#### Pro Forma

Modeling the impact of program marketing on contractor revenues

#### Robin LeBaron

National Home Performance Council



#### The National Home Performance Council

National, non-profit organization

 Supports whole-house upgrade programs through research and convening projects

 Addresses problems that limit growth and development of whole-house programs

#### NHPC Stakeholders

- Federal agencies (DOE)
- State energy offices (NASEO, MD, NY, TX)
- Program implementers (CSG, ICF)
- Utility sector (EEI, LIPA, and currently reaching out to several others)
- Industry (NAIMA, ABM)
- Real estate (Eco-Brokers / AEEREP)
- Non-profit stakeholders (ACEEE, ASE, EPC)

#### NHPC Current Projects

Cost-effectiveness testing

Data collection and transfer standards

 Smart grid and whole house energy efficiency upgrades

 Incorporating energy efficiency data in MLS systems and appraisals

#### "Pro Forma Project:" Two Goals

- Help program administrators:
- Understand contractor financials
  - Making a profit is challenging
  - Understanding key drivers of profit is important

 Understand the impact of program decisions on contractor revenues

#### Ideal Model

• Full integration of program and contractor finances

 Contractor side of the pro forma represents multiple contractors

#### Initial Project

- Integration of program marketing efforts and contractor pro forma
- Look at program marketing expenditures on a per channel basis
- Model how those expenditures will impact a contractor's financial situation

### Quantifying Program Marketing

 What assumptions are made when a program implements marketing efforts?

What efforts are made to quantify impacts?

How are impacts conceptualized?

#### Brought to you by...

- NHPC as sponsor (and contributor)
- Sustainable Spaces / efficiency.org as prime contractor
- LEAP as participating program
- Funding from U.S. Department of Energy

– thank you, DOE!!!

#### Presentation Overview

- Review of contractor model
- Review of program marketing model
- Review of program marketing data collection and revenue generation issues
- Review of full integrated pro forma

### Program Marketing Actuals

- For data entry on a per-channel basis
  - Number of leads, audits and retrofits
  - Average job size (or total revenue)
- Question: Could you generate this data from your existing systems, and, if so, how much effort would it take?

### Program Marketing Costs

- For entering data regarding costs on a per-channel basis
  - Direct costs
  - HR costs
  - G&A costs
- Important note: The period for the costs must match the period in which the lead/audit/retrofit totals were generated

### Program Marketing Costs

- Program marketing costs combine with data from "Marketing Actuals" tab to create key metrics
  - Average cost / lead by channel
  - Average cost / audit by channel
  - Average cost / retrofit by channel
  - Lead-audit conversion rate by channel
  - Audit-retrofit conversion rate by channel
  - Average job size per channel

#### Program Marketing Assumptions

- Take key metrics from Marketing Costs tab
- Project key metrics out into the future on the basis of assumptions about how each channel will perform in the future
- The past does not always predict the future!
- Writing out logic underlying the assumptions may be very useful

#### Program Marketing Pro Forma

- Shows implications of program marketing spend in terms of actuals leads / audits / retrofits
  - Leads, audits, and/or retrofits
  - And/or conversion rates
  - Average job size (weighted)
- Only point of contact between marketing and contractor model
- Costs not in original model, but built into integrated pro forma

#### Contractor Pro Forma

- Drivers derived off-spreadsheet
  - Lead to audit conversion rate
  - Close rate
  - Average project size
  - Revenue per hour per crew member
  - Crew utilization
  - Base wage

#### Contractor Pro Forma

- Drivers derived off-spreadsheet, cont'd
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## Best Practice : Recognize Spillover / Market Transformation

 Spillover and market transformation effects should be considered in the net-to-gross calculation

• *or*, simply use gross savings if spillover and market transformation data not available

## Best Practice: No Arbitrary Caps for EULs

• Some programs impose arbitrary caps on effective useful life (EUL) of energy efficiency measures

 For measures with long life-spans, no reason that measures should not be valued for the duration of their useful life

## Best Practice: Evaluate Appropriate Time Frame

- More complex energy efficiency programs typically have long start-up periods;
- Costs front-loaded in first few years;
- Mature programs' experience demonstrates that costs fall over time
- Develop ways to ensure that costs spread over time

## Best Practice: Use Appropriate Discount Rate

• For SCT, use Treasury bonds or similar rate to reflect cost to society as a whole;

This option also logically defensible for TRC;

 Alternative, use WACC or lower to reflect the lowrisk nature of energy efficiency investments

# Best Practice: Recognize all Energy Savings

 All fuel savings should be captured, not just those provided by the utility sponsoring the program

 An issue when gas and electric services are provided by separate utilities

Consideration of bulk fuels also an issue

## Best Practice: Recognize Non-Energy Impacts

- Studies consistently find non-energy impacts important
  - Comfort and health issues particularly important for consumers
- Non-energy costs should be considered if relevant
- Significant impact on TRC

# Best Practice: Recognize Future Costs of Environmental Compliance

• Recognize future costs of environmental regulation if they are quantifiable and almost certain to occur

• Examples: EPA regulations (MATS, CSAPR, NSPS)

#### Best Practices: In Progress

 Preliminary recommendations based on existing literature and stakeholder experience

• Further research and refinement of recommendations important

#### Use PAC if Best Practices Not Feasible

- Program Administrator Test has significant benefits:
  - Simpler and less expensive to administer
  - Compares the cost of efficiency to the cost of supplyside measures
  - Useful for considering bill impacts

## Tests are Important Analytic Tools

 Testing is important and can help to ensure that programs have real benefits

- But tests should be used mindfully -- larger goals important
  - Reduce consumer bills
  - Reduce energy consumption
  - Meet EEPS goals

#### Key Issues: Rates and Bills

- Key public policy concern: rates and bills
- Energy efficiency can cause rates to rise
- But *bill* impact can be negligible for smaller programs
- Larger programs can keep bills down over the longer term by delaying or preventing creation of new generation, transmission and/or distribution costs

#### More Research Needed

 More research on best practices important: identify and clarify

 Research that addresses rate / bill impacts also important

#### Synapse Energy Economics Study

 NHPC commissioned Synapse Energy Economics study with support from EFI

- Report addresses:
  - Appropriate uses of tests
  - Range of best practices
- To be released in July 2012

## Comments / Questions Please Contact Us

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## Thank you!

