

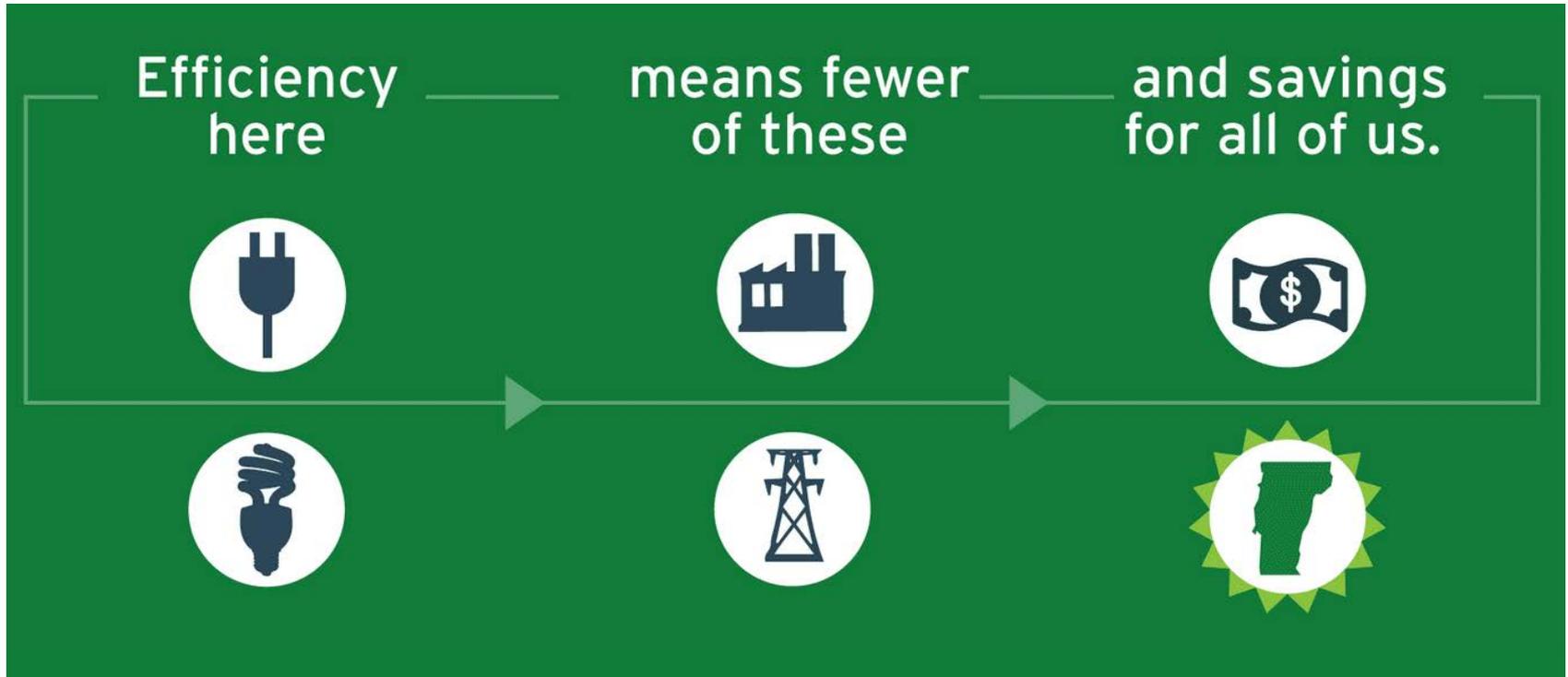


Introduction to Efficiency Vermont

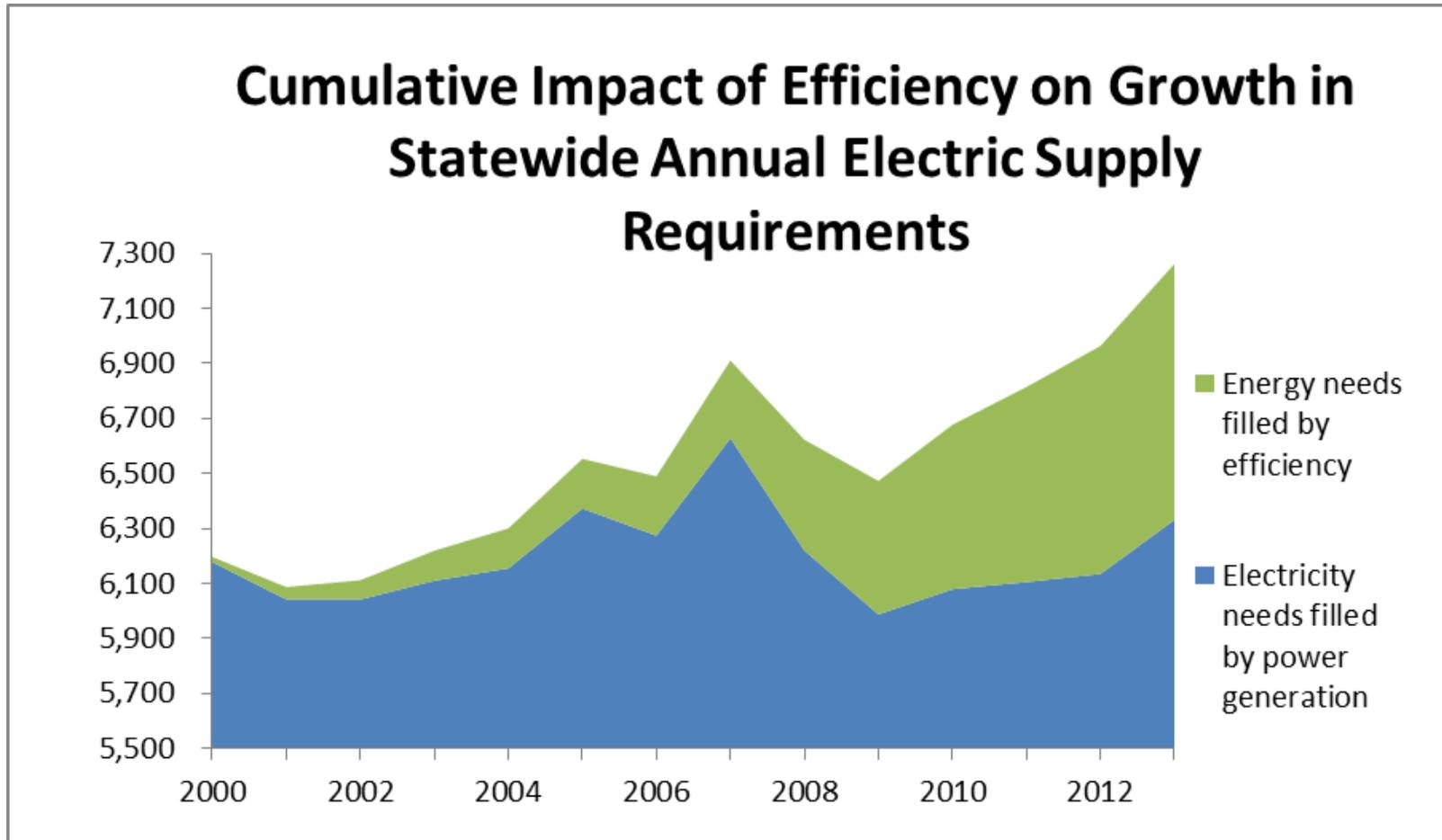
House Committee on Natural Resources and Energy
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Efficiency Plays a Critical Role in Vermont's Electric System



Cumulative Impact of Efficiency on Growth in Statewide Annual Electric Supply Requirements



Cost of efficiency = 4.1 cents/kwh

Cost of electricity = 8.6 cents/kwh

What Questions do Vermonters ask about Energy Efficiency?

- How do I pay for it?
- Where do I start?
- What should I do first?
- Why should I replace equipment or appliances that are working fine?
- How can I trust that the energy savings estimates are real?
- My contractor told me I should do _____ - is he just trying to up sell me?

Efficiency Vermont Reduces Vermont's Electric Bill

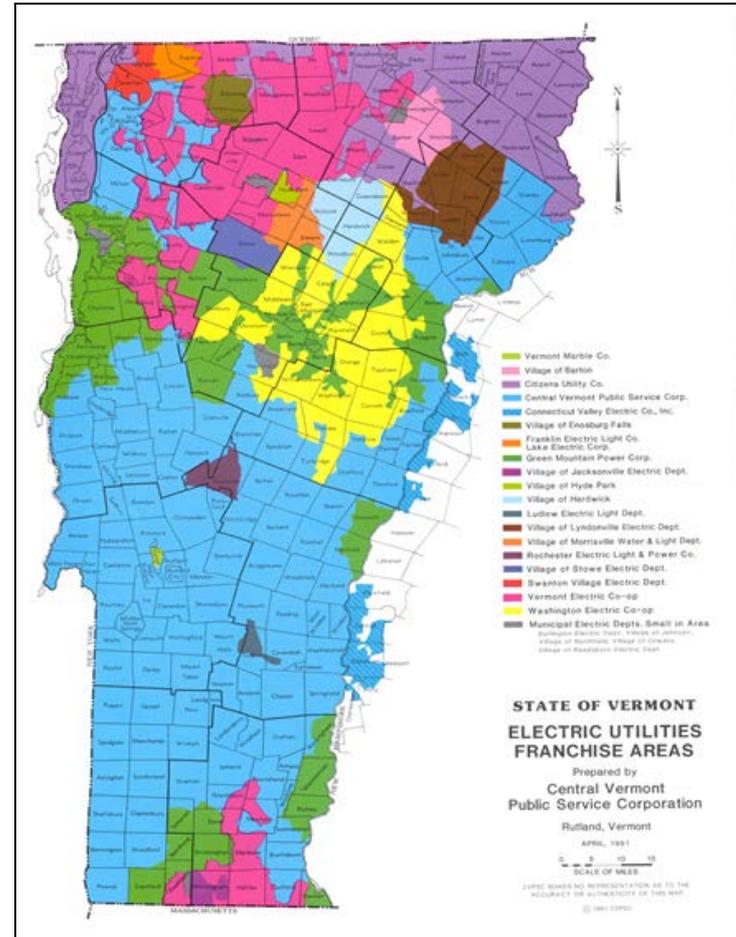
Background:

- Electric and gas utilities required to provide service on a “least cost” basis (30 VSA s.218c)
- Energy efficiency costs less than comparable electric supply (less than half)
- Result: utilities required to invest in efficiency to minimize costs to ratepayers

The Old Model

The 1990s

- 22 electric utilities delivered energy efficiency services
- Confusing to customers, equipment vendors
- Inequities in spending, services, and results
- High regulatory cost, administrative inefficiencies



The Current Model

2000 - present

- Energy efficiency services delivered by a single entity statewide: Efficiency Vermont (30 VSA s. 209d)
- Performance-based model
- Consistent services, programs, incentives statewide
- More equitable for all Vermonters
- More ratepayer transparency
- Easier to promote and coordinate with suppliers, vendors, etc.



Vermonters want comprehensive services

- Legislature responds: authorizes Efficiency Vermont expansion to “all fuels” in 2008 (30 VSA s.209d(7))
 - Forward Capacity Market
 - Regional Greenhouse Gas Initiative
- “Thermal efficiency” services now include:
 - Home Performance with ENERGY STAR
 - Building Performance
 - Biomass heating system incentives

Looking to 2015-17: Program budgets and funding sources

- Electric efficiency: \$148.1 million
 - Funded by the Energy Efficiency Charge
 - Every \$1 invested must generate at least \$2 in benefits
- Thermal efficiency: \$19.5 million
 - Funded by the Regional Greenhouse Gas Initiative and Forward Capacity Market
- Funding sources must be kept separate

Looking to 2015-17: Some expectations from our regulator (Public Service Board)

1. \$336.3 million in economic benefits
2. 321,800 MWh savings
3. 41,300 kW summer peak demand savings
4. 53,700 kW winter peak demand savings
5. Deliver high quality services for low-income Vermonters
6. Increased focus on reducing heating costs for small businesses

We work with:

- Schools
- Colleges & Universities
- State Buildings
- Hospitals
- Farms
- Restaurants
- Lodging
- Ski Areas
- Grocery & Convenience Stores
- Small Businesses

- Retailers
- Contractors
- Municipalities
- Community Energy Groups
- Utilities
- Housing developments
- Homeowners and Renters
- ...and many others



Highlights of Current & Recent Offerings:

- Heat pump water heaters
- Lighting
- Cold Climate heat pumps
- Circulator pumps
- Benchmarking
- Community Partner Grants
- Behavioral Demand Response (with GMP)
- Continuous Energy Improvement (large C&I)
- Heating systems
- Ventilation fans
- Comprehensive home efficiency (audit, insulation, air sealing, health & safety)
- Efficiency Excellence Network
- New construction services
- Technical Assistance & Support
- Industrial Peak Initiative (large C&I)

Efficiency Vermont

How Does it Help Vermonters?

1. Helps Vermonters reduce their energy use and costs.

- Upstream incentives make efficiency easy for customers – no rebate form needed
- Meeting customers where they are at - with DIY options and flexible programs
- Deep engagement with large businesses such as Husky

2. Transforms the marketplace to make efficiency the standard.

3. Plans for Vermont's energy future.



How does it work for customers?

Average residential customer spends roughly \$72 per year in EEC

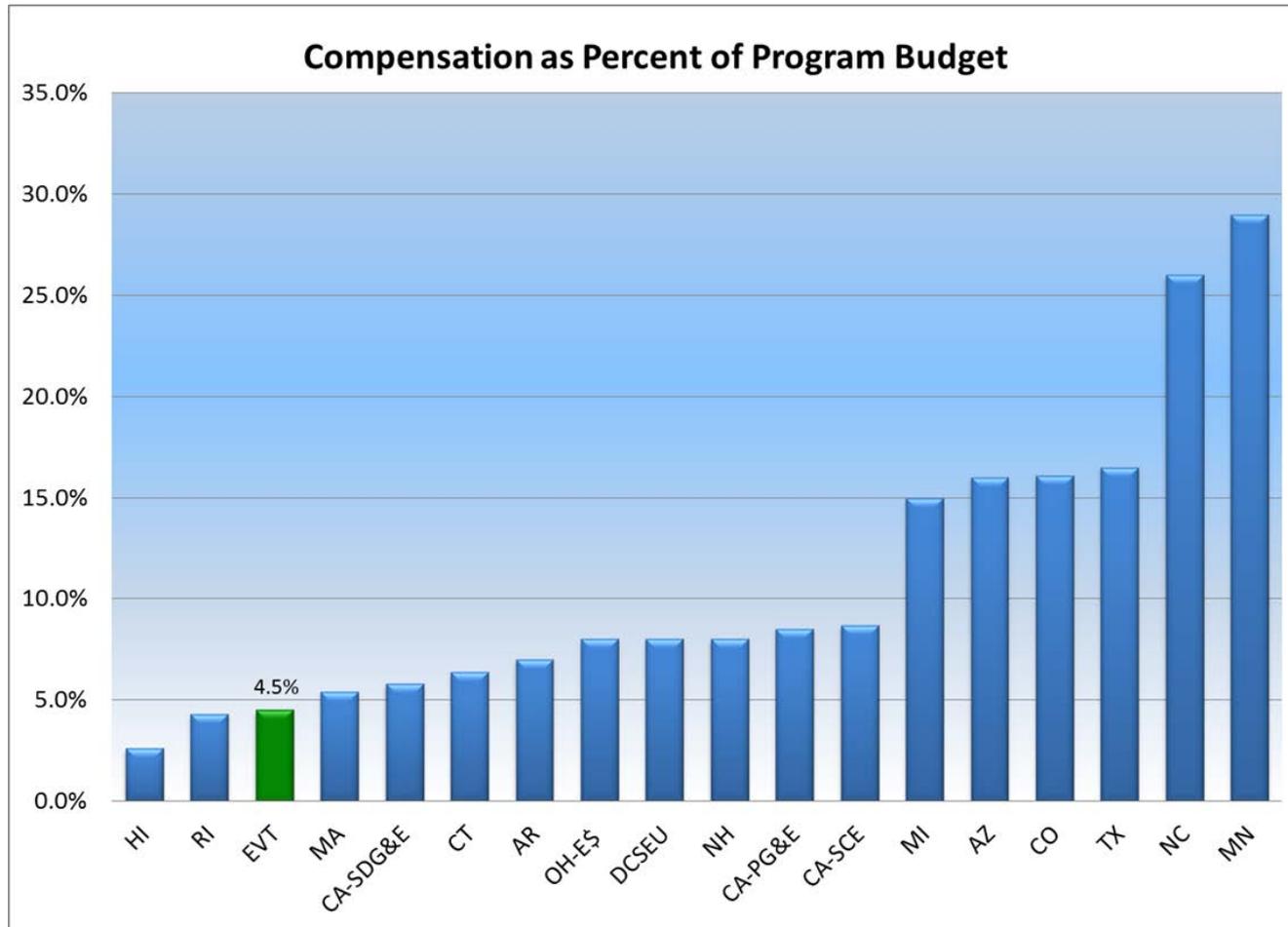
If they spend \$30 to install 6 LEDs, they get:

- \$90 in upstream EVT incentives + \$36 annual savings
- Net savings of \$24

If they spend \$1,100 to install a heat pump water heater, they get:

- \$550 in upstream EVT incentives + \$499 annual savings
- Net cost of \$123 (but continued \$499 savings the following year)

All provided at very low cost to Vermonters vs. other states



“Vermont's electric energy efficiency programs save more energy than comparable programs, with costs that are very similar to their peers.”

- Public Service Department Benchmarking Evaluation, 1/16/15

Accuracy, Verification & Oversight

Internal Systems & Processes

- Information Technology
- Quality Assurance
- Data Accuracy & Verification
- Continual Improvement

External Oversight

- Vermont Public Service Board
- Independent Auditor
- Technical Advisory Group

Extensive Reporting & Transparency

Reports to the PSB & PSD:

- Monthly
- Quarterly
- Preliminary Savings Claim
- Annual Report
- Annual Plan

**Legislative Audit (30 VSA
s.209e(12))**

**Forward Capacity Market
savings verification**

Looking Ahead: Some issues we are focusing on 2015-2017

- Helping more Vermonters save on their heating bills
- Linking customers to quality contractors and equipment
- Making efficiency easy
- Promotion of new energy efficiency technologies
- Aligning our work with other state goals

Direct Energy Savings are Only the Beginning

Vermonters investing in electrical efficiency:

- **Save money, improve properties, strengthen businesses.**
- **Avoid rate increases.**
 - Less demand = less generation = less new infrastructure & costs.
 - Less demand = lower transmission prices for Vermont.
- **Use the cheapest energy.**
 - Efficiency costs less than electricity.
- **Strengthen the local economy.**
 - Energy dollars stay in Vermont.
- **Protect the environment.**
 - Cutting power plant pollution.
 - Allowing the capacity to power new, efficient electric vehicles and electric heating

Questions?

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Additional Information

Substantial Economic and Environmental Benefits for Vermont

Key Results 2012-2013

Electric

25,658 kw summer peak demand savings

2,286,562 lifetime MWh saved

\$207,525,725 total resource benefit savings



Key Results 2012-2013

Thermal

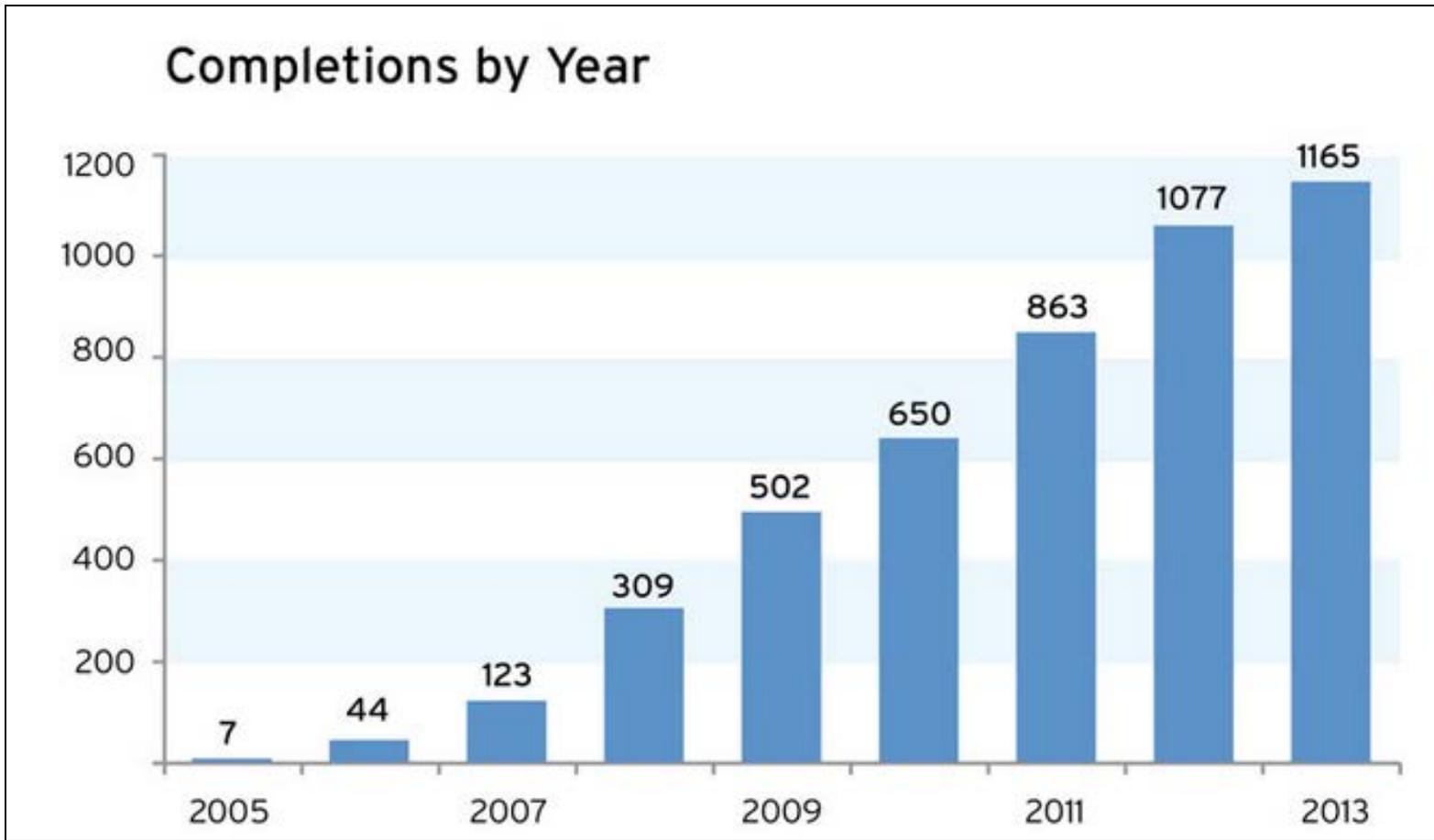
2,334,300 lifetime MMBtu savings

\$50,053,994 total resource benefit savings

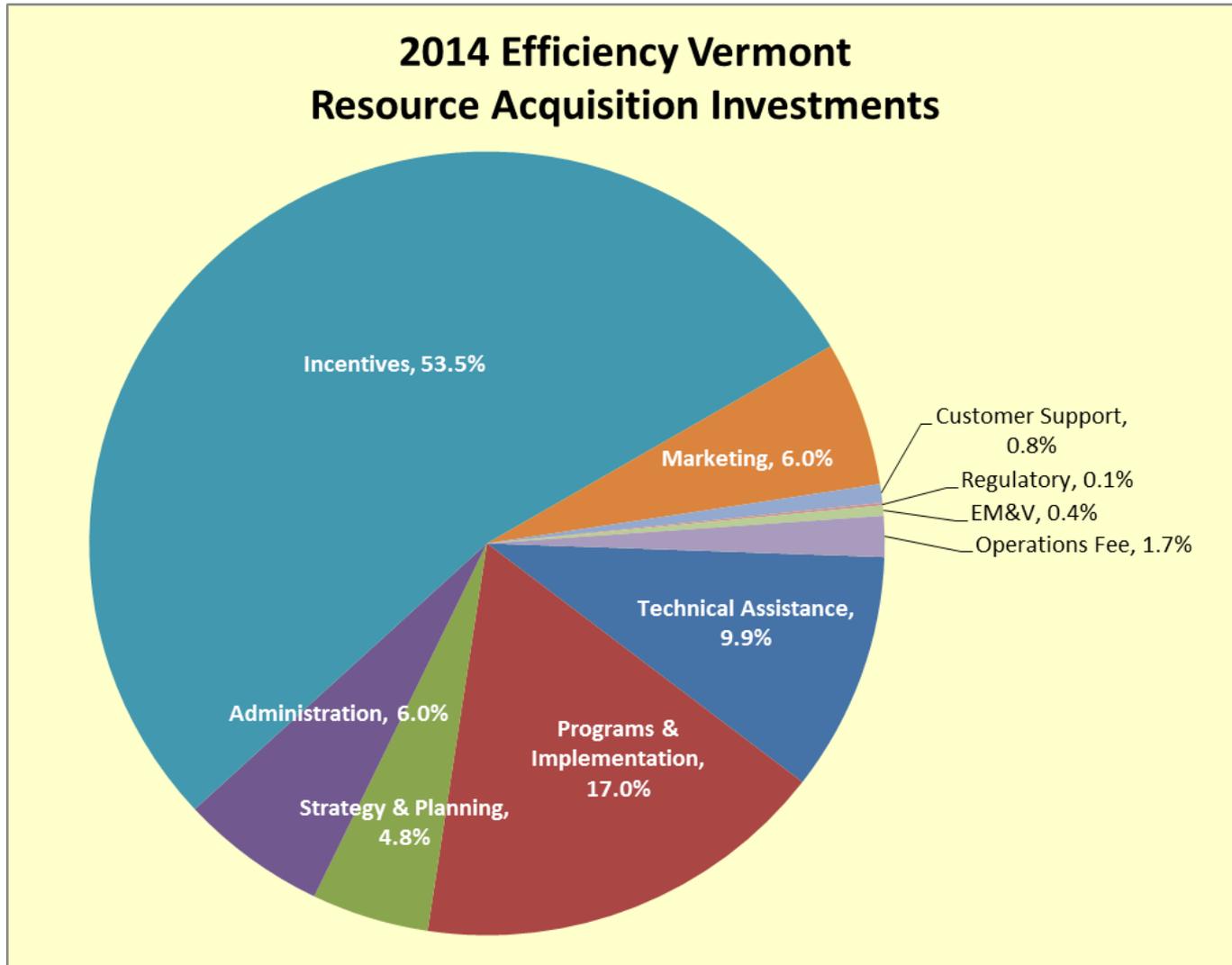


Efficiency Vermont partners: BPI-certified contractors.

Results: Rapid increase in weatherizing Vermont homes

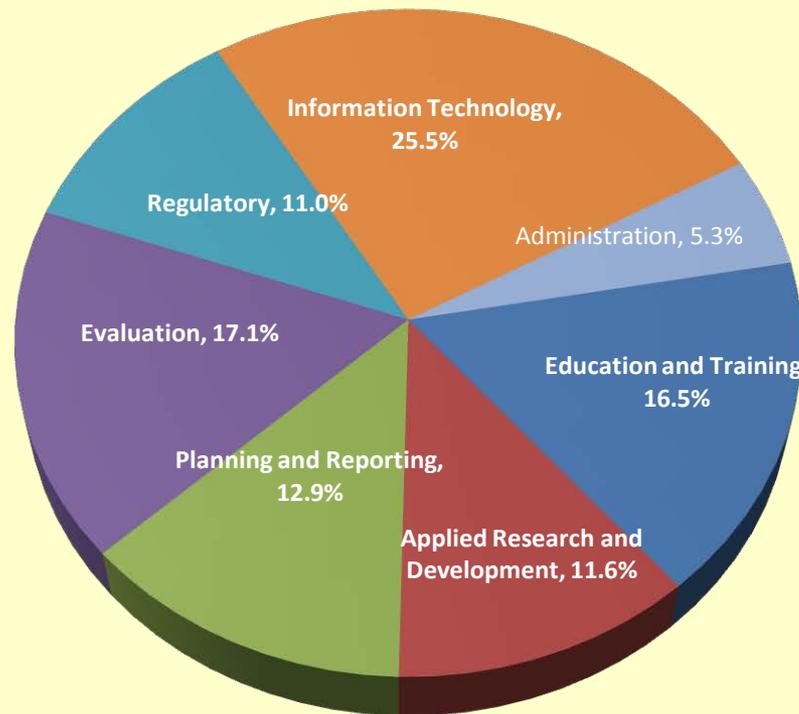


Efficiency Vermont Spending Overview



Efficiency Vermont Spending Overview

2014 Efficiency Vermont Market Advancement Activities



Vermont Leads the Nation

Nationally recognized results

- Ranked #3 in ACEEE national energy efficiency scorecard
- Numerous awards from ENERGY STAR for program excellence
- Winner of prestigious Kennedy School of Government “Innovations in American Government” award

We are exporting the model – and finding lots of takers

- Efficiency Smart
- DC Sustainable Energy Utility
- Consulting for numerous states