



NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

RESIDENTIAL LIGHTING PROGRAM STAKEHOLDER WORKSHOP

ED SCHMIDT

March 30, 2010

NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

“Facilitating Partnerships to advance the efficient use of energy”



MISSION

Promote the efficient use of energy in homes, buildings and industry in the Northeast U.S.

ORGANIZATION

Regional nonprofit since 1996

PRIMARY AUDIENCES

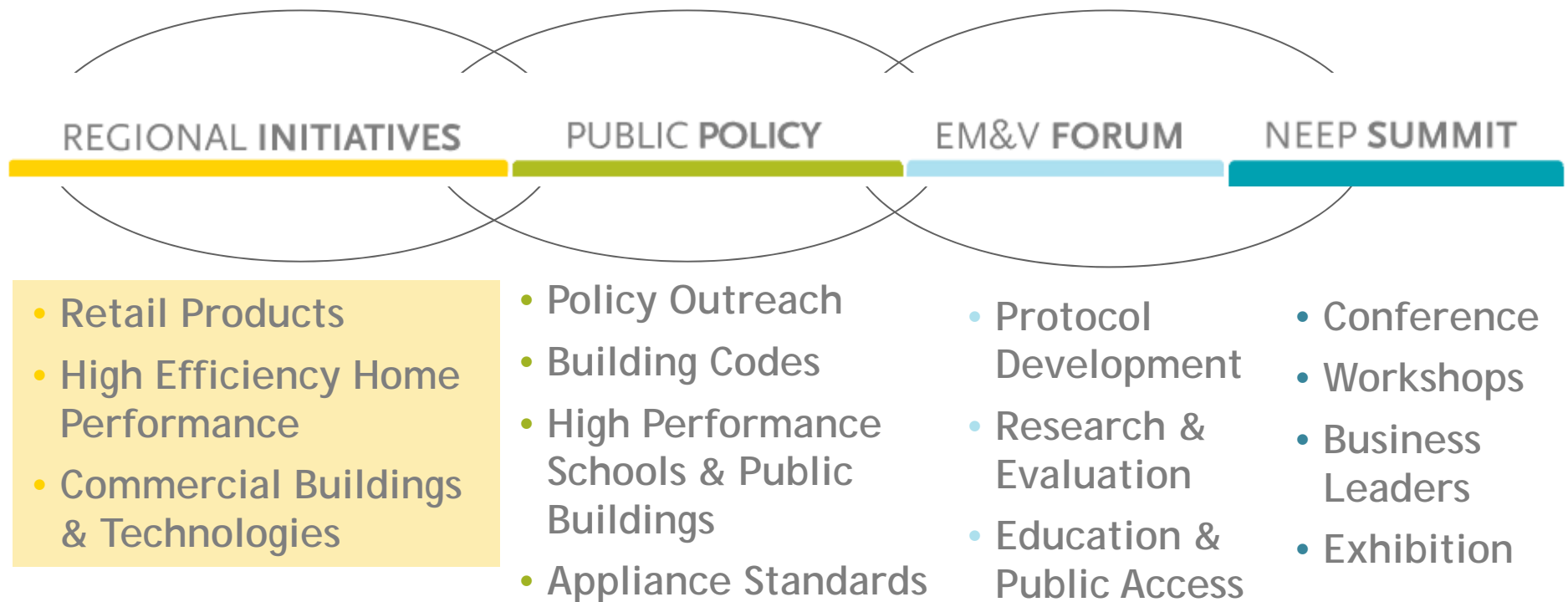
- State policy makers
- Efficiency program administrators

APPROACH

Overcome barriers to efficiency through *strategic regional collaboration* of public policies and programs



2010 NEEP STRUCTURE



WORKFORCE DEVELOPMENT

- Northeast Workforce Forum
- Regional Workforce Development Database (EE&RE)
- Sponsors Best Practices Network

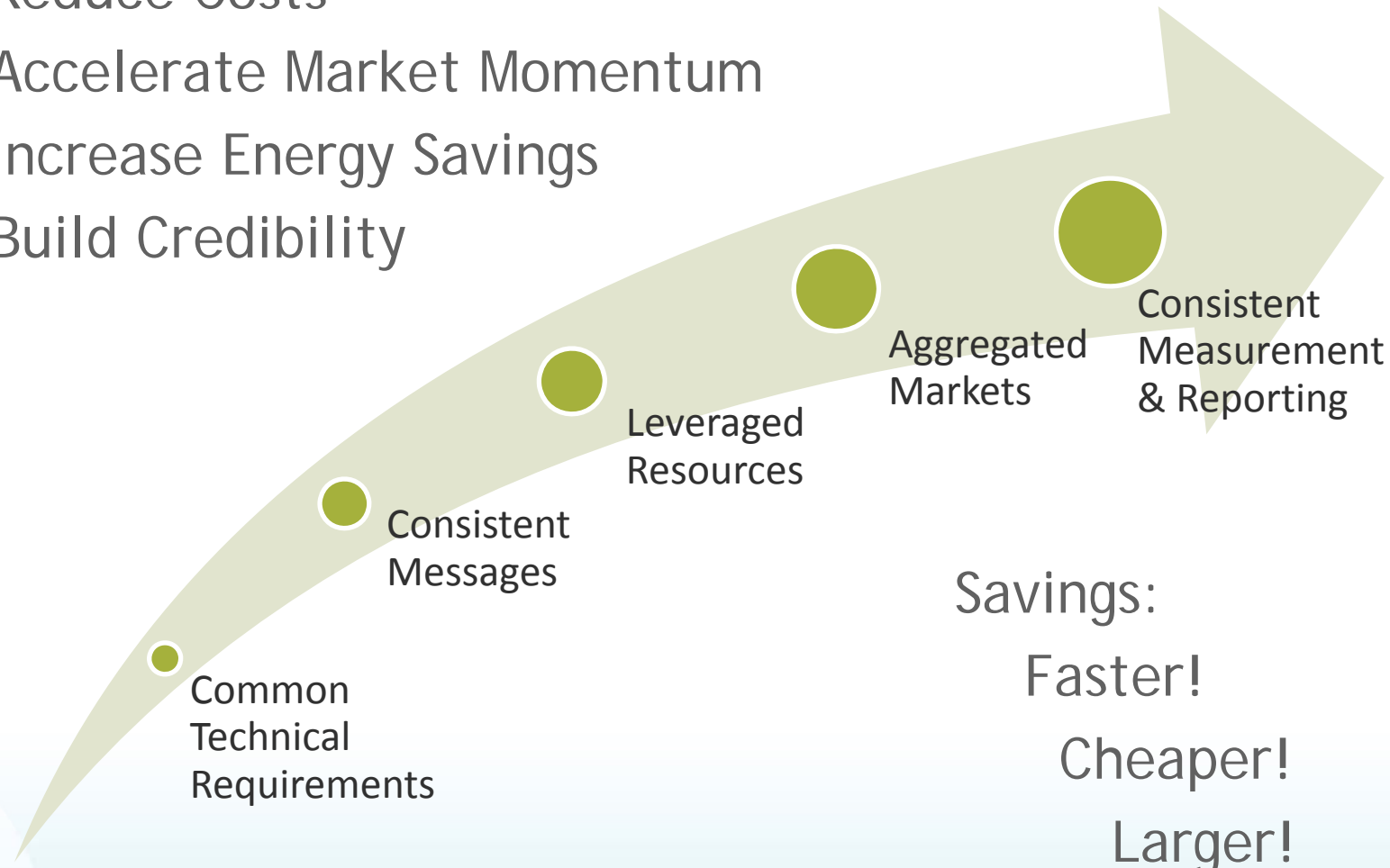
Details see: www.neep.org/about-neep/business-plans

NEEP RDI MODEL



REGIONAL EE PROGRAM COORDINATION

- ✓ Reduce Costs
- ✓ Accelerate Market Momentum
- ✓ Increase Energy Savings
- ✓ Build Credibility



Savings:
Faster!
Cheaper!
Larger!

CFLS: RESIDENTIAL PORTFOLIO GIANT



CFLs account for up to 80% of residential electric portfolio savings

- New Construction: Direct install, small volumes
- Existing Homes: Direct Install, small volumes
- Low Income: Direct Install, small volumes
- Retail: Mark downs, coupons...millions!

Fixtures, Specialty CFLs and SSL (LEDs) are less successfully pursued and/or emerging

THE TYPICAL PROGRAM MODEL



Barriers & Solutions

- High price: Incentivize to get on par with traditional product
- Low quality: Program for Evaluation and Analysis of Residential Lighting
- Low consumer awareness: Education, awareness campaigns and in-store “POP”
- Few applications: Technology design contests, higher incentives for different products
- Low availability: Target high volume “big box” and traditional food & drug channels
- High transaction cost: Develop wholesale incentive strategies (NCP, upstream, mark down)

And so its gone for 15 years...



TYPICAL SAVINGS CALCULATION

1. (Baseline product consumption - CFL consumption) = "delta watts"
 1. Example: 60 watt bulb to 15 watt CFL = 45 watts
2. Delta watts * hours of use per day * 365 = "Gross annual savings"
 1. "Lighting logger" studies peg this at 3-5 hours per day
 2. So, example: 14 watts * 3.5 hours * 365 days = 57,488 "watt hours"
 3. Divide by 1000 = 57.5 kilowatt hours
3. Gross annual savings * lifetime = "Gross lifetime savings"
 1. Example: 8000 hour bulb at 3.5 hours/day (1275 hours/year) = $8000/1275 = 6.25$ years so call it 6 years
 2. 6 years times 57.5 kWh = 345 lifetime kWh

But wait...there's more...

ADJUSTING TO NET SAVINGS



1. Begin with our 57.5 annual or 345 lifetime kWh
2. How much of that really happens and how much is attributable to the efficiency program?
 1. Or...what is the “net savings” due to the program?
3. Net to Gross Ratios (the basics):
 1. Free riders: those who would have bought the CFL without the incentive
 2. Spillover: those who bought non-incentivized CFLs due to awareness of the incentive program
 3. Persistence: the percentage of the gross savings that is not eroded due to product failure or removal
 4. Install rates versus stored bulbs
4. Via surveys and newer methods using statistical modeling based on variables such as socket saturation, sales and comparisons to control (non-incentive) states
5. “Net” is rapidly approaching ZERO in some studies

NEEP AS PART OF THE SOLUTION



NEEP IS WELL POSITIONED TO FACILITATE REGIONAL COORDINATION

- Strong Track Record Facilitating Regional Results
- Established Presence in Northeast & Mid-Atlantic States
- Strong Relationships - Federal Agencies & Foundations
- Broad Range of Existing Projects
- Highly Respected Professional Staff
- Capacity to Administer Jointly Funded Projects
- Strong Sponsor Base

“If NEEP did not exist, we’d have to invent it”

NEEP 2009 Sponsor Survey

NEEP AS PART OF THE SOLUTION



AUDIENCES AND RELATIONSHIPS

- Program Administrators of ratepayer funded energy efficiency programs
- Gas and Electric Utilities
- Policy Makers - Federal, State
- State and Federal Agencies and Authorities
- Energy Efficiency Market Interests (retailers, manufacturers, service providers)
- Designer, Architects, Builders
- Business and industry groups
- Environmental and Consumer Groups
- Educational Institutions

SO WHAT STARTS TODAY?



My email exchange of last week:

Peter Banwell, US EPA:

...Congratulations on wading into the deep water, it has to be done.

Reply:

...let's hope no one drowns in that deep water but rather a sense of team begins to emerge with the goal of building a bridge across it.



THANK YOU

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