Presentation Overview

- Energy Efficiency in the context of the CEP
- Current Statues
- Energy Efficiency Potential
- Screening
- Current Energy Efficiency Programs
- Other Policy Choices
Energy Efficiency

- Expend less energy to perform the same services
- Encompasses all categories of energy use
  - Utility (Electric/Gas)
  - Heating and Process Fuel
  - Motor Fuel
Why Address in the CEP?

- “Societal” Benefits
  - Address Greenhouse Gases
  - Potential to alleviate T&D Constraints
  - Less risk associated with energy efficiency than power supply
- First Cost Barrier
- Awareness
- Potential to meet many of the CEP objectives
Reach 60,000+ housing units by 2017 (20%), and ~80,000 housing units by 2020 (25%)
Reduce annual fuel needs and fuel bills by an average of 25 percent in the housing units served
Reduce total fuel usage by 6% by 2017 and 10% annually by 2025
Increase Wx Services (either # of homes or amount of services/home)
§218c Least Cost Integrated Planning
  ◦ Regulated Utilities must meet the public’s need for energy services at lowest present value life cycle costs

§209(d)(4) “all reasonably available, cost–effective energy efficiency savings”
Electric Sector EE Potential

- Technical Potential: 32.4%
- Economic Potential: 28.7%
- Max. Achievable Potential: 26.0%

Legend:
- Energy
- Winter MW
- Summer MW
Heating and Process Fuel Potential

Achievable Cost–Effective Potential – % of Forecasted Consumption in 2016 (2007 Study)
Screening Criteria

- “Societal Test” Used by EEUs, potential studies
- What is total net c/b to society, including all collateral impacts?
- Includes
  - Avoided Energy Supply Costs
  - O&M changes (could be + or –, often +)
  - Avoided Externalities
  - T&D Adder (Electric)
  - Risk Adjustment (Electric)
- Based on life-cycle benefits & costs
- Does Not Include Non-Energy Benefits
## Current EE Programs

<table>
<thead>
<tr>
<th>EE Service Provider</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Vermont</td>
<td>EEC, FCM, RGGI</td>
</tr>
<tr>
<td>Burlington Electric</td>
<td>EEC, FCM, RGGI</td>
</tr>
<tr>
<td>Vermont Gas Systems</td>
<td>Natural Gas Rates</td>
</tr>
<tr>
<td>OEO Weatherization</td>
<td>Gross Receipts, DOE, ARRA</td>
</tr>
<tr>
<td>GMP Efficiency Fund</td>
<td>GMP ratepayers – D7213</td>
</tr>
<tr>
<td>Self–Managed EE</td>
<td>SMEEP participants</td>
</tr>
<tr>
<td>VHCB</td>
<td>ARRA via CEDF</td>
</tr>
<tr>
<td>DPS and other Direct Grant</td>
<td>ARRA – EECBG, SEP</td>
</tr>
<tr>
<td>Recipients</td>
<td></td>
</tr>
</tbody>
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EE Utilities offer Electric and Heating and Process Fuel Services

- 2011 Budgets
  - Electric: $38.5 m (Energy Efficiency Charge)
  - HPF: ~$5.75m (Revenues from FCM and RGGI)

- Residential Examples
  - CFLs/LEDs
  - Home Performance with Energy Star

- Commercial Examples
  - Variable Frequency Drive
  - Boiler replacement (25% of HPF funding)
Other Methods for Encouraging EE

- Building Codes
  - Res/Commercial Codes in effect soon based on IECC 2009
  - Contractors must certify compliance with code

- Voluntary Codes/Standards

- Act 250
  - Res – meeting code meets Act 250 requirements
  - Com – best available technology
... Encouraging EE in Vermont

- Property Assessed Clean Energy District
- Time of Sale Disclosure
- Behavioral Measures
  - Advanced Metering Infrastructure enabled measures
  - Indirect feedback
What’s next?

- Hear your input
- What works? What doesn’t?
- What is missing?
- What should we include in the CEP going forward?