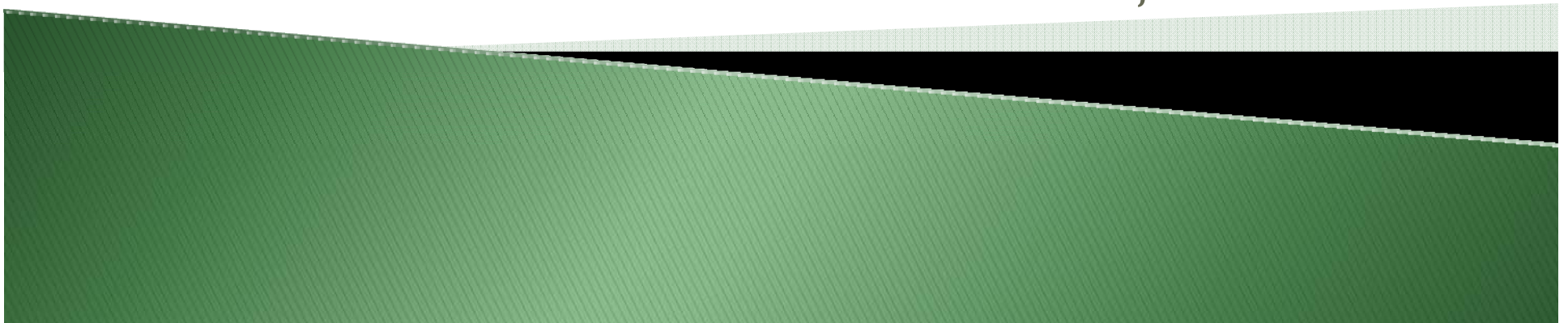




Comprehensive Energy Plan: Energy Efficiency

Initial Stakeholder Meeting
March 22, 2011

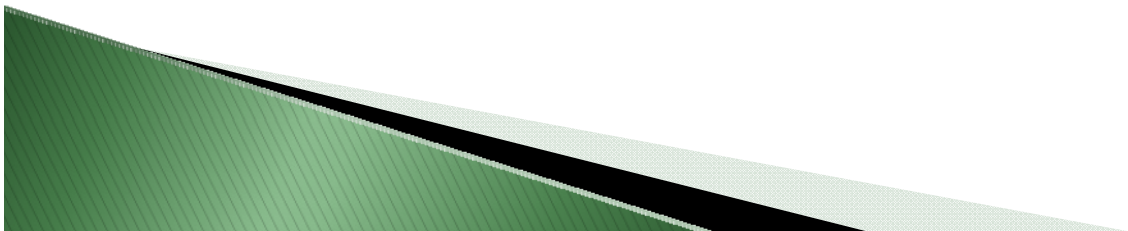


Presentation Overview

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

Energy Efficiency

- ▶ Expending 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

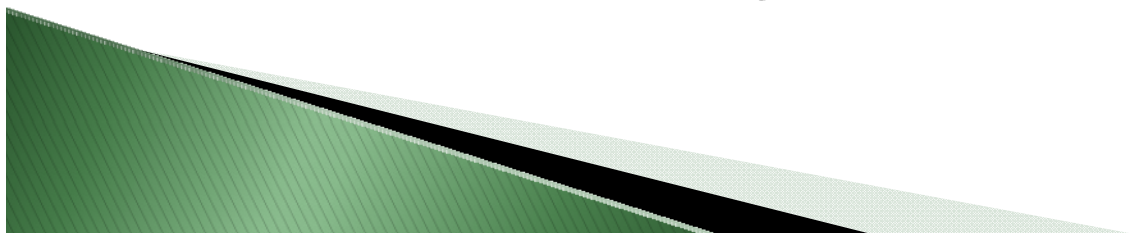
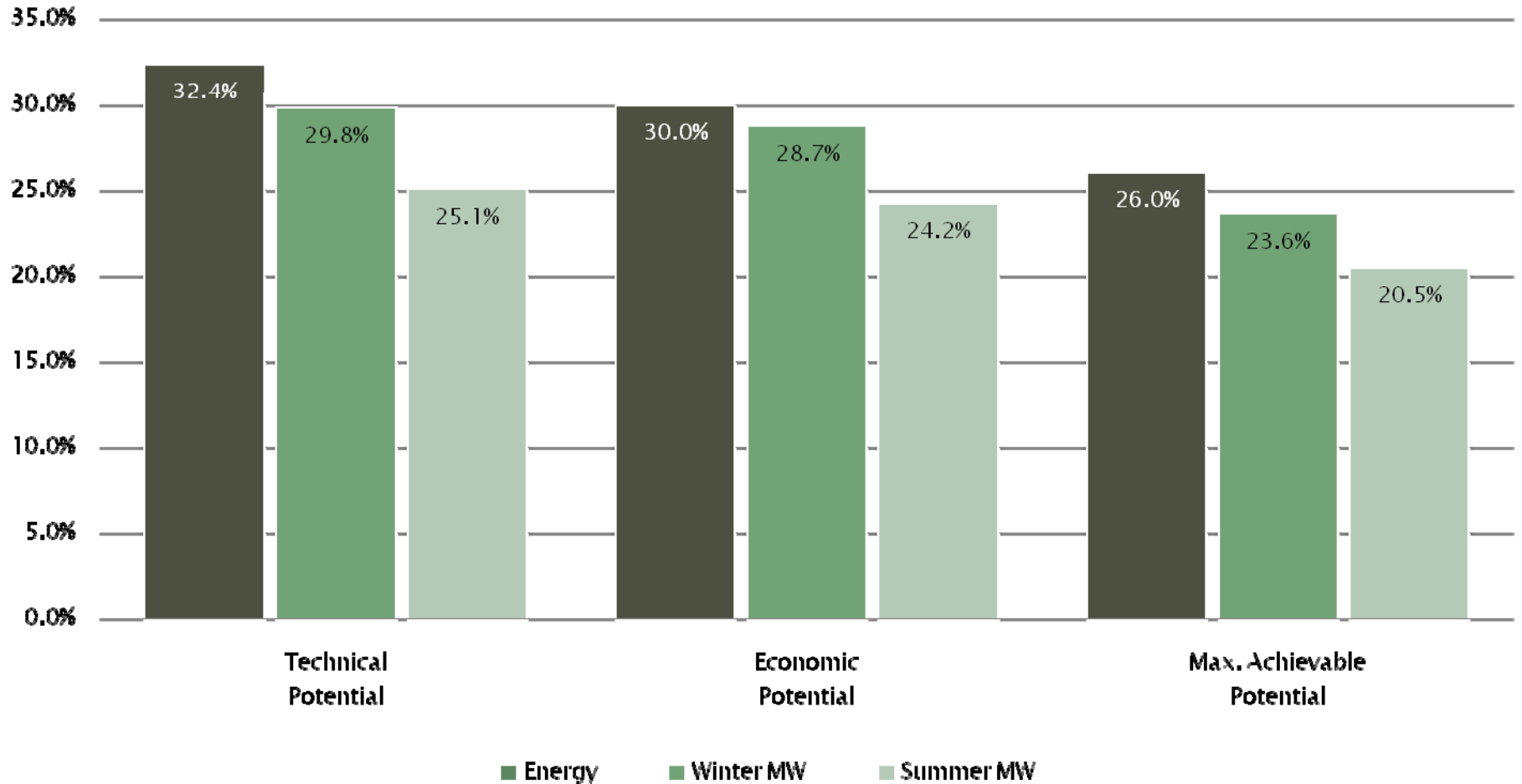
10 V.S.A. §581

- ▶ 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)

30 V.S.A §218c and §209(d)

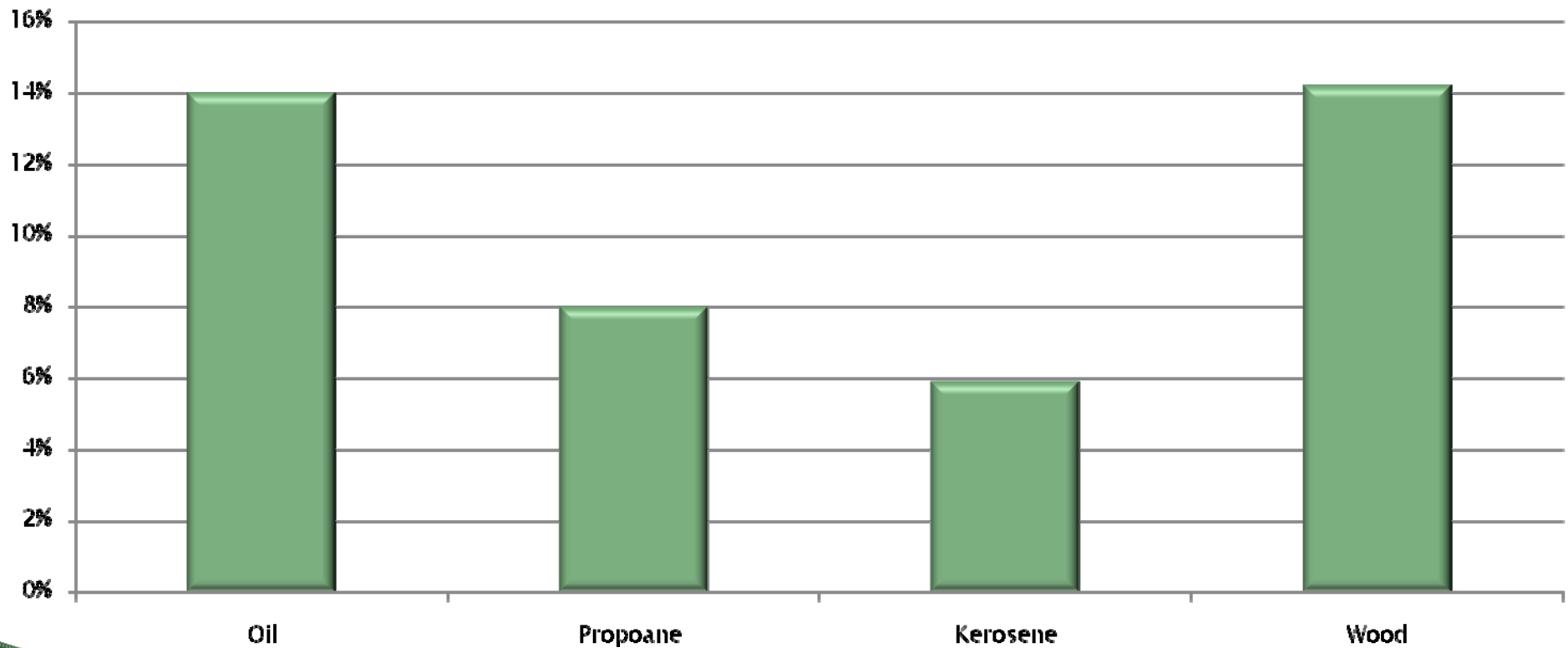
- ▶ §218c Least Cost Integrated Planning
 - Regulated Utilities must meet the public's need for energy services at lowest present value life cycle costs
- ▶ §209(d)(4) “all reasonably available, cost-effective energy efficiency savings”

Electric Sector EE Potential



Heating and Process Fuel Potential

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



Screening Criteria

- ▶ “Societal Test” Used by EEU’s, 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

EE Service Provider	Funding Source
Efficiency Vermont	EEC, FCM, RGGI
Burlington Electric	EEC, FCM, RGGI
Vermont Gas Systems	Natural Gas Rates
OEO Weatherization	Gross Receipts,DOE,ARRA
GMP Efficiency Fund	GMP ratepayers – D7213
Self-Managed EE	SMEEP participants
VHCB	ARRA via CEDF
DPS and other Direct Grant Recipients	ARRA – EECBG, SEP

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?