another sector through the
9	implementation of the Clean Heat Standard are not double-counted in the
10	Vermont Greenhouse Gas Emission, Inventory and Forecast;
11	(9) advising the Commission on the periodic assessment and revision
12	requirement established in subdivision 812-(a)(3) of this chapter; and
13	(10) any other matters referred to the TAG by the Commission.
14	(b) Members of the TAG shall be appointed by the Commission and shall
15	include the Department of Public Service, the Agency of Natural Resources,
16	and parties who have, or whose representatives have, expertise in one or more
17	of the following areas: technical and analytical expertise in measuring
18	lifecycle greenhouse gas emissions; energy modeling and data analysis, clean
19	heat measures and energy technologies, sustainability and non-greenhouse gas
20	emissions strategies designed to reduce and avoid impacts to the environment,
21	derivery of heating fuels, and climate change mitigation policy and law. The

1	Commission shall account and review motions to join the TAC from interested
2	parties who have, or whose representatives have, expertise in one or more of
3	the areas listed in this subsection. Members who are not otherwise
4	compensated by their employer shall be entitled to per diem compensation and
5	reimbursement for expenses under 32 V.S.A. § 1010.
6	(c) The Commission shall hire a third-party consultant responsible for
7	developing clean heat measure characterizations and relevant assumptions,
8	including CO2e lifecycle emissions analyses. The TAG shall provide input
9	and feedback on the consultant work.
10	(d) Emission analyses and associated assumptions developed by the
11	consultant shall be reviewed and approved annually by the Commission. In
12	reviewing the consultant's work, the Commission shall provide a public
13	comment period on the work. The Commission may approve or adjust the
14	consultant's work as it deems necessary based on its review and the public
15	comments received.
16	§ 8127. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP
17	(a) The Commission shall establish the Clean Heat Standard Equity
18	Advisory Group to assist the Commission in developing and implementing the
19	Clean Heat Standard in a manner that ensures an equitable share of clean heat
20	measures are delivered to Vermonters with low income and moderate income
21	and that vermonters with low income and moderate income who are not early

1	participants in clear heat measures are not negatively imported in their chility.
2	to afford heating fuel. Its duties shall include:
3	(1) providing feedback to the Commission on strategies for engaging
4	Vermonters with low income and moderate income in the public process for
5	developing the Cean Heat Standard program;
6	(2) supporting the Commission in assessing whether customers are
7	equitably served by clean teat measures and how to increase equity;
8	(3) identifying actions needed to provide customers with low income
9	and moderate income with better service and to mitigate the fuel price impacts
10	calculated in section 8126 of this title;
11	(4) assisting the Commission in defining customers with low income
12	and moderate income;
13	(5) recommending any additional programs, incentives, or funding
14	needed to support customers with low income and model to income and
15	organizations that provide social services to Vermonters in affording heating
16	fuel and other heating expenses;
17	(6) providing feedback to the Commission on the impact of the Clean
18	Heat Standard on the experience of Vermonters with low income and mode ate
19	meome, and

1	(7) providing information to the Commission on the challenges centers
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 with
9	socioeconomically, racially, and seographically diverse backgrounds; renters
10	and rental property owners; and a member of the Vermont Fuel Dealers
11	Association. Members who are not other vise compensated by their employer
12	shall be entitled to per diem compensation and reimbursement for expenses
13	under 32 V.S.A. § 1010.
14	§ 8128. CONSUMER PROTECTION
15	(a) Entities that provide clean heat measures shall not enfairly induce
16	customers to install or adopt clean heat measures. Entities shall not engage in
17	predatory practices to generate clean heat measures.
18	(b) On or before January 15, 2026, the Department of Public Service, in
19	consultation with the Attorney General's Office, shall file proposed rules with
20	the Secretary of State's Office that define how clean heat measure providers

1 actions, and what remedies will be available. 2 § 8129. SEVERABILITY 3 If any prevision of this chapter or its application to any person or 4 5 circumstance is seld invalid or in violation of the Constitution or laws of the 6 United States or in Volation of the Constitution or laws of Vermont, the invalidity or the violation shall not affect other provisions of this chapter that 7 can be given effect without the invalid provision or application, and to this 8 9 end, the provisions of this chapte are severable. Sec. 4. 10 V.S.A. § 582 is amended read: 10 11 § 582. GREENHOUSE GAS INVENTORIES; REGISTRY (a) Inventory and forecasting. The Secretary shall work, in conjunction 12 with other states or a regional consortium, to establish a periodic and 13 consistent inventory of greenhouse gas emissions. The Secretary shall publish 14 the Vermont Greenhouse Gas Emission Inventory and Forecast by no not later 15 16 than June 1, 2010, and updates shall be published annually und 2028, until a 17 regional or national inventory and registry program is established which 18 Vermont participates, or until the federal National Emissions Inventory 19 includes mandatory greenhouse gas reporting. The Secretary of Natural 20 Resources shall include a sensitivity analysis in the vermont differnouse das

1	Emissions Inventory and Forecast that measures the lifewale greenhouse gos
2	emissions of liquid, gaseous, and solid biogenic fuels combusted in Vermont.
3	***
4	Sec. 5. PULLIC UTILITY COMMISSION IMPLEMENTATION
5	(a) Commentement.
6	(1) On or before August 31, 2023, the Public Utility Commission shall
7	commence a proceeding to implement Sec. 3 (Clean Heat Standard) of this act
8	(2) On or before October 1, 2024, the Commission shall submit to the
9	General Assembly an interim report on the development of the Clean Heat
10	Standard.
11	(b) Facilitator. On or before October 2023, the Commission shall hire a
12	third-party consultant to design and conduct public engagement. The
13	Commission may use funds appropriated under this act on hiring the
14	consultant.
15	(c) Public engagement process. Before commencing relemaking, the
16	Commission shall use the forms of public engagement described in this
17	subsection to inform the design and implementation of the Clean Reat
18	Standard. Any failure by the Commission to meet the specific procedural
19	requirements of this section shall not affect the validity of the Commission
20	actions.

1 2 meetings, at least three shall allow members of the public to participate in 3 person and remotely. The meetings shall be held in at least six different geographically diverse counties of the State. The meetings shall be recorded 4 5 and publicly potted on the Commission's website. 6 (2) Of the six meetings, the Commission, with the assistance of the 7 consultant, shall also us deliberative polling or another method of receiving 8 focused feedback from specific constituents during at least two meetings. The 9 facilitator shall assist the Commission in developing a format for soliciting feedback at the meetings. Each of bese meetings shall focus on seeking input 10 11 from a specific group, which may include heating fuel dealers; customers with low income, moderate income, and fixed income and their advocates; and 12 13 customers who use large amounts of heating full (3) The Commission shall hold at least two workshops to solicit the 14 input of potentially affected parties. To facilitate participation, the 15 16 Commission shall provide notice of the workshops on its w bsite, shall publish 17 the notice once in a newspaper of general circulation in each county of Vermont, and shall also provide direct notice to any person that requests direct 18 19 notice or to whom the Commission may consider direct notice appropriate. 20 The Commission also shall provide an opportunity for submission of written 21 comments, which the notice shall include.

1	(d) Advartising. The Commission shall use funding appropriated in this
2	act on advertising the public meetings in order to provide notice to a wide
3	variety of segments of the public.
4	(e) Draft proposed rules. The Commission shall publish draft proposed
5	rules publicly and provide notice of it to the stakeholders who registered their
6	names and e-mail addresses with the Commission during the workshops. The
7	Commission shall provide a 30-day comment period on the draft and accept
8	written comments from the public and stakeholders. The Commission shall
9	incorporate necessary changes in response to the public comments before
10	filing the proposed rules with the Secretary of State and the Legislative
11	Committee on Administrative Rules.
12	(f) Final rules. On or before January 15, 2025, the Commission shall
13	submit to the General Assembly final proposed rules to implement the Clean
14	Heat Standard. The Commission shall not file the final proposed rules with
15	the Secretary of State until June 1, 2025.
16	(g) Consultant. On or before January 15, 2024, the Commission shall
17	contract with a consultant to assist with implementation of 30 V.S.A. § 8125
18	(clean heat credits).
19	(h) Funding. On or before January 15, 2024, the Commission shall report
20	to the General Assembly on suggested revenue streams that may be used or

1	greated to fund the Commission's administration of the Class Heat Standard
2	pro tram.
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 Natural Resources, Fish,
6	and Wildlife and the Senate Committees on Finance and on Natural Resources
7	and Energy detailing the efforts undertaken to establish the Clean Heat
8	Standard. The reports shall include, to the extent available, estimates of the
9	impact of the Clean Heat Standard on customers, including impacts to
10	customer rates and fuel bills for participating and nonparticipating customers,
11	net impacts on total spending on energy for thermal sector end uses, fossil fuel
12	reductions, greenhouse gas emission reductions, and, if possible, impacts on
13	economic activity and employment. The mode ed impacts shall estimate high-
14	, medium-, and low-price impacts. The reports shall recommend any
15	legislative action needed to address enforcement of the Clean Heat Standard.
16	Sec. 6. PUBLIC UTILITY COMMISSION AND DEPARAMENT OF
17	PUBLIC SERVICE POSITIONS; APPROPRIATION
18	(a) The following new positions are created in the Public Utility
19	Commission for the purpose of carrying out this act:
20	(1) one permanent exempt Staff Attorney 3;
21	(2) one permanent exempt Analyst, and

1	(2) and limited corving axampt Analyst
2	(b) The sum of \$800,000.00 is appropriated to the Public Utility
3	Commission from the General Fund in fiscal year 2023 for the positions
4	established in subsection (a) of this section; for the consultant required by
5	Sec. 4 of this act; and for additional operating costs required to implement the
6	Clean Heat Standar Lincluding marketing and public outreach for Sec. 4 of
7	this act.
8	(c) The following new positions are created in the Department of Public
9	Service for the purpose of carrying out this act:
10	(1) one permanent exempt Staff Attorney; and
11	(2) one permanent classified Program Analyst.
12	(d) The sum of \$400,000.00 is approprieted to the Department of Public
13	Service from the General Fund in fiscal year 2023 for the positions established
14	in subsection (c) of this section, to retain consultant, that may be required to
15	support verification and evaluation required by 30 V.S.A. § 8125(a), and for
16	associated operating costs related to the implementation of the Clean Heat
17	Standard.
18	Sec. 7. SECTORAL PROPORTIONALITY REPORT
19	(a)(1) On or before November 15, 2024, the Agency of Natural Resources
20	and the Department of Public Service, in consultation with the Agencies of
21	Agriculture, Food and Warkets, of Commerce and Community Development,

1	and of Transportation and the Vermont Climate Council, shall report to the
2	Ho se Committees on Energy and Technology and on Natural Resources, Fish,
3	and Wildlife and to the Senate Committees on Finance and on Natural
4	Resources and Energy regarding:
5	(A) the role of individual economic sectors in achieving the
6	greenhouse gas emission reduction requirements pursuant to 10 V.S.A.
7	§ 578(a);
8	(B) each economic sector's proportional contribution to greenhouse
9	gas emissions in Vermont as in entoried pursuant to 10 V.S.A. § 582; and
10	(C) the extent to which cost-effective, feasible, and cobeneficial
11	reasonably available greenhouse gas en ission reduction measures are available
12	commensurate with each sector's proportional contribution and emissions
13	reduction impact.
14	(2) The report shall consider the analyses performed in support of the
15	December 1, 2021 Climate Action Plan and the 2022 Comprehensive Energy
16	Plan. The report shall consider additional analyses as necessary.
17	(b) The report shall make recommendations to the General Assembly to
18	amend 10 V.S.A. § 578 to include sector-specific greenhouse emissions
19	reduction requirements and, as necessary, subsector-specific greenhouse
20	emission reduction requirements for the purposes of informing and
21	appropriately scaling the implementation of programs and policies that achieve

1	graanhouse gos amission raductions. As used in this section, "sector" means
2	those established in the annual Vermont Greenhouse Gas Emissions Inventory
3	and Forecast produced by the Agency of Natural Resources pursuant to
4	10 V.S.A. § 582. The recommendations shall be made in consideration of the
5	factors established in 10 V.S.A. § 592(d).
6	(c) The Agency of Natural Resources and the Department of Public
7	Service, in consultation with the Vermont Climate Council, shall submit an
8	updated report and any corresponding recommendations in accordance with
9	this section on July 1 of a year immediately preceding a year in which an
10	updated Climate Action Plan is adopted pursuant to 10 V.S.A. § 592(a).
11	Sec. 8. EFFECTIVE DATE
12	This act shall take effect on passage.
	Sec. 1. SHODT TITLE
	In. act shall be known and may be cited as the "Affordable Heat Act." Sec. 2. FINDINGS
	The General Assembly finds:
	(1) All of the legislative findings made in 2020 Acts and Resolves No. 153, Sec. 2, the Vermont Olobal Warming Solutions Act of 2020 (GWSA), remain true and are incorporated by reference here.
	(2) Under the GWSA and 10 V.S.4. § 578, Vermont has a legal obligation to reduce greenhouse gas emissions it specific levels by 2025, 2030, and 2050.
	(3) The Vermont Climate Council was established under the GWSA and was tasked with, among other things, recommending necessary legislation to

reduce greenhouse gas emissions. The Initial Vermont Climate Action Plan

calls for the General Assembly to adopt legislation authorizing the

<u>Lecommendations of the Energy Action Network's Clean Heat Standard Wighting Group.</u>

- (4) As required by the GWSA, the Vermont Climate Council published the Initial Vermont Climate Action Plan on December 1, 2021. As noted in that plan over one-third of Vermont's greenhouse gas emissions in 2018 came from the thermal sector. In that year, approximately 72 percent of Vermont's thermal energy use was fossil based, including 29 percent from the burning of heating oil, 24 vercent from fossil gas, and 19 percent from propane.
- (5) To meet the greenhouse gas emission reductions required by the GWSA, Vermont needs to transition away from its current carbon-intensive building heating practices to lower-carbon alternatives. It also needs to do this equitably, recognizing economic effects on energy users, especially energy-burdened users; on the workforce currently providing these services; and on the overall economy.
- (6) Vermonters have an unprecedented opportunity to invest in eligible clean heat measures with funding from new federal laws including, the Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act of 2022.
- Sec. 3. 30 V.S.A. chapter 94 is added to read:

CHAPTER 94. CLEAN NEAT STANDARD

§ 8121. INTENT

Pursuant to 2 V.S.A. § 205(a), it is the intent of the General Assembly that the Clean Heat Standard be designed and impremented in a manner that achieves Vermont's thermal sector greenhouse sas emissions reductions necessary to meet the requirements of 10 V.S.A. § 578(a)(2) and (3), minimizes costs to customers, and recognizes that affordable heating is essential for Vermonters. It shall enhance social equity by prioritizing customers with low income and moderate income and those households with the highest energy burdens. The Clean Heat Standard shall, to the greatest extent possible, maximize the use of available federal funds to deliver clean heat neasures.

§ 8122. CLEAN HEAT STANDARD

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

- (b) By rule or order, the Commission shall establish or adopt a system of tradeable clean heat credits earned from the delivery of clean heat measures that reduce greenhouse gas emissions.
- (c) An obligated party may obtain the required amount of clean heat credits through delivery of eligible clean heat measures, through contracts for delivery of eligible clean heat measures, through the market purchase of clean heat credits, or through delivery of eligible clean heat measures by a designated statewide default delivery agent. An obligated party shall inform the Commission of how it plans to meet its obligation through the process described in section 8125 of this title.
- (d) The Commission shall adopt rules and may issue orders to implement and enforce the Clean Neat Standard program.

§ 8123. DEFINITIONS

As used in this chapter:

- (1) "Carbon intensity valve" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO2e/MI).
- (2) "Clean heat credit" means a tradeable, nontangible commodity that represents the amount of greenhouse gas reduction attributable to a clean heat measure. The Commission shall establish a system of management for clean heat credits pursuant to this chapter.
- (3) "Clean heat measure" means ful delivered and technologies installed to end-use customers in Vermont that reduce greenhouse gas emissions from the thermal sector. Clean heat neasures shall not include switching from one fossil fuel use to another fossil fuel use. The Commission may adopt a list of acceptable actions that qualify as clean heat measures.
 - (4) "Commission" means the Public Utility Commission.
- (5) "Customer with low income" means a customer with a household income of up to 60 percent of area median income as published annually by the U.S. Department of Housing and Urban Development.
- (6) "Customer with moderate income" means a customer with a household income between 60 percent and 120 percent of area media, income as published annually by the U.S. Department of Housing and Urban Development.
- (7) "Default delivery agent" means an entity designated by the

- (ô) "Energy burden" means the annual spending on thermal energy as a percentage of household income.
- (9) "Entity" means any individual, trustee, agency, partnership, association, corporation, company, municipality, political subdivision, or any other form of organization.
- (10) "Fuel pathway" means a detailed description of all stages of fuel production and use for any particular fuel, including feedstock generation or extraction, production, transportation, distribution, and combustion of the fuel by the consumer. The fuel pathway is used in the calculation of the carbon intensity value and lifecycle greenhouse gas emissions of each fuel.
- (11) "Heating fuel" means fossil-based heating fuel, including oil, propane, natural gas, coal, and kerosene.
 - (12) "Obligated party" means:
 - (A) a regulated natural gas utility serving customers in Vermont; or
- (B) for other heating fuels, the entity that imports heating fuel for ultimate consumption within the State, or the entity that produces, refines, manufactures, or compounds heating fuel within the State for ultimate consumption within the State. For the purpose of this section, the entity that imports heating fuel is the entity that has ownership title to the heating fuel at the time it is brought into Vermont.
- (13) "Thermal sector" has the same meaning as the "Residential, Commercial and Industrial Fuel Use" sector as used in the Vermont Greenhouse Gas Emissions Inventory and Forecast.

§ 8124. CLEAN HEAT STANDARD COMPLIANCE

(a) Required amounts.

- (1) The Commission shall establish the number of clean heat credits that each obligated party is required to retire each calendar year. The size of the annual requirement shall be set at a pace sufficient for Vermont's thermal sector to achieve lifecycle carbon dioxide equivalent (CQ2e) emission reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3) expressed as lifecycle greenhouse gas emissions pursuant to subsection 8127(g) of this title.
- (2) Annual requirements shall be expressed as a percent of each obligated party's contribution to the thermal sector's lifecycle CO2e emissions in the previous year. The annual percentage reduction shall be the same for all obligated parties. To ensure understanding among obligated parties, the

Commission shall publicly provide a description of the annual requirements in particular parties of the parties

- (3) To support the ability of the obligated parties to plan for the future, the Commission shall establish and update annual clean heat credit requirements for the next 10 years. Every three years, the Commission shall extend the requirements three years; shall assess emission reductions actually achieved in the thermal sector; and, if necessary, revise the pace of clean heat credit requirements for future years to ensure that the thermal sector portion of the emission realiction requirements of 10 V.S.A. § 578(a)(2) and (3) for 2030 and 2050 will be achieved.
- (4) The Commission may temporarily, for a period not to exceed 18 months, adjust the annual requirements 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. The Commission shall ensure that any downward adjustment does not materially affect the State's ability to comply with the requirements of 10 V.S.A. § 578(x)(2) and (3).

(b) Annual registration.

- (1) Each entity that sells heating fuel into or in Vermont shall register annually with the Commission by an annual deadline established by the Commission. The first registration deadline is January 31, 2024, and the annual deadline shall remain January 31 of each year unless a different deadline is established by the Commission. The form and information required in the registration shall be determined by the Commission and shall include all data necessary to establish annual requirements under this chapter. The Commission shall use the information provided in the registration to determine whether the entity shall be considered an obligated party and the amount of its annual requirement.
- (2) At a minimum, the Commission shall require registration information to include legal name; doing business as name, if applicable; municipality; state; types of heating fuel sold; and the volume of sales of heating fuels into or in the State for final sale or consumption in the State in the calendar year immediately preceding the calendar year in which the entity is registering with the Commission.
- (3)(A) The Department of Taxes shall annually provide to the Commission a copy of the forms that were submitted by the entities that pay the existing fuel tax established in 33 V.S.A. § 2503(a)(1) and (2). If any form contains a Social Security number, the Department of Taxes shall redact that information before submitting a copy of the form to the Commission

any confidentiality provisions that would normally apply to tax forms, the fuel tax forms submitted pursuant to 33 V.S.A. § 2503(a)(1) and (2) shall be public documents, and the Commission shall make those documents publicly available.

- (2) The Department of Taxes shall ensure that the fuel tax form required under 33 V.S.A. § 2503(a)(1) and (2) includes a prominent notice explaining that, pursuant to this section, the form will be provided to the Public Utility Commission and will be made publicly available.
- (C) The Department of Taxes shall further ensure that the fuel tax form requires that each submitting entity list the exact amount of gallons of each fuel type, separated by type, that was sold in Vermont, as well as a list of the exact amount of gallons of each fuel type, separated by type, that was purchased by the submitting entity and the name and location of the entity from which it was purchased.
- (4) Each year, and not later than 30 days following the annual registration deadline established by the Commission, the Commission shall share complete registration information of obligated parties with the Agency of Natural Resources and the Department of Public Service for purposes of updating the Vermont Greenhouse Gas Emissions Inventory and Forecast and meeting the requirements of 10 V.S.A. § 391(b)(3).
- (5) The Commission shall maintain, and update annually, a list of registered entities on its website that contains the required registration information.
- (6) For any entity not registered on or before January 31, 2024, the first registration form shall be due 30 days after the first sale of heating fuel to a location in Vermont.
- (7) Clean heat requirements shall transfer to extities that acquire an obligated party.
- (8) Entities that cease to operate shall retain their clean heat requirement for their final year of operation.
- (c) Early action credits. Beginning on January 1, 2023 clean heat measures that are installed and provide emission reductions are creditable. Upon the establishment of the clean heat credit system, entities may register credits for actions taken starting in 2023.
 - (d) Equitable distribution of clean heat measures.
- (1) The Clean Heat Standard shall be designed and implemented to

households with tenant-paid energy bills. The design shall ensure all customers have an equitable opportunity to participate in, and benefit from, clean heat measures regardless of heating fuel used, income level, geographic location residential building type, or homeownership status.

- (2) Of their annual requirement, each obligated party shall retire at least 16 percent from customers with low income and 16 percent from customers with moderate income. For each of these groups, at least one-half of these credits shall be from installed clean heat measures that require capital investments in homes, have measure lives of 10 years or more, and are estimated by the rechnical 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 consider frontloading 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 it 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 consultation with the Equity Advisory Group, notice, and opportunity for public process. Good cause may include a stortage 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.
- (6) A clean heat measure delivered to a customer qualifying for a government-sponsored, low-income energy subsidy shall qualify for clean heat credits required by subdivision (2) of this subsection.
- (7) Customer income data collected shall be kept confidential by the Commission, the Department of Public Service, the obligated parties and any entity that delivers clean heat measures.
- (e) Credit banking. The Commission shall allow an obligated party that has mot its annual requirement in a given year to retain clean heat credits in

anyual requirements in future compliance periods, as determined by the Commission.

(f) Inforcement.

- (1) The Commission shall have the authority to enforce the requirements of this chapter and any rules or orders adopted to implement the provisions of this chapter. The Commission may use its existing authority under this title. As part of an inforcement order, the Commission may order penalties and injunctive relief.
- (2) The Commission shall order an obligated party that fails to retire the number of clean heat yields required in a given year, including the required amounts from customers with low income and moderate income, to make a noncompliance payment to the default delivery agent. The per-credit amount of the noncompliance payment shall be the four times the amount established by the Commission for timely per-credit payments to the default delivery agent.
- (3) False or misleading statements or other representations made to the Commission by obligated parties related to compliance with the Clean Heat Standard are subject to the Commission's enforcement authority, including the power to investigate and assess penalties, under this title.
- (4) The Commission's enforcement authority does not in any way impede the enforcement authority of other entities, such as the Attorney General's office.
- (5) Failure to register with the Commission as required by this section is a violation of the Consumer Protection Act in 9 V.S.A. chapter 63.
- (g) Records. The Commission shall establish requirements for the types of records to be submitted by obligated parties, a record retention schedule for required records, and a process for verification of records and data submitted in compliance with the requirements of this chapter.

(h) Reports.

- (1) As used in this subsection, "standing committees" means the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy.
- (2) After the adoption of the rules implementing this chapter, the Commission shall submit a written report to the standing committees detailing the efforts undertaken to establish the Clean Heat Standard pursuant to this chapter.

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

§ 8125. DEFAULT DELIVERY AGENT

- (a) Default delivery agent designated. In place of obligated-party specific programs, the Commission shall provide for the development and implementation of State vide clean heat programs and measures by one or more default delivery agents appointed by the Commission for these purposes. The Commission may specify that appointment of a default delivery agent to deliver clean heat services, on behalf of obligated entities who pay the percredit fee to the default delivery agent, satisfies those entities' corresponding obligations under this chapter.
- (b) Appointment. The defaux delivery agent shall be one or more statewide entities capable of providing a variety of clean heat measures. The designation of an entity under this subdivision may be by order of appointment or contract. A designation, whether by order of appointment or by contract, may only be issued after notice and opportunity for hearing. An existing order of appointment issued by the Commission under section 209 of this title may be amended to include the responsibilities of the default delivery agent. An order of appointment shall be for a limited duration not to exceed 12 years, although an entity may be reappointed by order or contract. An order of appointment may include any conditions and requirements that the Commission deems appropriate to promote the public good. For good cause, after notice and opportunity for hearing, the Commission may amend or revoke an order of appointment.
- (c) Supervision. Any entity appointed by order of appointment under this section that is not an electric or gas utility already regulated under this title shall not be considered to be a company as defined under section 201 of this title, but shall be subject to the provisions of sections 18–21, 30–32, 205–208, subsection 209(a), sections 219, 221, and subsection 231(b) of this title, to the same extent as a company as defined under section 201 of this title. The Commission and the Department of Public Service shall have jurisdiction under those sections over the entity, its directors, receivers, trustees, lessees, or other persons or companies overing or operating the entity and of all plants.

guipment, and property of that entity used in or about the business carried on by it in this State as covered and included in this section. This jurisdiction shall be exercised by the Commission and the Department so far as may be necessary to enable them to perform the duties and exercise the powers conferred upon them by law. The Commission and the Department each may, when they deem the public good requires, examine the plants, equipment, and property of any entity appointed by order of appointment to serve as a default delivery agent

(d) Use of a fault delivery agent.

- (1) An obligated party shall meet its annual requirement through a designated default delivery agent appointed by the Commission, unless the obligated party elects to meet its requirement, in whole or in part, through one or more other mechanisms pursuant to subsection 8122(c) of this title.
- (2) The Commission shall provide a form for an obligated party to indicate its election to meet its requirement. The form shall require sufficient information to determine the vature of the credits that the default delivery agent will be responsible to deliver if the obligated party elects to meet its obligation in part. The Commission shall make such elections known to the default delivery agent as soon as prasticable.
- (3) The Commission shall by run or order establish a standard timeline under which the default delivery agent credit cost or costs are established and by which an obligated party must file its excition form. The Commission shall provide not less than 120 days' notice of default delivery agent credit cost or costs prior to the deadline for an obligated party to file its election form so an obligated party can assess options and inform the Commission of its intent to procure credits in whole or in part as fulfillment of its requirement.
- (4) The default delivery agent shall deliver creditable clean heat measures either directly or indirectly to end-use customer locations in Vermont sufficient to meet the total aggregated annual requirement assigned to it pursuant to this subsection, along with any additional amount achievable through noncompliance payments as described in subdivision (f)(2) of this section.

(e) Budget.

- (1) The Commission shall open a proceeding on or before July 1, 2023 and every three years thereafter to establish the default delivery agent credit cost or costs for the subsequent three-year period. That proceeding shall include:
- (A) an initial potential study conducted by the Department of Public Somice to include a quantification of available thermal resources, thermal

yarkei conditions, and Statewide and regional thermal workforce characteristics;

- (B) the development of a three-year plan and associated proposed budges by the default delivery agent; and
 - (C) opportunity for public participation.
- (2) Once the Commission provides the default delivery agent with the obligated parties' election information, the default delivery agent shall be granted the opportunity to amend its plan and budget before the Commission.
- (f) Compliance funds. All funds received from noncompliance payments pursuant to section \$124 (f)(2) shall be used by the default delivery agent to provide clean heat measures to customers with low income.
- (g) Specific programs. The default delivery agent shall create specific programs for multiunit swellings, condo associations, renters, and for manufactured homes so these groups have an equal opportunity to benefit from the Clean Heat Standard.

§ 8126. RULEMAKING

- (a) The Commission shall adoptivules and may issue orders to implement and enforce the Clean Heat Standard program.
- (b) The requirement to adopt rules does not in any way impair the Commission's authority to issue orders or take any other actions, both before and after final rules take effect, to implement and enforce the Clean Heat Standard.
- (c) The Commission's rules may include a provision that allows the Commission to revise its Clean Heat Standard rules by order of the Commission without the revisions being subject to the rulemaking requirements of the 3 V.S.A. chapter 25, provided the Commission:
 - (1) provides notice of any proposed changes,
 - (2) allows for a 30-day comment period, and
 - (3) responds to all comments received on the proposed change.
- (d) Any order issued under this chapter shall be subject to appeal to the Vermont Supreme Court under section 12 of this title, and the Commission must immediately file any orders, a redline, and clean version of the revised rules with the Secretary of State, with notice simultaneously provided to the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy.

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

- (b) Credit own rship. The Commission, in consultation with the Technical Advisory Group, shall establish a standard methodology for determining what party or parties shall be the initial owner of a clean heat credit upon its creation. The original owner or owners may transfer those credits to a third party or to an obligated party.
- (c) Credit values. Clean heat credits shall be based on the accurate and verifiable lifecycle CO2e emission reductions in Vermont's thermal sector that result from the delivery of eligibic clean heat measures to existing or new enduse customer locations into or in Vermont.
- (1) For clean heat measures that are installed, credits will be created for each year of the expected life of the installed measure. The annual value of the clean heat credits for installed measures in each year shall be equal to the lifecycle CO2e emissions of the fuel use that is avoided in a given year because of the installation of the measure, minus the Efecycle emissions of the fuel that is used instead in that year.
- (2) For clean heat measures that are fuel, clean heat credits will be created only for the year the fuel is delivered to the end-use customer. The value of the clean heat credits for fuels shall be the lifecycle CO2e emissions of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel that is used instead.
- (d) List of eligible measures. Eligible clean heat measures delivered to or installed in Vermont shall include:
 - (1) thermal energy efficiency improvements and weatherization;
- (2) cold-climate air, ground source, and other heat pumps, including district, network, grid, microgrid, and building geothermal systems;
 - (3) heat pump water heaters;
 - (4) utility-controlled electric water heaters;
 - (5) solar hot water systems:

- (6) electric appliances providing thermal end uses,
- (7) advanced wood heating;
- (8) noncombustion or renewable energy-based district heating services;
- (9) the supply of sustainably sourced biofuels;
- (10) the supply of green hydrogen; and
- (11) the replacement of a manufactured home with a high efficiency manufactured home.
- (e) Renewable natural gas. For pipeline renewable natural gas and other renewably generated natural gas substitutes to be eligible, an obligated party shall purchase renewable natural gas and its associated renewable attributes and demonstrate that it has secured a contractual pathway for the physical delivery of the gas from the point of injection into the pipeline to the obligated party's delivery system.
 - (f) Carbon intensity of fuels.
- (1) To be eligible as a clean heat measure a liquid or gaseous clean heat measure shall have a carbon intensity value as follows:
 - (A) below 80 in 2025;
 - (B) below 60 in 2030; and
- (C) below 20 in 2050, provided the Commission may allow liquid and gaseous clean heat measures with a carbo, intensity value greater than 20 if excluding them would be impracticable based on the characteristics of Vermont's buildings, the workforce available in Vermont to deliver lower carbon intensity clean heat measures, cost, or the effective administration of the Clean Heat Standard.
- (2) The Commission shall establish and publish the rate at which carbon intensity values shall decrease annually for liquid and gaseous clean heat measures consistent with subdivision (1) of this subsection as follows:
 - (A) on or before January 1, 2025 for 2025 to 2030; and
 - (B) on or before January 1, 2030 for 2031 to 2050.
- (3) For the purpose of this section, the carbon intensity values shall be understood relative to No. 2 fuel oil delivered into or in Vermont in 2023 having a carbon intensity value of 100. Carbon intensity values shall be measured based on fuel pathways.

- (1) To promote certainty for obligated parties and clean heat providers, the Commission shall, by rule or order, establish a schedule of lifecycle emission rates for heating fuels and any fuel that is used in a clean heat measure, including electricity, or is itself a clean heat measure, including biofuels. The schedule shall be based on transparent, verifiable, and accurate emissions accounting adapting the Argonne National Laboratory GREET Model, Intergovernmental Panel on Climate Change (IPCC) modeling, or an alternative of comparable analytical rigor to fit the Vermont thermal sector context, and the requirements of 10 V.S.A. § 578(a)(2) and (3).
- (2) For each fuel pathway, the schedule shall account for greenhouse gas emissions from viogenic and geologic sources, including fugitive emissions and loss of stored care on. In determining the baseline emission rates for clean heat measures that are fuels, emissions baselines shall fully account for methane emissions reductions or captures already occurring, or expected to occur, for each fuel pathway as a result of local, State, or federal policies that have been enacted or adopted
- (3) The schedule may be smended based upon changes in technology or evidence on emissions, but clean heat credits previously awarded or already under contract to be produced shall not be adjusted retroactively.
- (h) Review of consequences. The Commission shall biennially assess harmful consequences that may arise in Vermont or elsewhere from the implementation of clean heat measures and shall set standards or limits to prevent those consequences. Such consequences shall include deforestation, conversion of grasslands, damage to water heds, or the creation of new methane to meet fuel demand.
- (i) Time stamp. Clean heat credits shall be "time stamped" for the year in which the clean heat measure delivered emission reductions. For each subsequent year during which the measure produces emission reductions, credits shall be generated for that year. Only clean heat credits that have not been retired shall be eligible to satisfy the current year obligation.
- (j) Delivery in Vermont. Clean heat credits shall be earned only in proportion to the deemed or measured thermal sector greenhouse gas emission reductions achieved by a clean heat measure delivered in Versiont. Other emissions offsets, wherever located, shall not be eligible measures.

(k) Credit eligibility.

(1) All eligible clean heat measures that are delivered in Vermont beginning on January 1, 2023 shall be eligible for clean heat credits and nay be retired and count towards an obligated party's emission reduction obligations regardless of who expected on delivers them and regardless of

by other federal or State policies and programs. This includes individual initiatives, emission reductions resulting from the State's energy efficiency programs, the low-income weatherization program, and the Renewable Energy Standard Tier 3 program. Clean heat measures delivered or installed pursuant to any local, State, or federal program or policy may count both towards goals or requirements of such programs and policies and be eligible clean heat measures that count towards the emission reduction obligations of this chapter.

- (2) The owner or owners of a clean heat credit are not required to sell the credit.
- (3) Regardless of the programs or pathways contributing to clean heat credits being earned, as individual credit may be counted only once towards satisfying an obligated party's emission reduction obligation.

(1) Credit registration.

- (1) The Commission shall create an administrative system to register, sell, transfer, and trade credits to obligated parties. The Commission may hire a third-party consultant to evaluate, develop, implement, maintain, and support a database or other means for tracking clean heat credits and compliance with the annual requirements of obligated parties.
- (2) The system shall require entities to submit the following information to receive the credit: the location of the rean heat measure, whether the customer or tenant has a low or moderate income, the type of property where the clean heat measure was installed or sold, the type of clean heat measure, and any other information as required by the Commission. Customer income data collected shall be kept confidential by the Commission, the Department of Public Service, the obligated parties and any entity that delivers clean heat measures.
- (m) Greenhouse Gas Emissions Inventory and Forecast. Nothing in this chapter shall limit the authority of the Secretary of Natural Resources to compile and publish the Vermont Greenhouse Gas Emissions Inventory and Forecast in accordance with 10 V.S.A. § 582.

§ 8128. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP

- (a) The Commission shall establish the Clean Heat Standard Sechnical Advisory Group (TAG) to assist the Commission in the ongoing management of the Clean Heat Standard. Its duties shall include:
- (1) establishing and revising the lifecycle carbon dioxide equivalent (CO2e) emissions accounting methodology to be used to determine each

binguied party's annual requirement parsuant to subdivision $\delta 124(a)(2)$ of this chapter;

- (2) establishing and revising the clean heat credit value for different clean heat measures;
- (3) periodically assessing and reporting to the Commission on the sustainability of the production of clean heat measures by considering factors including greenhouse gas emissions; carbon sequestration and storage; human health; land use changes; ecological and biodiversity impacts; groundwater and surface water impacts; air, water, and soil pollution; and impacts on food costs;
- (4) setting the expected life length of clean heat measures for the purpose of calculating credit amounts;
- (5) establishing credit values for each year over a clean heat measure's expected life, including adjustments to account for increasing interactions between clean heat measures over time so as to not double-count emission reductions;
 - (6) facilitating the program coordination with other energy programs;
- (7) calculating the impact of the cost of clean heat credits and the cost savings associated with delivered clean heat measures on per-unit heating fuel prices;
- (8) coordinating with the Agency of Natural Resources to ensure that greenhouse gas emissions reductions achieved in another sector through the implementation of the Clean Heat Standard are not double-counted in the Vermont Greenhouse Gas Emissions Inventory and Forecast;
- (9) advising the Commission on the periods: assessment and revision requirement established in subdivision 8124(a)(3) of this chapter; and
 - (10) any other matters referred to the TAG by the Commission.
- (b) Members of the TAG shall be appointed by the Commission and shall include the Department of Public Service, the Agency of Natural Resources, and parties who have, or whose representatives have, expertise in one or more of the following areas: technical and analytical expertise in measuring lifecycle greenhouse gas emissions, energy modeling and data analysis, clean heat measures and energy technologies, sustainability and non-greenhouse gas emissions strategies designed to reduce and avoid impacts to the environment, delivery of heating fuels, land use changes, deforestation, and climate change mitigation policy and law. The Commission shall accept and review motions to join the TAG from interested parties who have, or whose representatives have,

the not otherwise compensated by their employer shall be entitled to per diem compensation and reimbursement for expenses under 32 V.S.A. § 1010.

- (c) The Commission shall hire a third-party consultant responsible for developing clean heat measure characterizations and relevant assumptions, including CO2e lifecycle emissions analyses. The TAG shall provide input and feedback on the consultant's work. The Commission may use appropriated funds to hire the consultant.
- (d) Emission analyses and associated assumptions developed by the consultant shall be reviewed and approved annually by the Commission. In reviewing the consultant's work, the Commission shall provide a public comment period on the work. The Commission may approve or adjust the consultant's work as it deems necessary based on its review and the public comments received.

§ 8129. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP

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

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

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

§ 8130. SEVERABILITY

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

§ 8131. RULEMAKING AUTHORITY

Notwithstanding any other provision of lay to the contrary, the Commission shall not file proposed rules with the Secretary of State or issue any orders implementing the Clean Heat Standard without specific authorization enacted by the General Assembly.

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

§ 582. GREENHOUSE GAS INVENTORIES; REGISTAY

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

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

§ 3102. CONFIDENTIALITY OF TAX RECORDS

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

* * *

(d) The Commissioner Shall disclose a return or return information:

* * *

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

* *

Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION

- (a) Commencement. On or before August 31, 2023, the Public Utility Commission shall commence a proceeding to implement Sec. 3 (Clean Heat Standard) of this act.
- (b) Facilitator. The Commission may hire a hird-party consultant to design and conduct public engagement. The Commission may use funds appropriated under this act on hiring the consultant.
- (c) Public engagement process. Before commencing rulemaking, the Commission shall use the forms of public engagement a scribed in this subsection to inform the design and implementation of the Clean Heat Standard. Any failure by the Commission to meet the specific procedural requirements of this section shall not affect the validity of the Commission's actions.
- (1) The Commission shall allow any person to register at any time in the Commission's online case management system, ePUC, as a participant in the Clean Heat Standard proceeding. All members of the Equity Advisory Group that he made automatic participants to that proceeding.

carticipants in the proceeding, including all members of the Equity Advisory Group, shall receive all notices of public meetings and all notices of opportunities to comment in that proceeding.

- N) The Commission shall hold at least six public hearings or workshops that shall be recorded and publicly posted on the Commission's website or on ePUC. These meetings shall be open to everyone, including all stakeholders, members of the public, and all other potentially affected parties.
- (3) The Commission also shall provide at least three opportunities for the submission of written comments. Any person may submit written comments to the Commission.
- organizations and communities to invite to participate in the Commission's public meetings and opportunities to comment.
- (4) The Commission shall invite organizations and communities recommended by the Equity Advisory Group to participate in the Commission's public meetings and opportunities to comment.
- (d) Advertising. The Commission shall use funding appropriated in this act on advertising the public meetings in order to provide notice to a wide variety of segments of the public.
- (e) Draft proposed rules. The Commission shall publish draft proposed rules publicly and provide notice of them through the Commission's online case management system, ePUC, to the stakeholders in this rulemaking who registered their names and e-mail addresses with the Commission through ePUC. The Commission shall provide a 30-day comment period on the draft and accept written comments from the public and stakeholders. The Commission shall consider changes in response to the public comments before filing the proposed rules with the Secretary of State and the Legislative Committee on Administrative Rules.
- (A Final rules. On or before Jamusy 15, 2025, the Semmission shall submit to the General Assembly final proposed rules to implement the Clean Heat Standard. The Commission shall not the final proposed rules with the Secretary of State until June 1, 2025

(f) Final rules.

(1) On or before January 15, 2025, the Commission shall submit to the General Assembly final proposed rules to implement the Clean Heat Standard. The Commission shall not file the final proposed rules with the Secretary of State until specific authorization is enacted by the General Assembly to do so.

- (2) Notwinstanding 3 V.S.A. §§ 820, 831, 836–846, and 841(a), upon a) irmative authorization enacted by the General Assembly authorizing the adoption of rules implementing the Clean Heat Standard, the Commission shall file, as the final proposed rule, the rules implementing the Clean Heat Standard approved by the General Assembly with the Secretary of State and Legislative Committee on Administrative Rules pursuant to 3 V.S.A. § 841. The filing shall include everything that is required under 3 V.S.A. §§ 838(a)(1)–(5), (8)–(13), (15), and (16) and 841(b)(1).
- (3) The review, adoption, and effect of the rules implementing the Clean Heat Standard shall be governed by 3 V.S.A. §§ 841(c); 842, exclusive of subdivision (b)(4); 843; 845; and 846, exclusive of subdivision (a)(3).
- (4) Once adopted and effective, any amendments to the rules implementing the Clean Heat Standard shall be made in accordance with the Administrative Procedure Net, 3 V.S.A. chapter 25.
- (g) Consultant. The Commission may contract with a consultant to assist with implementation of 30 V.S.A. § 8127 (clean heat credits).
- (h) Funding. On or before January 15, 2024, the Commission shall report to the General Assembly on suggested revenue streams that may be used or created to fund the Commission's administration of the Clean Heat Standard program.
- (i) Check-back reports. On or before February 15, 2024 and January 15, 2025, the Commission shall submit a written report to and be available to provide oral testimony to the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy detailing the efforts undertaken to establish the Clean Heat Standard. The reports shall include, to the extent available, estimates of the impact of the Clean Heat Standard on customers, including impacts to customer rates and fuel bills for participating and nonparticipating customers, net impacts on total spending on energy for thermal sector end uses, justil fuel reductions, greenhouse gas emission reductions, and, if possible, impacts on economic activity and employment. The modeled impacts shall estimate high-, medium-, and low-price impacts. The reports shall recommend any legislative action needed to address enforcement or other aspects of the Clean Heat Standard.
- (j) Assistance. The Agency of Commerce and Community Development, the Department of Public Service, and other State agencies and departments shall assist the Commission with economic modeling for the required reports and rulemaking process.

Sec. 7. PUBLIC UTILITY COMMISSION AND DEPARTMENT OF

(a) The following new positions are created in the Public Citity

Commission for the purpose of carrying out this act:

- M one permanent exempt Staff Attorney;
- (2) one permanent exempt Analyst; and
- (3) one limited-service exempt Analyst.
- (b) The sum of \$000,000.00 \$825,000.00 is appropriated to the Public Utility Commission from the General Fund in fiscal year 2024 for the positions established in subsection (a) of this section; for all consultants required by this act; and for additional operating costs required to implement the Clean Heat Standard, including marketing and public outreach for Sec. 6 of this act.
- (c) The following new position, are created in the Department of Public Service for the purpose of carrying out this act:
 - (1) one permanent exempt Staff Attorney; and
 - (2) one permanent classified Program In Ayst.
 - (2) two permanent classified Program Analysts.
- (d) The sum of \$100,000.00 \$900,000.00 is appropriated to the Department of Public Service from the General Fund in fiscal year 2824 for the positions established in subsection (c) of this section, to retain consumants that may be required to support verification and evaluation required by 30 V.S.A. § 8127(a), for conducting the potential study, and for associated operating costs related to the implementation of the Clean Heat Standard.

Sec. 8. EFFECTIVE DATE

This act shall take offeet on passage

Sec. 1. SHORT TITLE

This act shall be known and may be cited as the "Affordable Heat Act."

Sec. 2. FINDINGS

The General Assembly finds:

- (1) All of the legislative findings made in 2020 Acts and Resolves No. 153, Sec. 2, the Vermont Global Warming Solutions Act of 2020 (GWSA), remain true and are incorporated by reference here.
- (2) Under the GWSA and 10 V.S.A. § 578, Vermont has a legal obligation to reduce greenhouse gas emissions to specific levels by 2025, 2030, and 2050.

- (3) The Vermont Climate Council was established under the GWSA and was tasked with, among other things, recommending necessary legislation to reduce greenhouse gas emissions. The Initial Vermont Climate Action Plan calls for the General Assembly to adopt legislation authorizing the Public Utility Commission to administer the Clean Heat Standard consistent with the recommendations of the Energy Action Network's Clean Heat Standard Working Group.
- (4) As required by the GWSA, the Vermont Climate Council published the Initial Vermont Climate Action Plan on December 1, 2021. As noted in that plan, over one-third of Vermont's greenhouse gas emissions in 2018 came from the thermal sector. In that year, approximately 72 percent of Vermont's thermal energy use was fossil based, including 29 percent from the burning of heating oil, 24 percent from fossil gas, and 19 percent from propane.
- (5) To meet the greenhouse gas emission reductions required by the GWSA, Vermont needs to transition away from its current carbon-intensive building heating practices to lower-carbon alternatives. It also needs to do this equitably, recognizing economic effects on energy users, especially energy-burdened users; on the workforce currently providing these services; and on the overall economy.
- (6) Vermonters have an unprecedented opportunity to invest in eligible clean heat measures with funding from new federal laws including the Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act of 2022.
- Sec. 3. 30 V.S.A. chapter 94 is added to read:

CHAPTER 94. CLEAN HEAT STANDARD

§ 8121. INTENT

Pursuant to 2 V.S.A. § 205(a), it is the intent of the General Assembly that the Clean Heat Standard be designed and implemented in a manner that achieves Vermont's thermal sector greenhouse gas emissions reductions necessary to meet the requirements of 10 V.S.A. § 578(a)(2) and (3), minimizes costs to customers, protects public health, and recognizes that affordable heating is essential for Vermonters. It shall enhance social equity by prioritizing customers with low income and moderate income and those households with the highest energy burdens. The Clean Heat Standard shall, to the greatest extent possible, maximize the use of available federal funds to deliver clean heat measures.

§ 8122. CLEAN HEAT STANDARD

- (a) The Clean Heat Standard is established. Under this program, obligated parties shall reduce greenhouse gas emissions attributable to the Vermont thermal sector by retiring required amounts of clean heat credits to meet the thermal sector portion of the greenhouse gas emission reduction obligations of the Global Warming Solutions Act.
- (b) By rule or order, the Commission shall establish or adopt a system of tradeable clean heat credits earned from the delivery of clean heat measures that reduce greenhouse gas emissions.
- (c) An obligated party shall obtain the required amount of clean heat credits through delivery of eligible clean heat measures by a default delivery agent, unless the obligated party receives prior approval from the Commission to use another method as described in section 8125 of this title.
- (d) The Commission shall adopt rules and may issue orders to implement and enforce the Clean Heat Standard program.

§ 8123. DEFINITIONS

As used in this chapter:

- (1) "Carbon intensity value" means the amount of lifecycle greenhouse gas emissions per unit of energy of fuel expressed in grams of carbon dioxide equivalent per megajoule (gCO2e/MJ).
- (2) "Clean heat credit" means a tradeable, nontangible commodity that represents the amount of greenhouse gas reduction attributable to a clean heat measure. The Commission shall establish a system of management for clean heat credits pursuant to this chapter.
- (3) "Clean heat measure" means fuel delivered and technologies installed to end-use customers in Vermont that reduce greenhouse gas emissions from the thermal sector. Clean heat measures shall not include switching from one fossil fuel use to another fossil fuel use. The Commission may adopt a list of acceptable actions that qualify as clean heat measures.
 - (4) "Commission" means the Public Utility Commission.
- (5) "Customer with low income" means a customer with a household income of up to 60 percent of the area or statewide median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development or a customer who qualifies for a government-sponsored, low-income energy subsidy.
- (6) "Customer with moderate income" means a customer with a household income between 60 percent and 120 percent of the area or statewide

median income, whichever is greater, as published annually by the U.S. Department of Housing and Urban Development.

- (7) "Default delivery agent" means an entity designated by the Commission to provide services that generate clean heat measures.
- (8) "Energy burden" means the annual spending on thermal energy as a percentage of household income.
- (9) "Entity" means any individual, trustee, agency, partnership, association, corporation, company, municipality, political subdivision, or any other form of organization.
- (10) "Fuel pathway" means a detailed description of all stages of fuel production and use for any particular fuel, including feedstock generation or extraction, production, transportation, distribution, and combustion of the fuel by the consumer. The fuel pathway is used in the calculation of the carbon intensity value and lifecycle greenhouse gas emissions of each fuel.
- (11) "Heating fuel" means fossil-based heating fuel, including oil, propane, natural gas, coal, and kerosene.
 - (12) "Obligated party" means:
 - (A) A regulated natural gas utility serving customers in Vermont.
- (B) For other heating fuels, the entity that imports heating fuel for ultimate consumption within the State, or the entity that produces, refines, manufactures, or compounds heating fuel within the State for ultimate consumption within the State. For the purpose of this section, the entity that imports heating fuel is the entity that has ownership title to the heating fuel at the time it is brought into Vermont.
- (13) "Thermal sector" has the same meaning as the "Residential, Commercial and Industrial Fuel Use" sector as used in the Vermont Greenhouse Gas Emissions Inventory and Forecast and does not include nonroad diesel or any other transportation or other fuel use categorized elsewhere in the Vermont Greenhouse Gas Emissions Inventory and Forecast.

§ 8124. CLEAN HEAT STANDARD COMPLIANCE

(a) Required amounts.

(1) The Commission shall establish the number of clean heat credits that each obligated party is required to retire each calendar year. The size of the annual requirement shall be set at a pace sufficient for Vermont's thermal sector to achieve lifecycle carbon dioxide equivalent (CO2e) emission reductions consistent with the requirements of 10 V.S.A. § 578(a)(2) and (3)

expressed as lifecycle greenhouse gas emissions pursuant to subsection 8127(g) of this title.

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

(b) Annual registration.

- (1) Each entity that sells heating fuel into or in Vermont shall register annually with the Commission by an annual deadline established by the Commission. The first registration deadline is January 31, 2024, and the annual deadline shall remain January 31 of each year unless a different deadline is established by the Commission. The form and information required in the registration shall be determined by the Commission and shall include all data necessary to establish annual requirements under this chapter. The Commission shall use the information provided in the registration to determine whether the entity shall be considered an obligated party and the amount of its annual requirement.
- (2) At a minimum, the Commission shall require registration information to include legal name; doing business as name, if applicable; municipality; state; types of heating fuel sold; and the exact amount of gallons

of each type of heating fuels sold into or in the State for final sale or consumption in the State in the calendar year immediately preceding the calendar year in which the entity is registering with the Commission, separated by type, that was purchased by the submitting entity and the name and location of the entity from which it was purchased.

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

(d) Equitable distribution of clean heat measures.

- (1) The Clean Heat Standard shall be designed and implemented to enhance social equity by prioritizing customers with low income, moderate income, those households with the highest energy burdens, residents of manufactured homes, and renter households with tenant-paid energy bills. The design shall ensure all customers have an equitable opportunity to participate in, and benefit from, clean heat measures regardless of heating fuel used, income level, geographic location, residential building type, or homeownership status.
- (2) Of their annual requirement, each obligated party shall retire at least 16 percent from customers with low income and an additional 16 percent from customers with low or moderate income. For each of these groups, at least one-half of these credits shall be from installed clean heat measures that

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 moderate-income weatherization programs shall not limit the ability of those households to participate in programs under this chapter.
- (6) A clean heat measure delivered to a customer qualifying for a government-sponsored, low-income energy subsidy shall qualify for clean heat credits required by subdivision (2) of this subsection.
- (7) Customer income data collected shall be kept confidential by the Commission, the Department of Public Service, the obligated parties, and any entity that delivers clean heat measures.
- (e) Credit banking. The Commission shall allow an obligated party that has met its annual requirement in a given year to retain clean heat credits in excess of that amount for future sale or application to the obligated party's annual requirements in future compliance periods, as determined by the Commission.

(f) Enforcement.

(1) The Commission shall have the authority to enforce the requirements of this chapter and any rules or orders adopted to implement the provisions of this chapter. The Commission may use its existing authority under this title.

As part of an enforcement order, the Commission may order penalties and injunctive relief.

- (2) The Commission shall order an obligated party that fails to retire the number of clean heat credits required in a given year, including the required amounts from customers with low income and moderate income, to make a noncompliance payment to the default delivery agent for the number of credits deficient. The per-credit amount of the noncompliance payment shall be two times the amount established by the Commission for timely per-credit payments to the default delivery agent.
- (3) However, the Commission may waive the noncompliance payment required by subdivision (2) of this subsection for an obligated party if the Commission:
- (A) finds that the obligated party made a good faith effort to acquire the required amount and its failure resulted from market factors beyond its control; and
- (B) directs the obligated party to add the number of credits deficient to one or more future years.
- (4) False or misleading statements or other representations made to the Commission by obligated parties related to compliance with the Clean Heat Standard are subject to the Commission's enforcement authority, including the power to investigate and assess penalties, under this title.
- (5) The Commission's enforcement authority does not in any way impede the enforcement authority of other entities such as the Attorney General's office.
- (6) Failure to register with the Commission as required by this section is a violation of the Consumer Protection Act in 9 V.S.A. chapter 63.
- (g) Records. The Commission shall establish requirements for the types of records to be submitted by obligated parties, a record retention schedule for required records, and a process for verification of records and data submitted in compliance with the requirements of this chapter.

(h) Reports.

- (1) As used in this subsection, "standing committees" means the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy.
- (2) After the adoption of the rules implementing this chapter, the Commission shall submit a written report to the standing committees detailing

the efforts undertaken to establish the Clean Heat Standard pursuant to this chapter.

- (3) On or before January 15 of each year following the year in which the rules are first adopted under this chapter, the Commission shall submit to the standing committees a written report detailing the implementation and operation of the Clean Heat Standard. This report shall include an assessment on the equitable adoption of clean heat measures required by subsection (d) of this section, along with recommendations to increase participation for the households with the highest energy burdens. The provisions of 2 V.S.A. § 20(d) (expiration of required reports) shall not apply to the report to be made under this subsection.
- (i) LIHEAP pricing. The Margin Over Rack pricing program for fuel assistance shall reflect the default delivery agent credit cost established by the Commission.

§ 8125. DEFAULT DELIVERY AGENT

- (a) Default delivery agent designated. In place of obligated-party specific programs, the Commission shall provide for the development and implementation of statewide clean heat programs and measures by one or more default delivery agents appointed by the Commission for these purposes. The Commission may specify that appointment of a default delivery agent to deliver clean heat services, on behalf of obligated entities who pay the per-credit fee to the default delivery agent, satisfies those entities' corresponding obligations under this chapter.
- (b) Appointment. The default delivery agent shall be one or more statewide entities capable of providing a variety of clean heat measures. The Commission shall designate the first default delivery agent on or before June 1, 2024. The designation of an entity under this subsection may be by order of appointment or contract. A designation, whether by order of appointment or by contract, may only be issued after notice and opportunity for hearing. An existing order of appointment issued by the Commission under section 209 of this title may be amended to include the responsibilities of the default delivery agent. An order of appointment shall be for a limited duration not to exceed 12 years, although an entity may be reappointed by order or contract. An order of appointment may include any conditions and requirements that the Commission deems appropriate to promote the public good. For good cause, after notice and opportunity for hearing, the Commission may amend or revoke an order of appointment.
- (c) Supervision. Any entity appointed by order of appointment under this section that is not an electric or gas utility already regulated under this title

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

(d) Use of default delivery agent.

- (1) An obligated party shall meet its annual requirement through a designated default delivery agent appointed by the Commission. However, the obligated party may seek to meet its requirement, in whole or in part, through one or more of the following ways: by delivering eligible clean heat measures, by contracting for delivery of eligible clean heat measures, or through the market purchase of clean heat credits. An obligated party shall be approved by the Commission to meet its annual requirement using a method other than the default delivery agent if it provides sufficient details on the party's capacity and resources to achieve the emissions reductions. This approval shall not be unreasonably withheld.
- (2) The Commission shall provide a form for an obligated party to indicate how it intends to meet its requirement. The form shall require sufficient information to determine the nature of the credits that the default delivery agent will be responsible to deliver on behalf of the obligated party. If the Commission approves of a plan for an obligated party to meet its obligation through a mechanism other than payment to a designated default delivery agent, then the Commission shall make such approvals known to the default delivery agent as soon as practicable.
- (3) The Commission shall by rule or order establish a standard timeline under which the default delivery agent credit cost or costs are established and by which an obligated party must file its form. The default delivery agent's schedule of costs shall include sufficient costs to deliver installed measures and shall specify separately the costs to deliver measures to customers with low income and customers with moderate income as required by subsection

8124(d) of this title. The Commission shall provide not less than 120 days' notice of default delivery agent credit cost or costs prior to the deadline for an obligated party to file its election form so an obligated party can assess options and inform the Commission of its intent to procure credits in whole or in part as fulfillment of its requirement.

(4) The default delivery agent shall deliver creditable clean heat measures either directly or indirectly to end-use customer locations in Vermont sufficient to meet the total aggregated annual requirement assigned to it, along with any additional amount achievable through noncompliance payments as described in subdivision 8124(f)(2) of this title. Clean heat credits generated through installed measures delivered by the default delivery agent on behalf of an obligated party are creditable in future years. Those credits not required to meet the obligated party's existing obligations shall be owned by the obligated party.

(e) Budget.

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

(C) opportunity for public participation.

(2) Once the Commission provides the default delivery agent with the obligated parties' plan to meet the requirements, the default delivery agent shall be granted the opportunity to amend its plan and budget before the Commission.

- (f) Compliance funds. All funds received from noncompliance payments pursuant to subdivision 8124(f)(2) of this title shall be used by the default delivery agent to provide clean heat measures to customers with low income.
- (g) Specific programs. The default delivery agent shall create specific programs for multiunit dwellings, condominiums, rental properties, commercial and industrial buildings, and manufactured homes.

§ 8126. RULEMAKING

- (a) The Commission shall adopt rules and may issue orders to implement and enforce the Clean Heat Standard program.
- (b) The requirements to adopt rules and any requirements regarding the need for legislative approval before any part of the Clean Heat Standard goes into effect do not in any way impair the Commission's authority to issue orders or take any other actions, both before and after final rules take effect, to implement and enforce the Clean Heat Standard.
- (c) The Commission's rules may include a provision that allows the Commission to revise its Clean Heat Standard rules by order of the Commission without the revisions being subject to the rulemaking requirements of the 3 V.S.A. chapter 25, provided the Commission:
 - (1) provides notice of any proposed changes;
 - (2) allows for a 30-day comment period;
 - (3) responds to all comments received on the proposed change;
- (4) provides a notice of language assistance services on all public outreach materials; and
- (5) arranges for language assistance to be provided to members of the public as requested using professional language services companies.
- (d) Any order issued under this chapter shall be subject to appeal to the Vermont Supreme Court under section 12 of this title, and the Commission must immediately file any orders, a redline, and clean version of the revised rules with the Secretary of State, with notice simultaneously provided to the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy.

§ 8127. TRADEABLE CLEAN HEAT CREDITS

(a) Credits established. By rule or order, the Commission shall establish or adopt a system of tradeable clean heat credits that are earned by reducing greenhouse gas emissions through the delivery of clean heat measures. While credit denominations may be in simple terms for public understanding and

ease of use, the underlying value shall be based on units of carbon dioxide equivalent (CO2e). The system shall provide a process for the recognition, approval, and monitoring of the clean heat credits. The Department of Public Service shall perform the verification of clean heat credit claims and submit results of the verification and evaluation to the Commission annually.

- (b) Credit ownership. The Commission, in consultation with the Technical Advisory Group, shall establish a standard methodology for determining what party or parties shall be the owner of a clean heat credit upon its creation. The owner or owners may transfer those credits to a third party or to an obligated party.
- (c) Credit values. Clean heat credits shall be based on the accurate and verifiable lifecycle CO2e emission reductions in Vermont's thermal sector that result from the delivery of eligible clean heat measures to existing or new enduse customer locations into or in Vermont.
- (1) For clean heat measures that are installed, credits will be created for each year of the expected life of the installed measure. The annual value of the clean heat credits for installed measures in each year shall be equal to the lifecycle CO2e emissions of the fuel use that is avoided in a given year because of the installation of the measure, minus the lifecycle emissions of the fuel that is used instead in that year.
- (2) For clean heat measures that are fuels, clean heat credits will be created only for the year the fuel is delivered to the end-use customer. The value of the clean heat credits for fuels shall be the lifecycle CO2e emissions of the fuel use that is avoided, minus the lifecycle CO2e emissions of the fuel that is used instead.
- (d) List of eligible measures. Eligible clean heat measures delivered to or installed in residential, commercial, and industrial buildings in Vermont shall include:
 - (1) thermal energy efficiency improvements and weatherization;
- (2) cold-climate air, ground source, and other heat pumps, including district, network, grid, microgrid, and building geothermal systems;
 - (3) heat pump water heaters;
 - (4) utility-controlled electric water heaters;
 - (5) solar hot water systems;
 - (6) electric appliances providing thermal end uses;
 - (7) advanced wood heating;

- (8) noncombustion or renewable energy-based district heating services;
- (9) the supply of sustainably sourced biofuels;
- (10) the supply of green hydrogen;
- (11) the replacement of a manufactured home with a high efficiency manufactured home and weatherization or other efficiency or electrification measures in manufactured homes; and
- (12) line extensions that connect facilities with thermal loads to the grid.
- (e) Renewable natural gas. For pipeline renewable natural gas and other renewably generated natural gas substitutes to be eligible, an obligated party shall purchase renewable natural gas and its associated renewable attributes and demonstrate that it has secured a contractual pathway for the physical delivery of the gas from the point of injection into the pipeline to the obligated party's delivery system.
 - (f) Carbon intensity of fuels.
- (1) To be eligible as a clean heat measure, a liquid or gaseous clean heat measure shall have a carbon intensity value as follows:
 - (A) below 80 in 2025:
 - (B) below 60 in 2030; and
- (C) below 20 in 2050, provided the Commission may allow liquid and gaseous clean heat measures with a carbon intensity value greater than 20 if excluding them would be impracticable based on the characteristics of Vermont's buildings, the workforce available in Vermont to deliver lower carbon intensity clean heat measures, cost, or the effective administration of the Clean Heat Standard.
- (2) The Commission shall establish and publish the rate at which carbon intensity values shall decrease annually for liquid and gaseous clean heat measures consistent with subdivision (1) of this subsection as follows:
 - (A) on or before January 1, 2025 for 2025 to 2030; and
 - (B) on or before January 1, 2030 for 2031 to 2050.
- (3) For the purpose of this section, the carbon intensity values shall be understood relative to No. 2 fuel oil delivered into or in Vermont in 2023 having a carbon intensity value of 100. Carbon intensity values shall be measured based on fuel pathways.
 - (g) Emissions schedule.

- (1) To promote certainty for obligated parties and clean heat providers, the Commission shall, by rule or order, establish a schedule of lifecycle emission rates for heating fuels and any fuel that is used in a clean heat measure, including electricity, or is itself a clean heat measure, including biofuels. The schedule shall be based on transparent, verifiable, and accurate emissions accounting adapting the Argonne National Laboratory GREET Model, Intergovernmental Panel on Climate Change (IPCC) modeling, or an alternative of comparable analytical rigor to fit the Vermont thermal sector context, and the requirements of 10 V.S.A. § 578(a)(2) and (3).
- (2) For each fuel pathway, the schedule shall account for greenhouse gas emissions from biogenic and geologic sources, including fugitive emissions and loss of stored carbon. In determining the baseline emission rates for clean heat measures that are fuels, emissions baselines shall fully account for methane emissions reductions or captures already occurring, or expected to occur, for each fuel pathway as a result of local, State, or federal legal requirements that have been enacted or adopted that reduce greenhouse gas emissions.
- (3) The schedule may be amended based upon changes in technology or evidence on emissions, but clean heat credits previously awarded or already under contract to be produced shall not be adjusted retroactively.
- (h) Review of consequences. The Commission shall biennially assess harmful consequences that may arise in Vermont or elsewhere from the implementation of specific types of clean heat measures and shall set standards or limits to prevent those consequences. Such consequences shall include environmental burdens as defined in 3 V.S.A. § 6002, public health, deforestation or forest degradation, conversion of grasslands, increased emissions of criteria pollutants, damage to watersheds, or the creation of new methane to meet fuel demand.
- (i) Time stamp. Clean heat credits shall be "time stamped" for the year in which the clean heat measure delivered emission reductions. For each subsequent year during which the measure produces emission reductions, credits shall be generated for that year. Only clean heat credits that have not been retired shall be eligible to satisfy the current year obligation.
- (j) Delivery in Vermont. Clean heat credits shall be earned only in proportion to the deemed or measured thermal sector greenhouse gas emission reductions achieved by a clean heat measure delivered in Vermont. Other emissions offsets, wherever located, shall not be eligible measures.
 - (k) Credit eligibility.

- (1) All eligible clean heat measures that are delivered in Vermont beginning on January 1, 2023 shall be eligible for clean heat credits and may be retired and count towards an obligated party's emission reduction obligations, regardless of who creates or delivers them and regardless of whether their creation or delivery was required or funded in whole or in part by other federal or State policies and programs. This includes individual initiatives, emission reductions resulting from the State's energy efficiency programs, the low-income weatherization program, and the Renewable Energy Standard Tier 3 program. Clean heat measures delivered or installed pursuant to any local, State, or federal program or policy may count both towards goals or requirements of such programs and policies and be eligible clean heat measures that count towards the emission reduction obligations of this chapter.
- (2) The owner or owners of a clean heat credit are not required to sell the credit.
- (3) Regardless of the programs or pathways contributing to clean heat credits being earned, an individual credit may be counted only once towards satisfying an obligated party's emission reduction obligation.

(1) Credit registration.

- (1) The Commission shall create an administrative system to register, sell, transfer, and trade credits to obligated parties. The Commission may hire a third-party consultant to evaluate, develop, implement, maintain, and support a database or other means for tracking clean heat credits and compliance with the annual requirements of obligated parties.
- (2) The system shall require entities to submit the following information to receive the credit: the location of the clean heat measure, whether the customer or tenant has a low or moderate income, the type of property where the clean heat measure was installed or sold, the type of clean heat measure, and any other information as required by the Commission. Customer income data collected shall be kept confidential by the Commission, the Department of Public Service, the obligated parties, and any entity that delivers clean heat measures.
- (m) Greenhouse Gas Emissions Inventory and Forecast. Nothing in this chapter shall limit the authority of the Secretary of Natural Resources to compile and publish the Vermont Greenhouse Gas Emissions Inventory and Forecast in accordance with 10 V.S.A. § 582.

§ 8128. CLEAN HEAT STANDARD TECHNICAL ADVISORY GROUP

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

- (1) establishing and revising the lifecycle carbon dioxide equivalent (CO2e) emissions accounting methodology to be used to determine each obligated party's annual requirement pursuant to subdivision 8124(a)(2) of this chapter;
- (2) establishing and revising the clean heat credit value for different clean heat measures;
- (3) periodically assessing and reporting to the Commission on the sustainability of the production of clean heat measures by considering factors including greenhouse gas emissions; carbon sequestration and storage; human health impacts; land use changes; ecological and biodiversity impacts; groundwater and surface water impacts; air, water, and soil pollution; and impacts on food costs;
- (4) setting the expected life length of clean heat measures for the purpose of calculating credit amounts;
- (5) establishing credit values for each year over a clean heat measure's expected life, including adjustments to account for increasing interactions between clean heat measures over time so as to not double-count emission reductions;
 - (6) facilitating the program's coordination with other energy programs;
- (7) calculating the impact of the cost of clean heat credits and the cost savings associated with delivered clean heat measures on per-unit heating fuel prices;
- (8) calculating the savings associated with public health benefits due to clean heat measures;
- (9) coordinating with the Agency of Natural Resources to ensure that greenhouse gas emissions reductions achieved in another sector through the implementation of the Clean Heat Standard are not double-counted in the Vermont Greenhouse Gas Emissions Inventory and Forecast;
- (10) advising the Commission on the periodic assessment and revision requirement established in subdivision 8124(a)(3) of this chapter; and
 - (11) any other matters referred to the TAG by the Commission.
- (b) The Clean Heat Standard Technical Advisory Group shall consist of up to 15 members appointed by the Commission. The Commission shall establish the procedure for the TAG, including member term lengths and meeting procedures. Members of the TAG shall be appointed by the Commission and shall include the Department of Public Service, the Agency of Natural Resources, the Department of Health, and parties who have, or whose

representatives have, expertise in one or more of the following areas: technical and analytical expertise in measuring lifecycle greenhouse gas emissions, energy modeling and data analysis, clean heat measures and energy technologies, sustainability and non-greenhouse gas emissions strategies designed to reduce and avoid impacts to the environment, mitigating environmental burdens as defined in 3 V.S.A. § 6002, public health impacts of air quality and climate change, delivery of heating fuels, land use changes, deforestation and forest degradation, and climate change mitigation policy and law. The Commission shall accept and review motions to join the TAG from interested parties who have, or whose representatives have, expertise in one or more of the areas listed in this subsection. Members who are not otherwise compensated by their employer shall be entitled to per diem compensation and reimbursement for expenses under 32 V.S.A. § 1010.

- (c) The Commission shall hire a third-party consultant responsible for developing clean heat measure characterizations and relevant assumptions, including CO2e lifecycle emissions analyses. The TAG shall provide input and feedback on the consultant's work. The Commission may use appropriated funds to hire the consultant.
- (d) Emission analyses and associated assumptions developed by the consultant shall be reviewed and approved annually by the Commission. In reviewing the consultant's work, the Commission shall provide a public comment period on the work. The Commission may approve or adjust the consultant's work as it deems necessary based on its review and the public comments received.

§ 8129. CLEAN HEAT STANDARD EQUITY ADVISORY GROUP

- (a) The Commission shall establish the Clean Heat Standard Equity Advisory Group to assist the Commission in developing and implementing the Clean Heat Standard in a manner that ensures an equitable share of clean heat measures are delivered to Vermonters with low income and moderate income and that Vermonters with low income and moderate income who are not early participants in clean heat measures are not negatively impacted in their ability to afford heating fuel. Its duties shall include:
- (1) providing feedback to the Commission on strategies for engaging Vermonters with low income and moderate income in the public process for developing the Clean Heat Standard program;
- (2) supporting the Commission in assessing whether customers are equitably served by clean heat measures and how to increase equity;

- (3) identifying actions needed to provide customers with low income and moderate income with better service and to mitigate the fuel price impacts calculated in section 8128 of this title;
- (4) recommending any additional programs, incentives, or funding needed to support customers with low income and moderate income and organizations that provide social services to Vermonters in affording heating fuel and other heating expenses;
- (5) providing feedback to the Commission on the impact of the Clean Heat Standard on the experience of Vermonters with low income and moderate income; and
- (6) providing information to the Commission on the challenges renters and residents of manufactured homes face in equitably accessing clean heat measures and recommendations to ensure that renters and residents of manufactured homes have equitable access to clean heat measures.
- (b) The Clean Heat Standard Equity Advisory Group shall consist of up to 10 members appointed by the Commission and at a minimum shall include at least one representative from each of the following groups: the Department of Public Service; the Department for Children and Families' Office of Economic Opportunity; a community action agency with expertise in low-income weatherization; a community action agency with expertise in serving residents of manufactured homes; Efficiency Vermont; the Vermont Association of Area Agencies on Aging; individuals with socioeconomically, racially, and geographically diverse backgrounds; renters; rental property owners; the Vermont Housing Finance Agency; and a member of the Vermont Fuel Dealers Association. Members who are not otherwise compensated by their employer shall be entitled to per diem compensation and reimbursement for expenses under 32 V.S.A. § 1010.
- (c) The Equity Advisory Group shall cease to exist when the initial Clean Heat Standard rules are adopted. Thereafter, the issues described in subsection (a) of this section shall be reviewed by the Commission, in compliance with 3 V.S.A. chapter 72.

§ 8130. SEVERABILITY

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

§ 8131. RULEMAKING AUTHORITY

Notwithstanding any other provision of law to the contrary, the Commission shall not file proposed rules with the Secretary of State implementing the Clean Heat Standard without specific authorization enacted by the General Assembly.

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

§ 582. GREENHOUSE GAS INVENTORIES; REGISTRY

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

* * *

Sec. 5. CONFIDENTIALITY OF FUEL TAX RETURNS; 2024

- (a) Notwithstanding 32 V.S.A. § 3102(a), from January 1, 2024 until December 31, 2024, the Commissioner of Taxes shall disclose to the Public Utility Commission and the Department of Public Service a return or return information related to the fuel tax imposed under 33 V.S.A. § 2503, provided the return or return information provided is necessary to verify the identity, fuel tax liability, and registration status of an entity that sells heating fuel into Vermont for purposes of administering the Clean Heat Standard established in 30 V.S.A. chapter 94.
- (b) Pursuant to 32 V.S.A. § 3102(h), the person or persons receiving return or return information under this section shall be subject to the penalty provisions of 32 V.S.A. § 3102(a) for unauthorized disclosure of return or return information as if such person were the agent of the Commissioner. Pursuant to 32 V.S.A. § 3102(g), nothing in this section shall be construed to prohibit the publication of statistical information, rulings, determinations, reports, opinions, policies, or other information, provided the data is disclosed in a form that cannot identify or be associated with a particular person.
- (c) Pursuant to 1 V.S.A. § 317(c)(6), a fuel tax return and related documents, correspondence, and certain types of substantiating forms that

include the same type of information as in the tax return itself filed with or maintained by the Vermont Department of Taxes disclosed to the Public Utility Commission and the Department of Public Service under this section shall be exempt from public inspection and copying.

Sec. 6. PUBLIC UTILITY COMMISSION IMPLEMENTATION

- (a) Commencement. On or before August 31, 2023, the Public Utility Commission shall commence a proceeding to implement Sec. 3 (Clean Heat Standard) of this act.
- (b) Facilitator. The Commission shall hire a third-party consultant with expertise in equity, justice, and diversity to design and conduct public engagement. The Commission and the facilitator shall incorporate the Guiding Principles for a Just Transition into the public engagement process. The Commission may use funds appropriated under this act on hiring the consultant. Public engagement shall be conducted by the facilitator for the purposes of:
- (1) supporting the Commission in assessing whether customers will be equitably served by clean heat measures and how to increase equity in the delivery of clean heat measures;
- (2) identifying actions needed to provide customers with low income and moderate income with better service and to mitigate the fuel price impacts calculated in 30 V.S.A. § 8128;
- (3) recommending any additional programs, incentives, or funding needed to support customers with low income and moderate income and organizations that provide social services to Vermonters in affording heating fuel and other heating expenses; and
- (4) providing information to the Commission on the challenges renters face in equitably accessing clean heat measures and recommendations to ensure that renters have equitable access to clean heat measures.
- (c) Public engagement process. Before commencing rulemaking, the Commission shall use the forms of public engagement described in this subsection to inform the design and implementation of the Clean Heat Standard. Any failure by the Commission to meet the specific procedural requirements of this section shall not affect the validity of the Commission's actions.
- (1) The Commission shall allow any person to register at any time in the Commission's online case management system, ePUC, as a participant in the Clean Heat Standard proceeding. All members of the Equity Advisory Group shall be made automatic participants to that proceeding. All registered

participants in the proceeding, including all members of the Equity Advisory Group, shall receive all notices of public meetings and all notices of opportunities to comment in that proceeding.

- (2) The Commission shall hold at least six public hearings or workshops that shall be recorded and publicly posted on the Commission's website or on ePUC. These meetings shall be open to everyone, including all stakeholders, members of the public, and all other potentially affected parties, with translation services available to those attending.
- (3) The Commission also shall provide at least three opportunities for the submission of written comments. Any person may submit written comments to the Commission.
- (d) Advertising. The Commission shall use funding appropriated in this act on advertising the public meetings in order to provide notice to a wide variety of segments of the public. All advertisements of public meetings shall include a notice of language assistance services. The Commission shall arrange for language assistance to be provided to members of the public as requested using the services of professional language services companies.
- (e) Draft proposed rules. The Commission shall publish draft proposed rules publicly and provide notice of them through the Commission's online case management system, ePUC, to the stakeholders in this rulemaking who registered their names and e-mail addresses with the Commission through ePUC. The Commission shall provide a 30-day comment period on the draft and accept written comments from the public and stakeholders. The Commission shall consider changes in response to the public comments before filing the proposed rules with the Secretary of State and the Legislative Committee on Administrative Rules.

(f) Final rules.

- (1) On or before January 15, 2025, the Commission shall submit to the General Assembly final proposed rules to implement the Clean Heat Standard. The Commission shall not file the final proposed rules with the Secretary of State until specific authorization is enacted by the General Assembly to do so.
- (2) Notwithstanding 3 V.S.A. §§ 820, 831, 836–840, and 841(a), upon affirmative authorization enacted by the General Assembly authorizing the adoption of rules implementing the Clean Heat Standard, the Commission shall file, as the final proposed rule, the rules implementing the Clean Heat Standard approved by the General Assembly with the Secretary of State and Legislative Committee on Administrative Rules pursuant to 3 V.S.A. § 841. The filing shall include everything that is required under 3 V.S.A. §§ 838(a)(1)–(5), (8)–(13), (15), and (16), (b), (c), and 841(b)(1).

- (3) The review, adoption, and effect of the rules implementing the Clean Heat Standard shall be governed by 3 V.S.A. §§ 841(c); 842, exclusive of subdivision (b)(4); 843; 845; and 846, exclusive of subdivision (a)(3).
- (4) Once adopted and effective, any amendments to the rules implementing the Clean Heat Standard shall be made in accordance with the Administrative Procedure Act, 3 V.S.A. chapter 25, unless the adopted rules allow for amendments through a different process in accordance with 30 V.S.A. § 8126(c) and (d).
- (5) The final proposed rules shall contain the first set of annual required amounts for obligated parties as described in 30 V.S.A. § 8124(a)(1). The first set of annual required amounts shall only be adopted through the rulemaking process established in this section, not through an order.
- (g) Consultant. The Commission may contract with a consultant to assist with implementation of 30 V.S.A. § 8127 (clean heat credits).
- (h) Funding. On or before February 15, 2024, the Commission shall report to the General Assembly on suggested revenue streams that may be used or created to fund the Commission's administration of the Clean Heat Standard program and shall include programs to support market transformation such as workforce development, market uplift, and training that may be administered by a third party.
- (i) Check-back reports. On or before February 15, 2024 and January 15, 2025, the Commission shall submit a written report to and be available to provide oral testimony to the House Committee on Environment and Energy and the Senate Committees on Finance and on Natural Resources and Energy detailing the efforts undertaken to establish the Clean Heat Standard. The reports shall include, to the extent available, estimates of the impact of the Clean Heat Standard on customers, including impacts to customer rates and fuel bills for participating and nonparticipating customers, net impacts on total spending on energy for thermal sector end uses, fossil fuel reductions, greenhouse gas emission reductions, and, if possible, impacts on economic activity and employment. The modeled impacts shall estimate high-, medium-, and low-price impacts. The reports shall recommend any legislative action needed to address enforcement or other aspects of the Clean Heat Standard, including how to ensure fuel use that occurs outside the thermal sector is not impacted under the program.
- (j) Assistance. The Agency of Commerce and Community Development, the Department of Public Service, and other State agencies and departments shall assist the Commission with economic modeling for the required reports and rulemaking process.

(k) Report on equity issues. On or before January 15, 2025, the Equity Advisory Group shall report to the General Assembly on the Group's findings from the review of issues under 30 V.S.A. § 8129(a).

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

- (a) The following new positions are created in the Public Utility Commission for the purpose of carrying out this act:
 - (1) one permanent exempt Staff Attorney;
 - (2) one permanent exempt Analyst; and
 - (3) one limited-service exempt Analyst.
- (b) The sum of \$825,000.00 is appropriated to the Public Utility Commission from the General Fund in fiscal year 2024 for the positions established in subsection (a) of this section; for all consultants required by this act; and for additional operating costs required to implement the Clean Heat Standard, including marketing and public outreach for Sec. 6 of this act.
- (c) The following new positions are created in the Department of Public Service for the purpose of carrying out this act:
 - (1) one permanent exempt Staff Attorney; and
 - (2) two permanent classified Program Analysts.
- (d) The sum of \$900,000.00 is appropriated to the Department of Public Service from the General Fund in fiscal year 2024 for the positions established in subsection (c) of this section, to retain consultants that may be required to support verification and evaluation required by 30 V.S.A. § 8127(a), for conducting the potential study, and for associated operating costs related to the implementation of the Clean Heat Standard.

Sec. 8. EFFECTIVE DATE

This act shall take effect on passage.