



# NHSEA Home Energy Conference

Mary Downes

OEP Energy Efficiency Specialist

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# Getting Started

## 1) Assess your current status (cost, energy, and carbon)

- Home/building
- Transportation (including air flight)
- Goods and services

### Tools:

- Watt meter
- Candle or smoke stick
- Calculator or spreadsheet software
- Utility bills

A vertical thermal image of a door, showing heat signatures in yellow and orange against a cooler purple background. The door has two panels at the top and a larger panel at the bottom.

# Getting Started

## 2) Determine what you can do yourself

- **Energy Conservation** (in behavior and processes: air sealing, diy pipe and duct insulation, programmable thermostat, timers)
- **Energy Efficiency** (in electronic/electric systems, lighting)
- **Generation** on site renewable energy



# Getting Started

2a) And where you need professional help

3) Set a SMART goal

Specific (20% reduction, Energy Star)

Measureable (bills)

Attainable (do-able given limitations)

Realistic (technically feasible)

Timely (by date-certain)



# What to Look For

Energy Star Home Tour

[http://www.energystar.gov/index.cfm?  
c=behind\\_the\\_walls.btw\\_landing](http://www.energystar.gov/index.cfm?c=behind_the_walls.btw_landing)



# How to Pay for It

## 4) Figure out how to pay for it (and over what time period)

- what's your budget (remember to include savings from reduced bills)
- what funds can you get for free
- where can you get a good loan
- what's on the horizon
- save funds

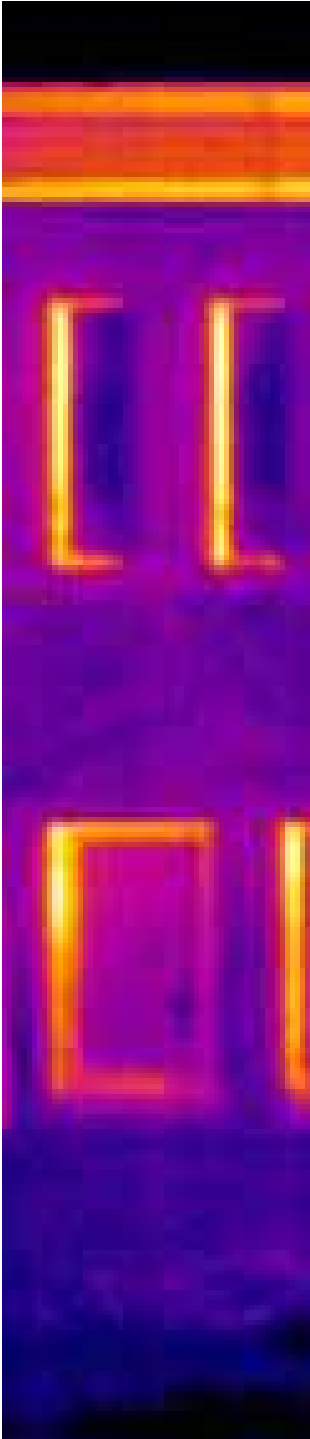
# How to Pay for It

## (it pays for itself!)

| Year | Bank Account<br>5%<br>interest | cumulative<br>extra<br>money to<br>play with | Invest in<br>oil stocks<br>10%<br>interest | cumulative<br>extra<br>money to<br>play with | EE invest | cumulative<br>extra<br>money to<br>play with |
|------|--------------------------------|--|--|--|-----------|--|
| 2010 | \$4,000                        |  | \$4,000                                    |  | \$4,000   |  |
| 2011 | \$4,200                        | \$200  | \$4,400                                    | \$400  | \$5,362   | \$1,362                                      |
| 2012 | \$4,410                        | \$410  | \$4,840                                    | \$840  | \$6,724   | \$2,725                                      |
| 2013 | \$4,631                        | \$631  | \$5,324                                    | \$1,324                                      | \$8,086   | \$4,087                                      |
| 2014 | \$4,862                        | \$862  | \$5,856                                    | \$1,856                                      | \$9,448   | \$5,449                                      |
| 2015 | \$5,105                        | \$1,105                                      | \$6,442                                    | \$2,442                                      | \$10,810  | \$6,811                                      |
| 2016 | \$5,360                        | \$1,360                                      | \$7,086                                    | \$3,086                                      | \$12,172  | \$8,174                                      |
| 2017 | \$5,628                        | \$1,628                                      | \$7,795                                    | \$3,795                                      | \$13,534  | \$9,536                                      |
| 2018 | \$5,910                        | \$1,910                                      | \$8,574                                    | \$4,574                                      | \$14,896  | \$10,898                                     |
| 2019 | \$6,205                        | \$2,205                                      | \$9,432                                    | \$5,432                                      | \$16,258  | \$12,261                                     |
| 2020 | \$6,516                        | \$2,516                                      | \$10,375                                   | \$6,375                                      | \$17,620  | \$13,623                                     |
| 2021 | \$6,841                        | \$2,841                                      | \$11,412                                   | \$7,412                                      | \$18,982  | \$14,985                                     |

# How to Pay for It

DSIRE USA





# How to Pay for It

## State Residential Incentives

### **Home Performance with Energy Star**

- Pays for 75% of EE work (income blind, fuel blind pilot)
- Utilities asking for it to be renewed for a second year in January 2010
- Decision up to PUC, OCA is advocating for its renewal
- See Example report (my house)



# How to Pay for It

## State Residential Incentives

NH Saves <http://www.nhsaves.com/>

- Lighting and appliance rebates (clothes washers \$50 and Acs \$20 - \$25)
- National Grid (gas) w/program very similar to the HPwES: boiler reset controls, rebates on efficient boilers (\$50 - \$100)

# How to Pay for It

## State Residential Incentives

### **Residential Renewable Energy Generation Incentives Program (RPS)**

- Order approved July 2009
- Applications available [online](#)
- Covers small residential RE generation facility (up to 5kW)
- Does not (yet) cover solar thermal (because not generating electricity) but PUC considering it, and may make it retroactive to July 2008
- Pays \$3/watt of generation capacity up to \$6K or 50% of system cost, whichever less



# How to Pay for It

## State Residential Incentives

### **Regional Greenhouse Gas Initiative**

- Funding utilities to do a 2<sup>nd</sup>-fridge recycling program w/rebate
- Kilowatt meter to all libraries in state (LECs should try to combine with a training)
- Another RGGI funding round early 2010, but likely to be restricted to specific area (not sure what yet)

# How to Pay for It

## State Residential Incentives

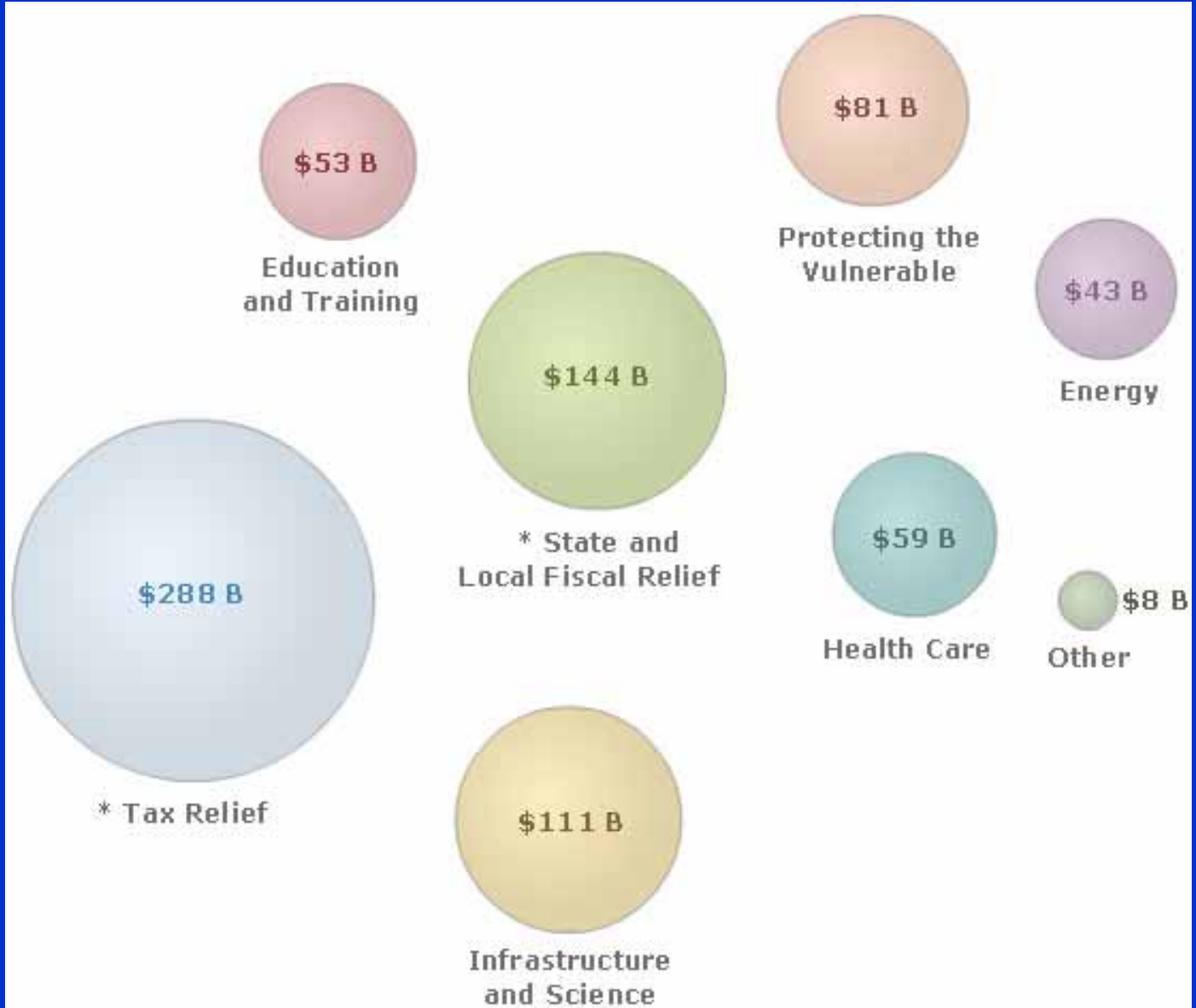
### **Residential Renewable Energy Generation Incentives Program (RPS)**

**Initial** limitation of the rebates to 10% of the funds available in the renewable energy fund (from RPS proceeds) was lifted by HB229 signed Jun 10, 2009

- approx \$4.5 million in fund right now
- apps in >9/30/09 have a two-step process,
  - 1) get in queue
  - 2) get rebate after installation in place

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# How to Pay for It



# How to Pay for It

## Federal resources

### Stimulus funds (ARRA)

- 1) First time home buyer EE incentive  
~80 homes / loans at \$15,000 each  
\$1.2 million
- 2) Residential EE program incentives up to  
\$3000 each (like HPwES) \$1.8 million

# How to Pay for It

## Federal resources

### Stimulus funds (ARRA)

#### 3) EECSBG

May include residential incentive programs, depending on municipal application/award

#### 4) Appliance rebate

-~2500 rebates from \$100 - \$1000

-For domestic hot water, boilers and furnaces (including gas condensing and solar hot water, and high efficiency oil and gas boilers and furnaces, as well as boiler reset controls)

# How to Pay for It

## Federal resources

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# How to Pay for It

Federal resources

**Stimulus funds (ARRA)**

5) federal tax credits

[http://www.energystar.gov/index.cfm?c=tax\\_credits.tx\\_index](http://www.energystar.gov/index.cfm?c=tax_credits.tx_index)

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# Carbon Footprint

- New England Carbon Challenge

<http://necarbonchallenge.org/calculator.jsp>

## Office of Energy and PLANNING:

- Collaborating with EESE Board
- Working with nonprofits, public and private associations, NH Climate and Energy Collaborative
- Working with DRED, DAS, DES, DOT, NH Office of Economic Recovery, Interagency EE Committee
- Communicating with other States' Energy Offices in Northeast, specifically around Recovery Act

## National Trends:

- **New Administration and Congress**
- **Clean Energy and Security Act (Proposed)**
- **EPA Proposed Rule on Greenhouse Gases**

## More Information:

- [Recovery.gov](http://Recovery.gov) (Federal Recovery website)
- [Energy.gov/recovery](http://Energy.gov/recovery) (DOE recovery website)
- [NH.gov/recovery](http://NH.gov/recovery) (State of NH recovery website)
- [NH.gov/oep/recovery](http://NH.gov/oep/recovery) (OEP Recovery website)
- [epa.gov/EEBUILDINGS](http://epa.gov/EEBUILDINGS) (EPA Energy Efficiency)

[Mary.Downes@nh.gov](mailto:Mary.Downes@nh.gov)

**NH Office of Energy and Planning**

# For More Information...

OEP Website: [www.nh.gov/oep/recovery](http://www.nh.gov/oep/recovery)

State of New Hampshire Website: [www.nh.gov/recovery](http://www.nh.gov/recovery)

Federal Government: [www.recovery.gov](http://www.recovery.gov)

**Mary Downes**

Office: 603-271-6092

Mary.Downes@nh.gov

# Thank you!

**Mary Downes**  
**Energy Efficiency Specialist**  
Office: 603-271-1715  
Mary.Downes@nh.gov