THE CADMUS GROUP, INC.

Non-Utility Programs: Savings, EM&V, and Program Considerations

M. Sami Khawaja

June 26, 2012

Expansion of Non-Utility EE Programs

- ARRA and local stimulus funds
- Regional greenhouse gas initiatives
- Regional market transformation initiatives
- State tax policies to promote energy efficiency
- Expanding EE marketplace
- Self directs

Benefits of Non-Utility EE

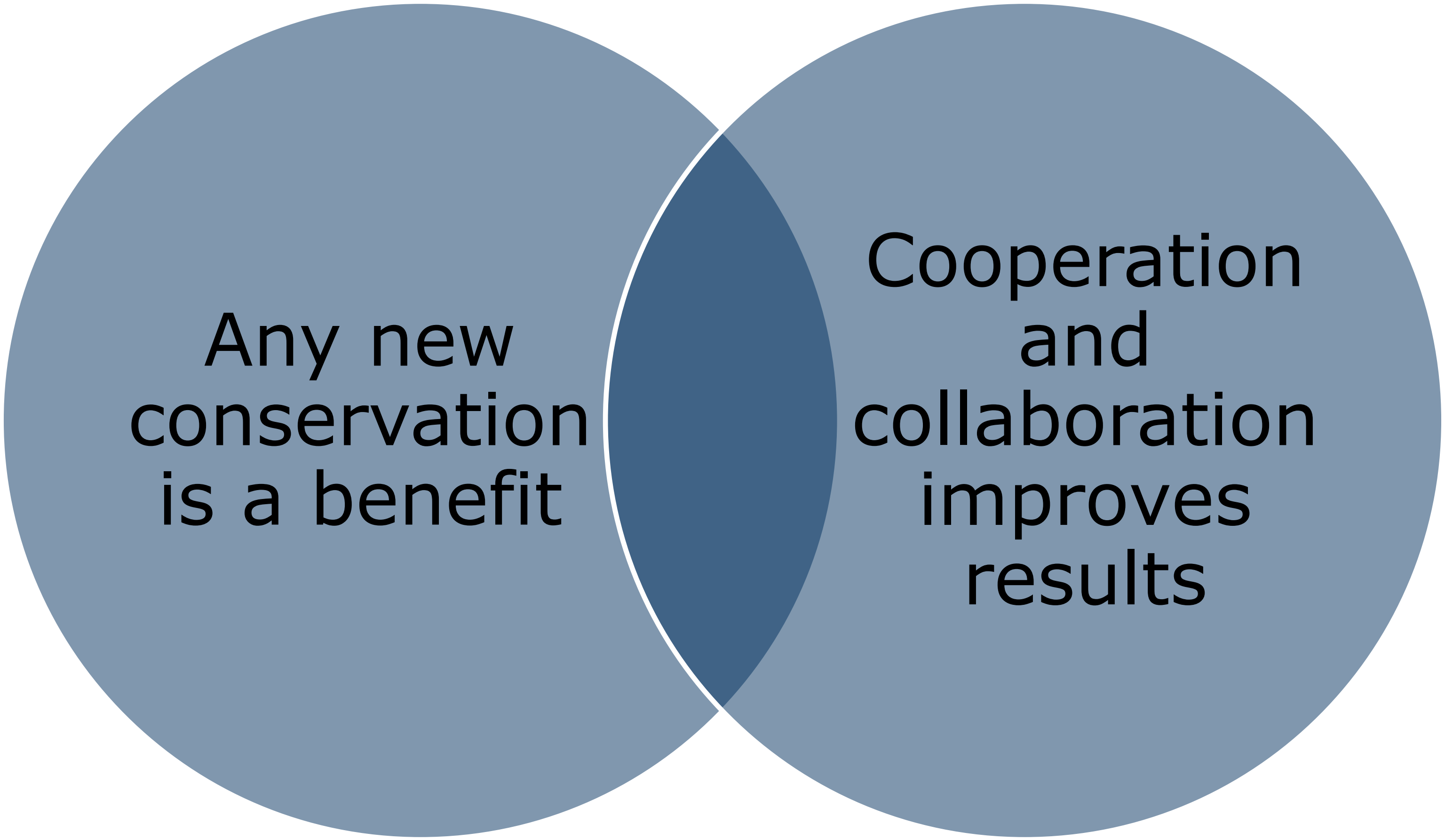
- Can complement the utility portfolio
  - Hard-to-reach markets (NTG=1.0)
  - Innovative measures or delivery approaches
  - Promote market transformation
  - Leverage non-energy benefits
- Well-executed and coordinated NUEE can expand overall energy savings achievements

Attribution Questions

How do we slice the pie?

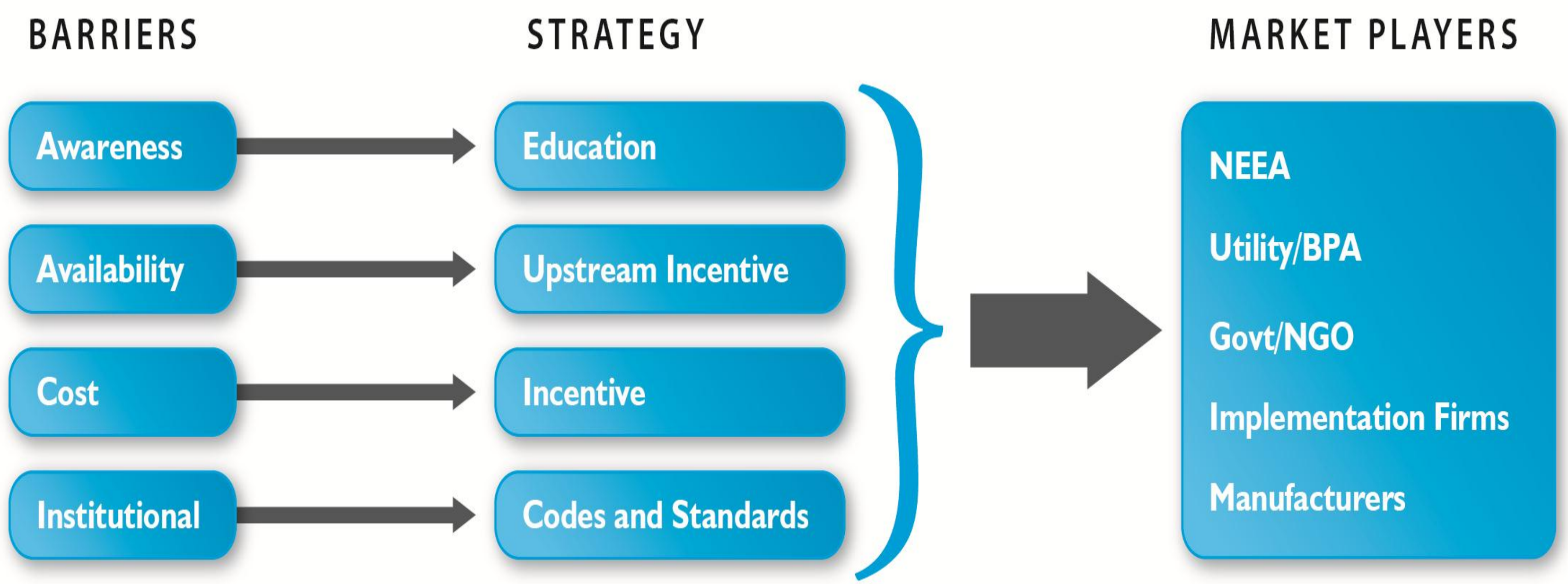
OR how do we get the biggest, best pie?

A View from the Pacific Northwest



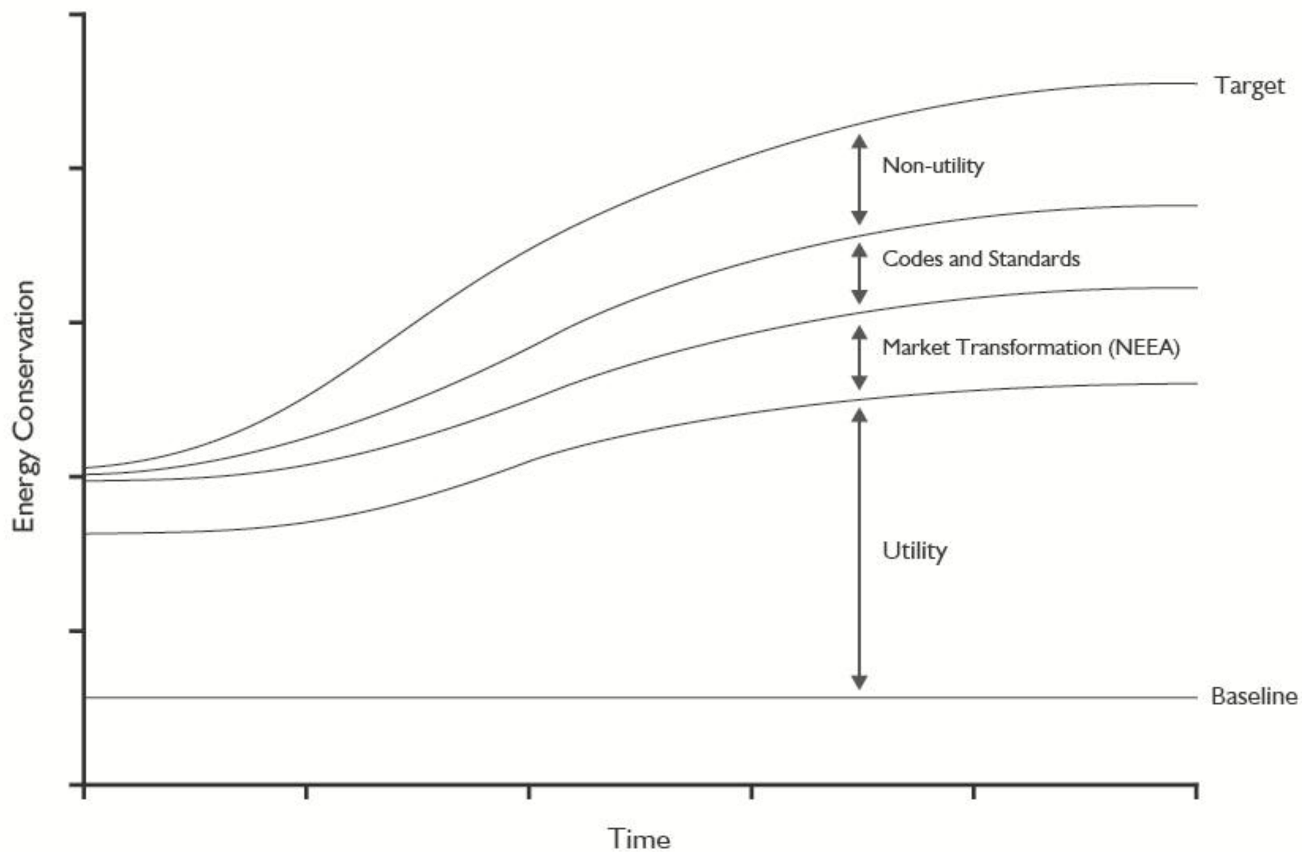
THE CADMUS GROUP, INC.

A Collaborative Effort



THE CADMUS GROUP, INC.

Targets Reflect Savings from Collaborative Efforts



Regional targets are set by the Northwest Power and Conservation Council (NPCC) without regard to attribution.

Attribution in the PNW

- Level of coordination makes it difficult to appropriately attribute the region's EE to the actions taken by any one entity
- Attribution efforts may have unintended consequences:
  - Creating an atmosphere in which various entities are motivated to compete, rather than cooperate

THE CADMUS GROUP, INC.

PNW

- Strong regional infrastructure and reporting structure supports collaboration
  - Regional deemed savings and custom M&V protocols drive consensus on savings claims – deemed savings values updated regularly to reflect changing baselines
  - Under WA I-937, utilities report impacts from programs, market transformation, codes and standards, other market-induced effects
  - Regional progress reporting to NPCC reflects all savings
- NEEA savings currently distributed by contribution

Other

- Massachusetts State Energy Office – loan loss reserve fund
- Minnesota Office of Energy Security (OES) – revolving loan funds
- Michigan Saves and Better Buildings for Michigan – energy efficiency loans and community-focused direct installs leveraging utility infrastructure and non-utility funding
- The California Energy Commission, Public Utilities Commission and the investor-owned utilities coordinated to a single statewide, multi-agency, multi-sector retrofit program that targeted residential customers.
  - The state agencies conducted outreach and workforce development but utilities could still claim credit for savings
  - CPUC sees collaboration as key to achieving deep energy savings

Regulatory Frameworks to Promote Collaboration

- Encouraging coordination between utility and NUEE will increase the overall energy saved
  - Attribution methodology should be determined through a collaborative process to develop a rules-based approach
  - NTG policies should address methodological challenges and drive optimal program design
  - Performance incentives may consider more than savings achievement, e.g., a utility's efforts to effectively collaborate and leverage non-utility programs may be considered as performance threshold
  - Targets should align with savings achievement measurement approach

In Summary

- Saying that savings should be allocated fairly and according to actual contributions is obvious
- Easier said than done
- How do you achieve this? How do you track and demonstrate incremental contributions?
- You need an institutional infrastructure. In the NW, for example we have had a history of collaborative program design and implementation (BPA) and institutions like the RTF, that have been in existence for a long time.
- To achieving this in IL, you need:
  - An institutional framework (SAG may help)
  - Oversight (commissions?)
  - Tracking procedures and reporting requirements
  - M&V methods for determining and allocating savings

One last thought

- NTG is ultimately attribution and appropriately crediting savings to parties who make the investment. In general, investments may come from three generic sources:
  1. Utility (administrator)
  2. Utility customers (participants)
  3. Other sources of funds (co-funders)
- The only difference is that the traditional NTG was about allocating savings between the utility and participants (let’s forget non-participants and spillover for the moment).
- Now we need to worry about a third party entering the game.
- In the conventional NTG, we subtracted savings attributable to participant investments (freeriders) from what was reported by the utility.
- Now we need to credit someone else for them (co-funders).
- Analytically the problem is the same, just a whole lot messier (more negotiation and infrastructure needed).

- Contact Information:

M. Sami Khawaja, Ph.D.
Sr. Vice President
Energy Services
The Cadmus Group
503-467-7100 (Office)
503-467-7122 (Direct)
Sami.Khawaja@cadmusgroup.com
www.cadmusgroup.com