

The background of the slide is a collage of US one hundred dollar bills, featuring the portrait of Benjamin Franklin and the text "ONE HUNDRED DOLLARS".

Financing Residential Energy Efficiency in Vermont

Marianne Tyrrell
Vermont Law School
MTyrrell@vermontlaw.edu

Increased Energy Efficiency

- Reduces \$s spent on imported fuels
- Increases quality of life
- Saves money
- Reduces GHG emissions
- Decreases need to build power plants
- Creates jobs

Lessons Learned

Original assumption:

Main barrier to action is **lack of money.**

Research demonstrated:

Key issue is **lack of *demand*.**

Lack of Demand

Due to combination of:

- (1) Bewilderingly complex process
(improvements, incentives & financing)
- (2) Debt aversion
- (3) Invisible benefits

What Is Needed

(1) Demand: Programs that offer a seamlessly coordinated process.

(2) Money:

- Financing programs that provide customer-friendly, unsecured loans &
- Funding for demand programs.

(3) Policies: Monetize EE improvements.

Monetizing EE Upgrades

- Include EE in appraisals
- Train realtors
- Institute a building-rating system
- Require time-of-sale efficiency disclosure
- Require post-improvement follow up

Driving Demand

How:

- Reach the “low hanging fruit”/early adopters
- Promote EE benefits
- Emulate best practices (e.g., NWWV HEAT Squad)
 - Provide a seamless path through the upgrade process.
 - Incorporate cashflow-positive (when possible) financing.
 - Increase “neighbor-to-neighbor” promotion.

Financing EE Upgrades (1)

Conclusion: Money is available.

Issue: What facilitates homeowner access to this money?

Options:

- Reduced lender risk (e.g., loan loss reserve).
- Centralized revolving loan fund.
- On-bill (utility) financing (e.g., right to disconnect lowers losses).

Financing EE Upgrades (2)

Conclusion: Borrowers usually prefer quick, unsecured, cashflow-positive loans.

Options:

- Increased loan term +/- or lower interest rates.

Examples:

- Keystone Help

\$1-15K unsecured for up to 10 yrs @ 2.99% if use qualified auditor & approval w/in 24 hrs.

- FHA Power Saver (in pilot phase, n/a in VT in '12)

Up to \$7500 in unsecured for up to 15 yrs w/ 90% FHA guarantee.

Paying for EE Programs

Conclusion: This need is generally unrecognized.

Issue: How to fund?

Options:

- State or local government subsidizes.
- Philanthropy supports.
- Lenders fund.
- Community invests (e.g., revolving loan fund, loan loss reserve, etc.).
- Those who benefit from programs pay (e.g., contractors, suppliers, etc.).

Success IS Possible

- **NeighborWorks of Western Vermont:
H.E.A.T. Squad program**
 - Provides a lot of customer support.
 - Promoted using conventional marketing and neighbor-to-neighbor outreach.
 - 49% conversion rate (audit to upgrade).
 - 250 homes in 1st 6 months (population 61K).

Everyone Has a Role

Questions

- How many people **have invested** in EE?
- Of these, how many would be willing to serve as “**neighborhood ambassadors**”?
- How many people **are interested** in investing in EE in their own homes? In their communities?

Other

- Comment on draft DPS Comprehensive Energy Plan (due 11/4/11)
 - Adoption of alternative indicators (Vol. 1, p. 3)
 - Thermal energy (Vol. 2, p. 175)
 - Other thermal fuel sources (Vol. 2, p. 224)



**Just as a bird requires
two wings to *fly*,
energy efficiency requires**

(1) Effective financing.

AND

(2) Strong customer demand.

**Marianne Tyrrell
Vermont Law School
Mtyrrell@vermontlaw.edu**