

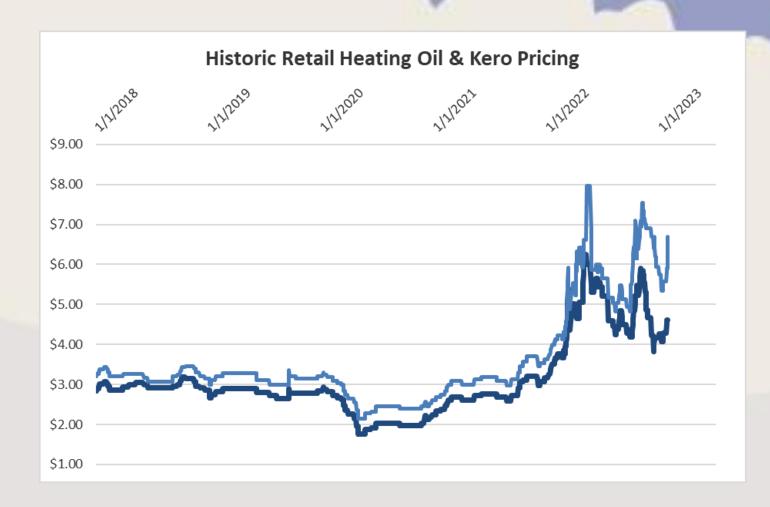
ENERGY CO-OP OF VERMONT

Use less. Save more.

S.5 - Affordable Heat Act Testimony April 4th, 2023



Current Fuel Costs - Fuel Oil



Average Fuel Pricing

2018-2021

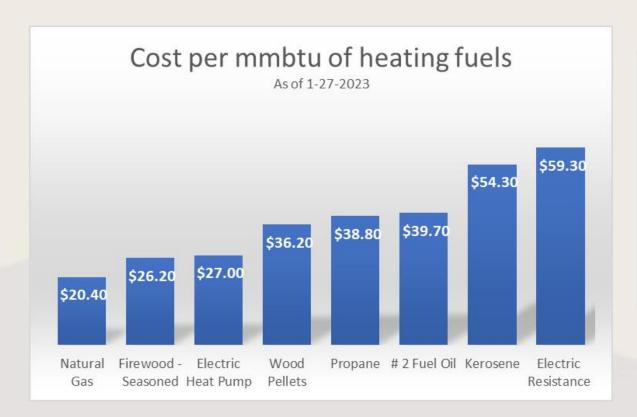
Heating Oil \$2.68 Kerosene \$3.05

2022 to present

Heating Oil \$4.78

Kerosene \$5.81

Current Fuel Costs – Heat Pumps



	Current		Energy Per Unit		Cost Per
	Avg Price	Unit	Btus	Efficeicny	MMBTU
Natural Gas	\$ 16.70	mcf	100,037	85%	\$ 20.40
Firewood - Seasoned	\$ 375.00	Cord	22,000,000	65.0%	\$ 26.20
Electric Heat Pump	\$ 20.24	KWH	3,413	240%	\$ 27.00
Wood Pellets	\$ 400.00	Ton	17,000,000	75.0%	\$ 36.20
Propane	\$ 3.03	Gallon	91,800	85%	\$ 38.80
#2 Fuel Oil	\$ 4.40	Gallon	138,700	85%	\$ 39.70
Kerosene	\$ 5.86	Gallon	135,000	85%	\$ 54.30
Electric Resistance	\$ 20.24	KWH	3,413	100%	\$ 59.30

How will S.5 affect our company?

- HVAC and Weatherization Revenue is currently 45% of our total revenues. We expect
 with the right incentives, more homeowners will be adopting heat pump technology and
 weatherizing homes at a rapid pace. This will allow the Energy Co-op to continue to grow
 and expand our services in these areas if the workforce is available.
- We purchase all our fossil fuels from terminals located in Burlington and Essex Vermont.
 As a reseller within the State, we do not anticipate being an obligated party.
- With anticipated credits generated by the heat pump and weatherization business we hope to be able to discount the fossil fuel delivered to our customers.
- S.5 requires over time the carbon intensity values for clean biodiesel will be reduced. Our company will need to reevaluate if the up-front capital infrastructure costs as well as anticipated customer demand will make it feasible to offer this heating alternative option.
- We do anticipate more accounting requirements and government oversight/registration which will add to our expenses.
- We anticipate as more and more customers switch away from fossil fuels our deliver costs per gallon will increase and will need to be passed on to the remaining fossil fuel customers.

How will S.5 affect our members and customers?

- While the cost of credits is currently unknown, whether it is \$.05 or \$1.50 per gallon those costs will be passed on to our members and customers. Fuel oil delivery in Vermont is a competitive business which keeps margins very thin with very little room to absorb new expenses.
- As more and more members and customers move towards clean heat solutions the increased costs of delivery will be borne by the remaining fossil fuel users.
- Customers & Members will be faced with a choice, pay more for fossil fuel or pay the upfront costs of transitioning to other fuels. Either choice will hit our customers wallets.

How will the S.5 affect our members and customers?

While we do not know how much S.5 will add to a gallon of fuel oil, we do know how much transitioning to a cleaner technology costs. Upfront costs of heat pumps and weatherizing a home is a significant obstacle for our customers.

- Heat Pumps \$5,000 to \$20,000
- Weatherizing a home \$6,500 to \$15,000
- Current rebates and tax incentives only cover a small portion of the upfront costs.
- Payback periods are long
- Disposable/Available income for these items are out of reach for most Vermont households.

Things to Think About

- Steep incentives and readily available financing for homeowners for heat pumps and weatherization is imperative to defeat the upfront cost obstacle. On Bill Financing seems to be a very attractive way to make this affordable.
- Delivery of incentives must be streamlined and made easy. Searching and compiling rebates from Federal, State, Tier III Programs, Efficiency Utilities, and other entities and then figuring out income thresholds or preexisting conditions is enough to make consumers give up.
- The Cold Climate heat pumps we install are tested to function down to an ambient temperature of -13 degrees. Vermont historically will reach this temperature multiple times in a typical winter. We never recommend removing an existing central heating system unless the homeowner has an alternative heat backup to the heat pumps.
- Workforce in Vermont is a significant hurdle to providing weatherization and electrification transformation. We currently struggle to find any new employees to help meet the increasing demand. The scale of transformation called for by S.5 seems unattainable with Vermont's current and anticipated workforce.
- While electrification may be the solution for many, as fossil fuel demand is reduced, the
 cost per gallon to deliver the fuel to the homeowner will increase and be passed on to the
 customer.



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Questions??