
Bi-Annual Energy Reporting 19 V.S.A. Chapter 1 Section 45

HOUSE TRANSPORTATION COMMITTEE, FEBRUARY 4, 2026

ANDREA WRIGHT, ENVIRONMENTAL POLICY MANAGER

BRAD MCAVOY, FACILITIES MANAGER

Bi-Annual Energy Reporting

19 V.S.A § 45

§45. Heating systems

(a) In accordance with the renewable energy goals set forth in the State Comprehensive Energy Plan, the Agency of Transportation shall strive to meet not less than 35 percent of its thermal energy needs from non-fossil fuel sources by 2025 and 45 percent by 2035.

- (1) In order to meet these goals, the Agency will need to use more renewable fuels, such as local wood fuels, to heat its buildings and continue to increase its use of electricity that is generated from renewable sources.
- (2) When building new Agency facilities or replacing heating equipment that has reached the end of its useful lifespan, the Agency shall prioritize switching to high-efficiency, advanced heating systems.

(b) On or before October 1 every other year, the Agency shall report to the Department of Buildings and General Services the percentage of the Agency's thermal energy usage during each of the previous two fiscal years that came from fossil fuels and from non-fossil fuels. The Agency shall report its non-fossil fuel percentage by fuel source and shall identify each type and amount of wood fuel used.

AOT Facilities Summary

430 Buildings
1,438,180 Sq ft

Leases @:
BCP (72,713 sq ft)
Dill (61,129 sq ft)

~ thermal energy usage ~
900,000 sq ft of owned
heated space

Division	Total Buildings	Total Square Footage
AVIATION	38	163,714
DISTRICT 1	36	104,562
DISTRICT 2	35	101,080
DISTRICT 3	36	113,236
DISTRICT 4	50	148,042
DISTRICT 5	26	118,957
DISTRICT 6	39	164,960
DISTRICT 7	43	117,914
DISTRICT 8	43	149,594
DISTRICT 9	36	113,037
GMTA	2	19,150
RAIL	22	70,883
WEIGH STATION	3	1,400
WELCOME CENTER	21	51,651
Grand Total	430	1,438,180

Does not include space AOT leases.

Data Collection Background

Process:

- Rail, Aviation, and each Maintenance District bill payers enter data from fuel, electric, water and sewer receipts
- Finance team reviews and corrects fuel usage types based on scans of original invoices
- AOT has tracked and reported energy usage data since SFY2011

Challenges:

- Different reporting systems for different consumption
- Labor intensive and introduces opportunity for some level of inaccuracy, inconsistency, and human error
- Difficult to separate fuel usage for thermal systems compared to fuel usage for vehicles and equipment
- Difficult to separate electricity usage for heating (baseboard or heat pumps) vs. for lighting, EVSE, etc.

Thermal Energy Usage Summary

- Percentage of thermal energy usage during each of the previous two fiscal years - fossil fuels and non-fossil fuels
- Non-fossil fuel percentage by fuel source
- Each type and amount of wood fuel used

Thermal Energy Usage by Fuel Type			SFY 2023		SFY 2024		SFY 2025	
Fuel Type	Unit	MMBTU / unit	Qty	MMBTU	Qty	MMBTU	Qty	MMBTU
HEATING OIL #1 - Kerosene	GAL	0.135	12,454	1,681	16,606	2,242	16,455	2,221
HEATING OIL #2 - Uncut	GAL	0.138	48,279	6,663	43,217	5,964	60,398	8,335
FUELS - Diesel	GAL	0.139	9,211	1,280	5,361	745	3,384	470
FUELS - Natural Gas	CCF	0.1026	44,465	4,562	42,321	4,342	46,560	4,777
FUELS - Propane	GAL	0.091	191,663	17,441	204,058	18,569	236,267	21,500
WOOD - Purchased*	CORDS	22	-	-	-	-	-	-
WOOD - Projects	CORDS	22	414	9,108	344	7,568	403	8,866
Total MMBTU			40,736		39,430		46,170	
% MMBTU from Wood			22%		19%		19%	
Facilities Heating with Wood			23		23		24	

*All wood fuel used in recent years has been cordwood harvested from AOT project sites. The new Swanton garage uses purchased wood pellets.

Facilities Energy Upgrades

(14) sites with solar arrays

(5) sites with heat pumps

(24) Outdoor Wood boilers

(15) sites with Level II charging

(2) sites with Level III

90% maintenance garages have been converted to high-bay LED lights



Swanton District Garage

Energy Efficiency Components

- Primary Heat Source
 - Maine Energy Systems Wood Pellet boilers with 18-ton storage silo
 - Garage office/breakroom areas use heat pumps
- Radiant slab
- 48 panel parking canopy
- 32 panel roof array on office
- Electric Vehicle Charging
 - (1) dual head level 3
 - (3) level 2 stations
- Garage has conduit in place for future charging



Contacts

Andrea Wright

Environmental Policy Manager
Environmental Policy and Sustainability
Vermont Agency of Transportation

802-917-1586

Andrea.Wright@vermont.gov

Brad McAvoy

AOT Facilities Manager
Emergency Management and Employee Safety
Vermont Agency of Transportation

802-249-1942

Brad.McAvoy@vermont.gov