



**VERMONT ENERGY**  
INVESTMENT CORPORATION

# **Thermal Efficiency in VT: Past, Present, Future**

VECAN Conference  
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# Quick Review of the Lingo

- “Efficiency” = using the least amount of energy possible to do a certain task (e.g., use an LED or CFL instead of an incandescent light)
- “Conservation” = don’t waste energy (turn out the lights when you leave the room!)
- “Electric efficiency” = measures that support efficient use of electricity
- “Thermal efficiency” = measures that support efficient use of heating energy (oil, wood, etc.)
  - Sometimes also called “weatherization”

# Current thermal efficiency landscape



- Weatherization Assistance Program
  - Created in 1976
  - 100% subsidy for income-eligible Vermonters
  - Administered by regional providers, overseen by Office of Economic Opportunity
  - Mix of state and federal funding via the Wx Trust Fund (mostly the former, these days)
  - Typically completes ~1500 homes/year
  - Typical funding ~\$7.5m/year (excluding one-time ARRA funding)



# Current thermal efficiency landscape

- Efficiency Vermont



- Scope expanded in 2008 to include both thermal and electrical efficiency
- Delivered via “Home Performance with ENERGY STAR” statewide network of private contractors
- Incentives typically cover 20-30% of project costs
- Funded by RGGI and FCM auction revenues
- Typically completes ~1000 homes/year
- Typical funding ~\$5m/year

# Current thermal efficiency landscape

- Other programs
  - HEAT Squad: Rutland-based program funded by one-time ARRA grant, administered by NeighborWorks of Western VT
  - GMP Energy Efficiency Fund: Provides additional resources coordinated via Eff. Vermont programs (funds for thermal efficiency now exhausted, but new one-time funding on the way for '13)
  - VT Gas Systems: Funds programs for ratepayers in its service territory

# These investments have a great track record

- Example: Weatherization Assistance Program
  - \$437 annual energy savings/household
  - 35% average heating savings
  - \$2.51 in benefits for each \$1 invested



# These investments have a great track record

- Example: Efficiency Vermont case study
  - Doud family in Northfield
  - 100 year-old farmhouse
  - 61% reduction in air leakage
  - 42% reduction in energy costs
  - \$945/year savings
  - (Your mileage may vary!)



# Economic benefits not limited to the homeowner

- Business as usual = buy foreign oil
- Thermal efficiency investment = buy local
  - Local labor
  - Locally purchased supplies
  - Spending recycled in the local economy
- DPS study – for efficiency overall (both thermal and electric), approx. \$5 in benefits for every \$1 in investment







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# What's Next?

# Challenge: increase participation when resources are stagnant

- More emphasis on financing
  - PACE
  - Conventional bank/credit union loans
  - Interest rates are low ... the economics are great
- Experimentation with different & new ways to engage Vermonters
  - More local community engagement!

# Example: Vermont Home Energy Challenge



- Efficiency Vermont/VECAN partnership
- Work with town energy committees & other local partners to weatherize 3% of homes in a community in a 1-year period
- Fabulous prizes!
- Efficiency Vermont provides training, materials, other resources to support local efforts
- For more info:  
[http://www.encyvermont.com/for\\_our\\_partners/community\\_partners/residential.aspx](http://www.encyvermont.com/for_our_partners/community_partners/residential.aspx)

# Bottom line – slow and steady, but not fast enough

- Too slow!
  - Not meeting the state energy goal
  - Not meeting the challenge of climate change
  - Every year of underinvestment = lost opportunities
- Resource-constrained
  - Federal funding for Wx Assistance Program tenuous
  - Funding for EVT thermal programs volatile, based on auction revenues
  - Reliable, robust funding source is critical



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**Thanks!**  
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