

New Hampshire Independent Study of Energy Policy Issues

“SB 323 Study”





Presentation for the
NH EESE Board

**Orientation to the
Draft Report
& to our
Policy-Level Conclusions**

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Agenda

1. Purpose & Format Today - Christine (5 min)
2. Orientation to the Draft Report - Christine (25 min)

Break
3. Policy Level Conclusions - Scudder (40 min)
4. Wrap Up & Next Steps - Christine (5 min)

1. Purpose & Format Today



Purpose Overall (AKA Desired End Result)

An increasingly effective approach to continuing to develop EE and SE markets in NH that:

... reflects what is unique about the state

... builds upon the progress and successes to date

... applies learning from other states & jurisdiction

... when helpful for achieving NH's goals.

Purpose Today

1. Familiarize you with the report
2. Provide “sneak peek” at key findings

Break

3. Begin the conversation about our highest level policy recommendations
4. Remind you of the review process & next steps

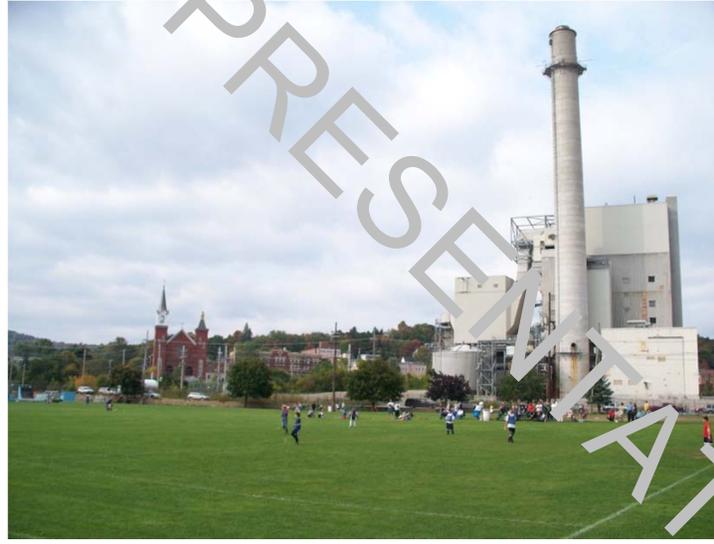
What Today is ...

- A chance to begin digesting our findings ...as you continue your reading and review

What will come later ...

- Increased consistency - among sections and for recommendations within sections
 - Corrections — at this length and depth, there are certain to be
 - Edits - for clarity, etc.
 - Additions & subtractions — balanced with independent view
 - Executive Summary — directed at Legislature, Governor, Agency Directors, etc.
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2. Study Findings “Sneak Peek”



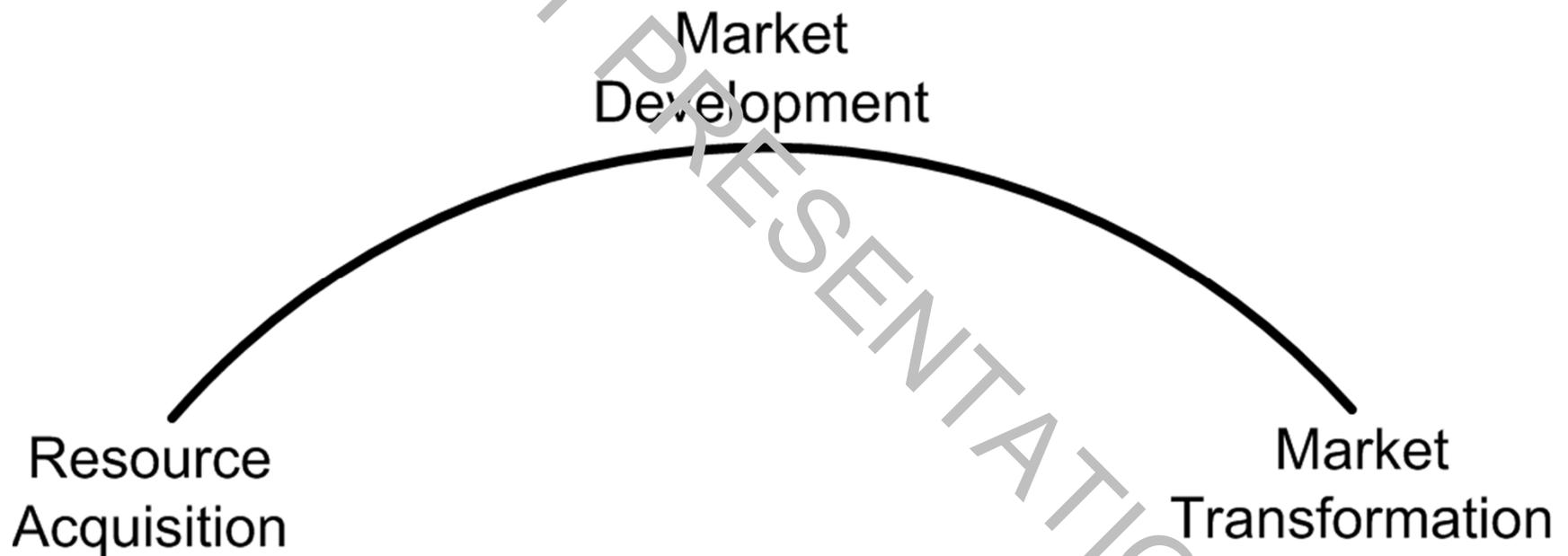
Study Context

- NH 2008 Energy Bill - \$6 Billion (and rising)
- \$4.1 Billion (68%) leaves the state immediately
- Represents @7% of NH annual GDP
- Efficient use of clean local, indigenous energy is:
 - Yankee independence and frugality at its best
 - Makes good economic and business sense for all!

If we had our “d’ruthers” (per GDS 2009)

- Residents would save \$309 Million/year once all households were improved to highest level of cost-effective EE
- C&I would save an additional \$220 Million/year
- Investment would cost >\$2 Billion
- Savings would offset investment in 4 years

How to Keep Developing and Moving EE and SE Markets ...



Sustained Orderly Market Development

- Results in EE & SE market penetration and growth in a way that:
 - ❑ Enhances market drivers that already exist
 - ❑ Engages market players
 - ❑ Ensures no dead ends – allows for & encourages:
 - Future market growth
 - Innovation
 - Continuous improvement

Key Ingredients

- **Coherent policy & regulatory framework**
- **Clear, stable message to market players**
 - Ease of finding information and assistance
 - Contractors/installers, retailers, manufacturers, business and home owners all driving to one result
 - Consistent market presence
 - Optimized incentive structures
- **Ease of participation**
- **Sustainable public funding**
- **Stimulating & leveraging private investment**

Report #1: Community Planning & Engagement
(AKA Land Use and Energy Policy)

Denser, mixed use development = less energy use:

- State Gov't - Revise, follow State Development Plan & Smart Growth Statutes (RSA 9-A, 9-B), incl. formal Energy Policy
- Regional Entities (e.g. PAREI) - Support, assist, encourage
- Local Gov't – Insulate town hall, energy in land use regs, form based codes encouraged by NH OEP and RPCs

Report #2: Building Energy Codes & Labelling

- Building Energy Codes are critical for new construction & major retrofits
- Building labeling critical for existing buildings
- Energy Code Challenge well along
- We concur w/ key recommendations from BCAP “NH Gap Analysis”

Report #3: State Gov't Leading by Example

- Exec Order 2011-1 strong foundation
- Reiterates 25 by 25 goal
- Energy usage down 16% per sq ft already
- Contract w/ multi-fuel energy company heading towards 25% electricity from SE
- RFP out for feasibility studies
- As single largest energy user, state can really move the market

Report #4: EE Portfolio Level Review

- CORE programs functioning and create a foundation for market development
 - Some coordination underway betw electric & gas
 - Programs continuously exceed goals
 - Customer satisfaction is high
 - Some programs are fully subscribed early in year
 - Increase goals over time: **sustained orderly development**
 - Increase the SBC, for cost effective savings
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Report #5: Residential EE CORE Programs

- Programs effectively capture savings in primary markets
- Fuel neutral pilot great start
- Some programs oversubscribed
- Market development limited
- Incentive levels higher than needed to drive participation
- Opportunities to stimulate upstream activity

Report #6: C&I EE Programs

- Effectively captures savings for largest customers, with high satisfaction levels
- Satisfaction and participation among large customers is high
- 50%+ of lifetime savings come from large C&I (pool of 1,200 customers out of 36,000 business accounts)

Report #6: C&I EE Programs (con't)

- Increase participation among smaller customers
- Streamline participation process for smaller customers
 - Remove pre-installation inspection/approval
 - Inspect once, after installation
 - Promote additional technologies to draw in broader participant base (food service, compressed air, Ag, data centers, etc.)

Report #6: C&I Market Approaches (con't)

- Implement upstream programs for common small C&I
 - Develop outreach approaches that reflect specific market audiences (grocery stores, restaurants, institutions, etc.)
 - Key Account Management for single entity w/ many meters
 - Reconsider 1 year simply payback
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Report #7: SE Programs

- Biomass & hydro = 16% of elec gen
 - Solar, wind, & methane = < 1%
 - RPS is a strong statement
 - ACP structure and levels not going to develop in-state market
 - Establish stable source of funding – SBC or RGGI or FCM - market responsive
 - Continue first-in-nation residential high efficiency wood pellet furnace rebate
 - Address issues hindering utility investment in DG
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Report #8: Smart Grid Deployment

Can:

- Reduce meter reading costs
 - Improve utility outage management
 - Reduce energy consumption
 - Reduce peak demand
 - Better integrate SE
 - Provide info on all fuels and water use
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Report #8: Smart Grid Deployment (con't)

- Unitil installed AMI for all customers in 2008
 - NHEC installing in 2011 and conducting pilots over next 2-3 years
 - Rest of state can learn from their experience
 - Potential win/win for utility and customer
 - Need policy that balances utility and customer interests
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Report #9: Utility Performance Incentives (PI)

- Typical NRI incentive of 10-12% in range of overall average of 10-11%
 - It is performance-based & goals are typically exceeded
 - Performance thresholds low – 65% vs 81% nationwide
 - Need independent, third party EM&V
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Report #10: Financing

- Most effective financing programs:
 - ❑ Have a solid link to audit offerings
 - ❑ Sustainable funding adequate to meet goals
 - ❑ Significant uptake, participation
 - NH financing programs:
 - ❑ Relatively new
 - ❑ Capital levels not adequate or sustainable
 - ❑ Many not maximizing opportunities for leveraging capital from lending institutions
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Report #10: Financing (con't)

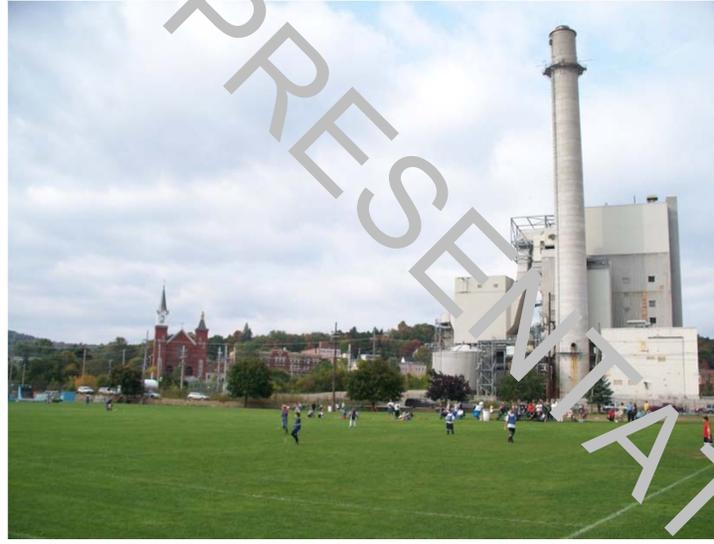
- ❑ Too many separate offerings, competing terms, market confusion
 - ❑ Res programs financing low hanging fruit (\$3,400 vs \$7,500 national average)
 - ❑ No common branding or single point of contact
 - ❑ Not coordinated
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Report #10: Financing (con't)

■ Potential solutions

- ❑ Move towards “team approach” to unify finance programs
 - ❑ Standardize audit processes and requirements
 - ❑ Adopt a contractor-driven sales approach
 - ❑ Way to go - Pay for Performance and Better Buildings/Beacon Communities!
 - ❑ Don't give up on PACE completely
 - ❑ Consider using QECEBs to engage private capital
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3. Policy & Regulatory Conclusions



We have numerous observations,
suggestions, and recommendations ...

Ideological and Policy Context

- Apparent ambivalence about EE
- Lack of clear policy
- Lack of funding
- Resulting regulatory and programmatic complexity
- Key issues it is hard to focus on
 - Are goals and targets appropriate?
 - Focus on markets and market development?
 - All market segments and opportunities?
 - What are we learning?

Clear Policy Direction

Energy Efficiency Resource Standard that...

- Guides goal-setting
- Guides regulatory process
- Framework for stakeholder involvement
- Anchor for other governmental policy

True for Sustainable Energy as well

State Should Lead by Example

- Good work under way:
- Demonstrate benefits (reduce taxpayer costs)
- Affect markets by purchasing and building policies
- Coordinate with Core Programs
- Demonstrate “market barrier” insight
- Provide leadership and coordination statewide

Clear Regulatory Guidance and Incentives

- Don't do one without the other
- Decoupling will not substitute for Policy
- Incentive Structure should “stretch”
- Integrate Gas, Electric and other services, including SE

Improve Regulatory Environment

- Clear Mandate means struggles take place where they can be resolved
- New Utility vision of themselves
 - New relationships to customers
 - Flexibility in exchange for Performance
 - Prep for Smart Grid
- Increased Collaboration
- Integrate other State Policies

Increase Program Coordination and Streamline Administration

- Consistency of offerings
- All-fuels question
- Upstream efforts
- Systematically building market networks
- New Hampshire identity
- Use public policy (codes, standards, tax, loan strategies)
- Third-party, independent EM&V

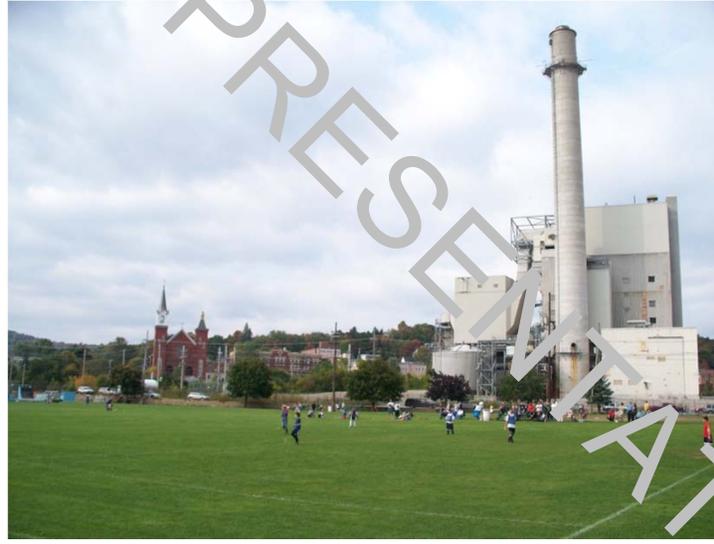
Use Public Funding Strategically

- Leverage Federal and State dollars
- Supportive legislation (PACE)
- Figure out how to use financing Institutions well
- Regulated fuels
- Weatherization
- Codes and standards

New Home for EE and SE oversight and Co-ordination

- Mandate to follow-through on EE and SE policy and goals
- Both regulatory and broader role
 - Role with PUC
 - Collaborate on CORE programs and other EE/RE
 - Coordinate with other agencies
 - Support community EE and SE initiatives
- Need adequate independent and consistent funding

4. Next Steps from Here



Next Steps for Study Team

- Receive review comments
- Modify draft report
- Write, produce executive summary
- Present final report to EESE Board - September 9
- 2 public presentation days - Fall 2011 & Winter 2012

Study Team

- Vermont Energy Investment Corporation (VEIC) – Prime
 - Senior-level PM, 3 Senior Managers, and 8+ specialists with expertise in EE and SE program design & assessment, low income/WAP, demand response, smart grid, finance & investment, etc.

 - Jeffrey H. Taylor & Associates – Subcontractor
 - Jeff Taylor, NH Planning and Stakeholder Outreach Lead
 - Steve Whitman, NH Local Energy Committees Outreach Specialist

 - Optimal Energy, Inc. (OEI) – Subcontractor
 - Phil Mosenenthal, Performance Incentives Lead
 - Cliff MacDonald, Utility Analyst
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For More Information

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