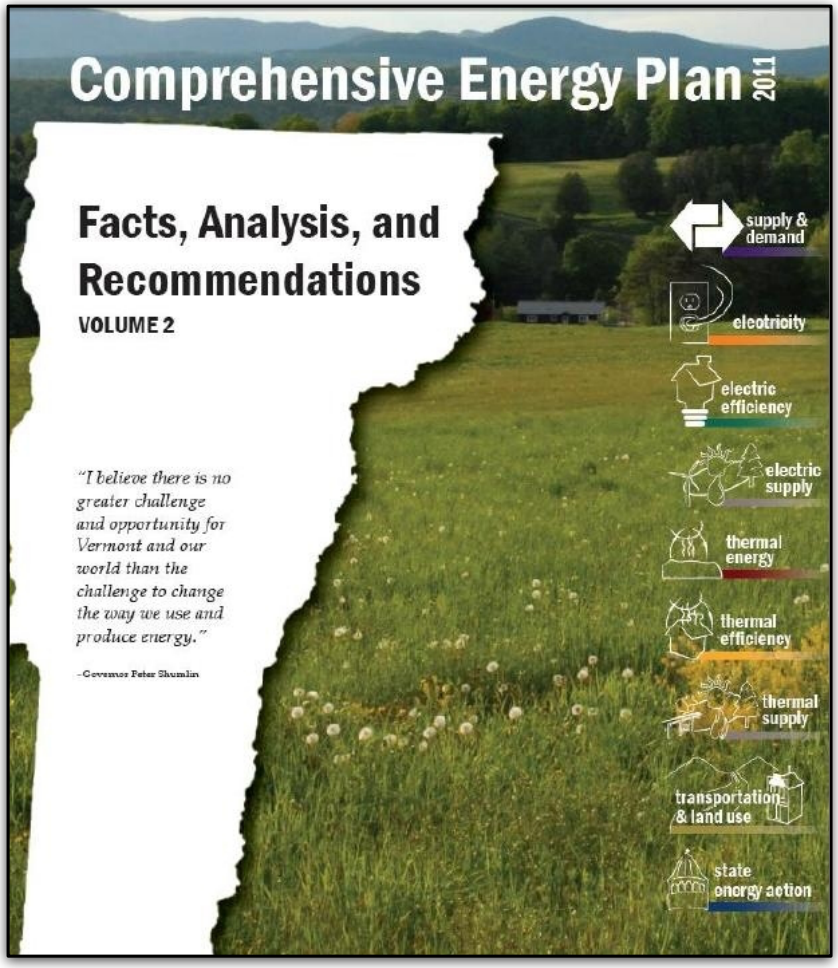
VFDA
vermontfuel.com
EPA
FuelSave
Regular Unleaded
V-Power
Vermont's Liquid Fuel Industry



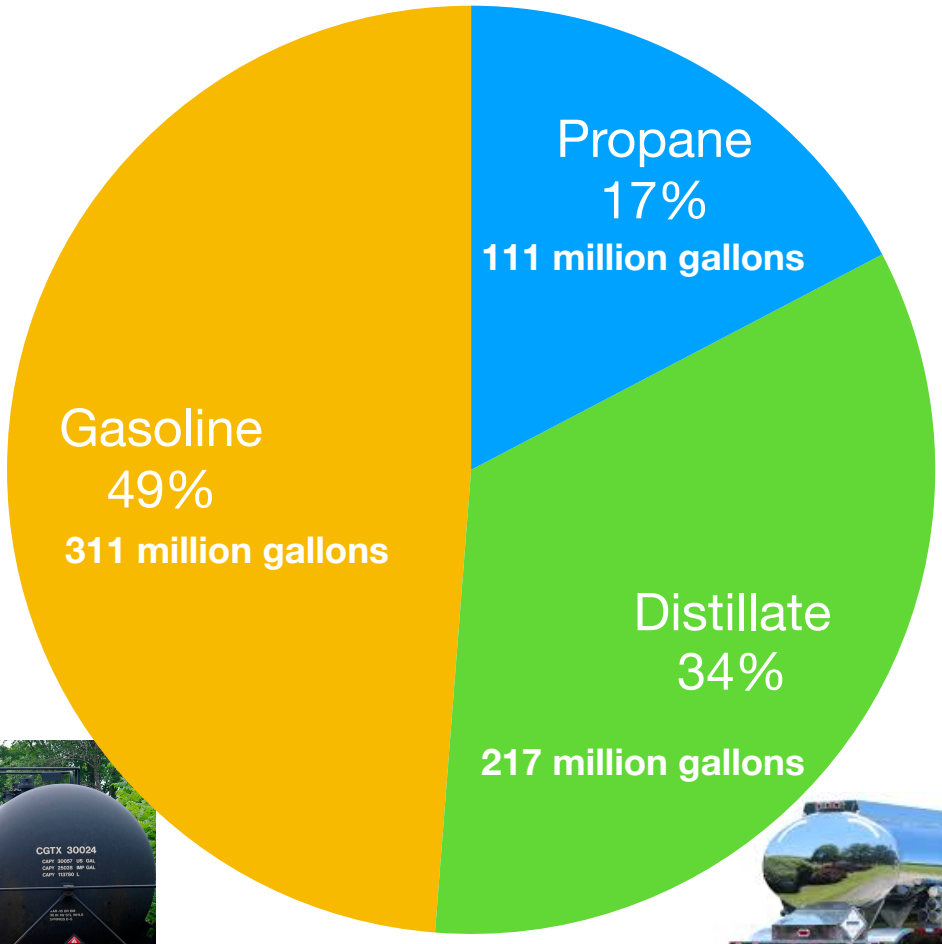

The Vermont Comprehensive Energy Plan seeks to

**"virtually eliminate"**

the use of petroleum.

# Liquid Fuel Consumption in Vermont

***2016 Vermont Consumption Data from U.S. DOE EIA  Updated April 2018***



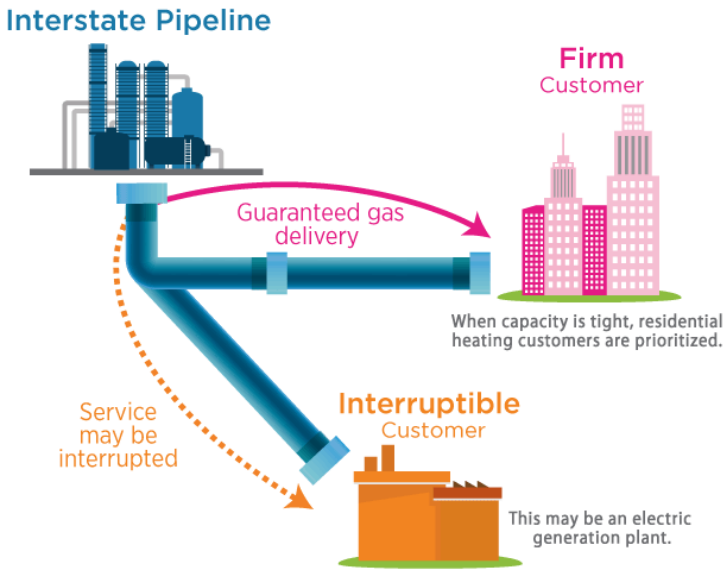
# Distillate Consumption— Vermont —2016

| Use | Gallons | Percentage |
|---|---|---|
| Heat, Residential | 75,226,000 | 35% |
| Heat, Commerical | 28,095,000 | 13% |
| Military | 760,000 | Less than 1% |
| Electric Power Production | 414,000 | Less than 1% |
| Railroad | 9,818,000 | 5% |
| Highway Vehicles | 70,527,000 | 32% |
| Forestry/Construction | 6,673,000 | 3% |
| Farm | 12,808,000 | 6% |
| Jet Fuel | 12,180,000 | 6% |
| TOTAL | 216,501,000 | |

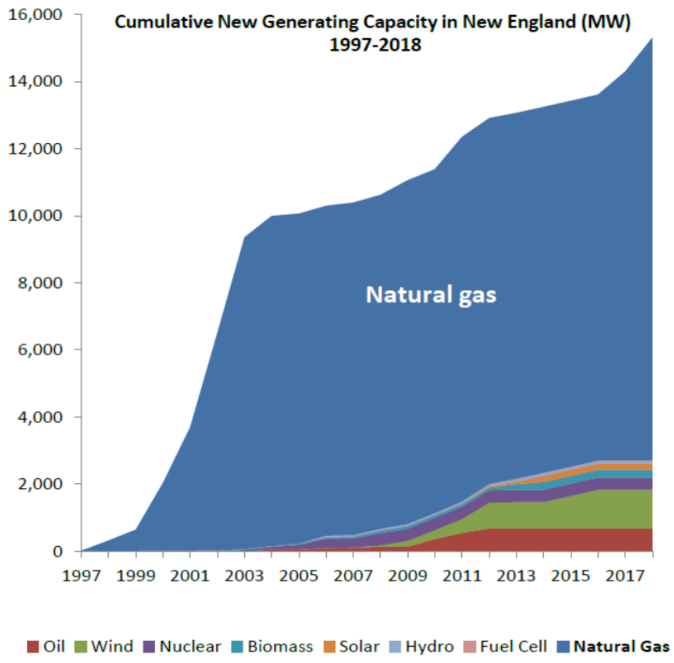
Source: Energy Information Administration (EIA) https://www.eia.gov/dnav/pet/pet_cons_821usea_dcu_SVT_a.htm

# Lessons from the 2018 Bomb Cyclone

If your outdoor condensing unit is iced up, airflow will be severely restricted, resulting in a struggling unit that may end up causing severe damage. The most common solution to a frozen heat pump is running the defrost cycle. It normally turns on automatically at timed intervals or when the unit detects frost, however, some systems have a defrost option. The defrost cycle basically reverses the heat pump into air conditioning mode so that it can pump heat to the outdoor unit until it unfreezes.




Source: PJM https://learn.pjm.com/three-priorities/keeping-the-lights-on/gas-electric-industry/natural-gas-electric-market.aspx




VELCO Testimony: https://legislature.vermont.gov/Documents/2020/WorkGroups/House%20Energy%20and%20Technology/Witness%20Documents/Electric%20Utilities/W~John%20Flynn~VELCO%20Introduction%20~1-25-2019.pdf

**When natural gas is interrupted, electric utilities and large industrial users of natural gas rely on distillate infrastructure to keep the lights and heat on in the winter.**

ISO new england

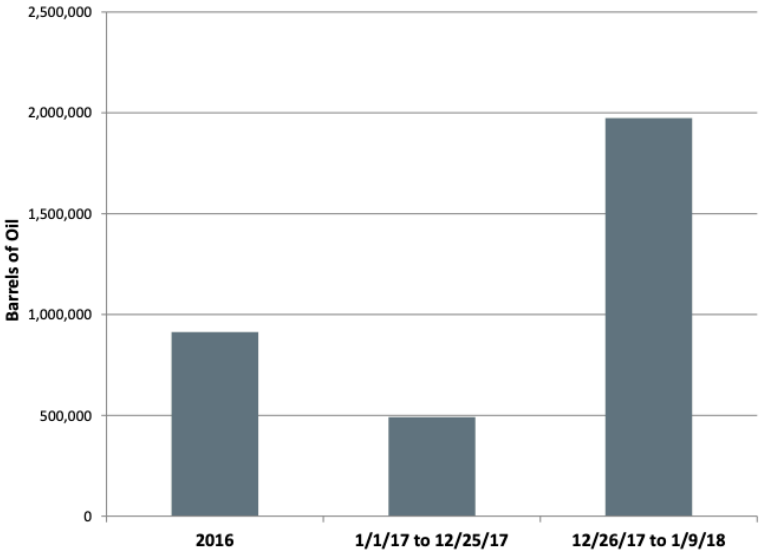
# State of the Grid: 2018

*ISO on Background*

**2018 Bomb Cyclone**

## Generator Oil Burn: Two Weeks vs Twelve Months

*NE generators burned 2 million barrels of oil in 2 weeks—more than twice the amount of oil used in all of 2016*




2 million barrels =
84 million gallons

Vermont homes require approximately 72 million gallons of distillate per year.

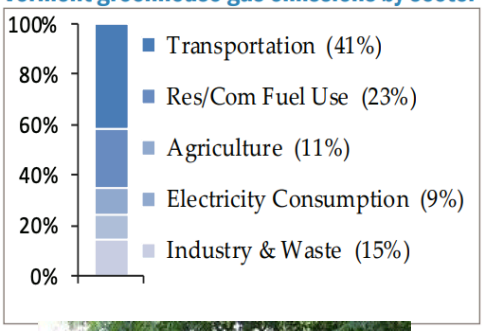
Source: ISO-NE https://www.iso-ne.com/static-assets/documents/2018/02/02272018_pr_presentation_state-of-the-grid_2018.pdf

VERMONT

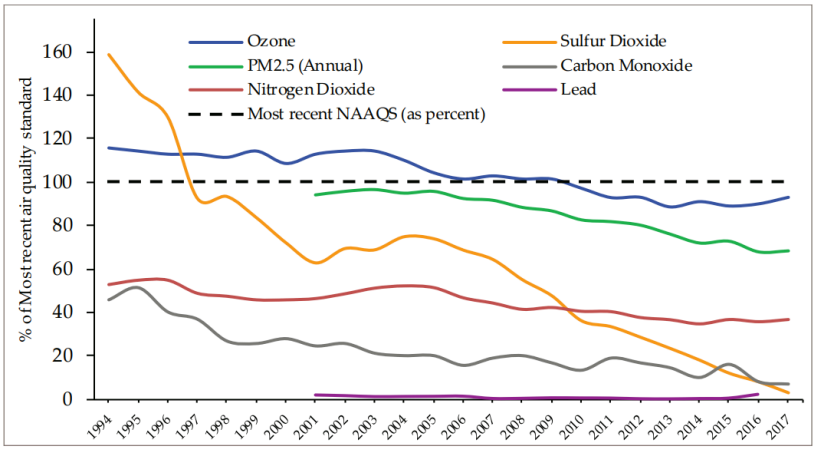
AGENCY OF NATURAL RESOURCES

Department of Environmental Conservation

**Vermont greenhouse gas emissions by sector**




**Ambient air quality trends for Criteria Air Pollutants in Vermont**



**Vermont's winter particulate levels are often dominated by local emissions, especially in mountain valley towns where reductions from local sources like wood stoves will be needed to meet more protective future standards.**

Source: DATA SOURCE: Air Quality and Climate Division Greenhouse Gas Emissions Inventory Update 1990-2013 PREPARED BY: Air Quality and Climate Division; (802) 828-1288

https://legislature.vermont.gov/Documents/2020/WorkGroups/Senate%20Natural%20Resources/reports/W~Heidi%20Hales~DEC%20Department%20Performance%20Report%202019~1-17-2019.pdf

# Clean and Efficient Oilheat

Vermont oilheat companies *only* deliver clean and efficient Ultra-Low Sulfur Heating Oil (ULSHO)

*Learn more at heatcleanvt.com*

*Vermont law requires all heating oil and kerosene to have less than 15 ppm sulfur.*

**Bourne's Energy— Morrisville, VT**