INVESTING IN AFFORDABLE HEAT – THE MISSING LINK IN VERMONT'S ENERGY FUTURE

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- Proven benefits from utility efficiency programs. For more than 25 years, Vermont's regulated electric and gas utilities have proven the benefits of investing in energy efficiency to improve service and lower customer bills. Today, about 7% of power utility revenues are devoted to electric efficiency, which now meets about 20% of our total power supply needs. Vermonters will save well over \$2.5 billion on their power bills from these efficiency programs. VGS, the natural gas utility, invests about 3% of its annual revenue in programs that help its customers save energy and money.
- Delivered fuels lag far behind. But we have failed to deliver equivalent savings on Vermont's other major household energy sources: fuel oil, propane, and kerosene (the delivered, liquid fuels). As a result each year Vermonters send out of state well over \$500 million to import fossil fuels to heat buildings that are often old, drafty, and poorly insulated.
- Delivered fuels contribute at 1/10th the rate of regulated fuels. Most people are unaware of how much money can be saved by devoting a small fraction of energy company revenues to well-designed efficiency programs. And we totally ignore the fact that today we spend, as a percentage of total cost, only 1/10th the rate on saving delivered fuels as we invest in saving electricity and natural gas combined.
- The actual mismatch is even worse. To make this mismatch even more extreme, the amount of
 money collected from the power system to improve home heating (i.e., to save delivered fuels)
 actually exceeds the amount of money collected from the delivered heating fuels to help
 Vermonters insulate homes and lower their heat bills.
- Weatherization works. On a more positive note, since 1990 Vermont has devoted a modest source of revenue via an "all fuels" charge to support weatherizing homes for some of the most vulnerable low-income households. The weatherization program has proven the benefits in lower bills, improved comfort, and healthier homes of investing in home energy efficiency. But the program still serves fewer than 1000 units per year, out of an estimated 20,000 eligible units, and out of the state's total housing stock of over 325,000 units. At this rate we could not hope to weatherize our existing housing supply even in the next century.
- An obvious answer. We could improve the pace of change and lower fossil fuel bills, especially for low-income and working families, by increasing funds for thermal efficiency from fossil fuel sales. That rate should be closer to the rate we know is needed, and know is cost-effective, as shown by the history of savings in electricity and natural gas.

ENERGY COMPANY INVESTMENTS IN ENERGY EFFICIENCY

Summary of contributions from electric and gas utility efficiency programs, other power system sources (RGGI, Tier 3 requirements, NE-ISO capacity revenues), and the weatherization "all-fuels" charge.

Sources: Department of Public Service, Vermont Joint Fiscal Office, Efficiency Vermont and Vermont Gas Systems. Data assembled and totals estimated by Regulatory Assistance Project, March 2019.

FUEL TYPE	ELECTRICITY	ELECTRICITY (RGGI, ISO, TIER 3)	NATURAL GAS	FUEL OIL, PROPANE, KEROSENE	NOTES
CARBON CONTENT	LOW		MEDIUM	HIGH	Need new focus on high-emissions thermal EE
VERMONTS ANNUAL BILL	\$791 million		\$104 million	\$550-600 million	Total EE budgets small compared to energy bills
% INVESTED IN ELECTRIC EFFICIENCY	6% estimate				Electricity savings still needed and still cost-effective
% INVESTED IN THERMAL EFFICIENCY	1% estimate	\$10.4 mil out of \$13.1 mil from FCM & RGGI	3%	0.6% (just WAP)	We underinvest in thermal EE
AMOUNT FOR LOW-INCOME Weatherization	\$4.4 million	\$1.9 million	\$1.04 million	\$4.6 million	Electricity pays for 50% of WAP; delivered fuels pay less than half. WAP program too small.
TOTALS	7.5% \$60 million (in FCM, Tier3 an	•	3.5% \$4.1 million	.6% \$4.6 million	Delivered fuels invest at 1/10 th the rate of electricity and gas