

Market Transformation: Substantial Progress from a Decade of Work

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Market Transformation a Decade Old

- Paper by Eckman, Benner & Gordon at 1992 Summer Study
- Dozens of MT initiatives since then
- Formation of CEE, NEEP, NEEA, MEEA
- Energy Star gone from idea to major presence



What Has MT Accomplished?

- Early successful initiatives included Northwest Model Conservation standards, Wisconsin furnace programs, SERP, Energy Star office equipment
- In 2003, ACEEE examined 28 current initiatives underway in multiple parts of country



Scale to Rate Degree of Transformation

- 5 = largely transformed
- 4 = transformation likely
- 3 = substantial progress
- 2 = some progress
- 1 = little progress



Largely Transformed

- Energy Star exit signs (LED, etc.)
- Energy Star residential clothes (standard takes effect 2007, although still an opportunity to promote higher levels of efficiency)



Transformation Likely

- LED traffic signals
- SEER 12/13 residential a/c
- TP-1 dry-type distribution transformers
- Building operator training/certification
- Energy Star residential appliances
- Commercial packaged a/c
- Commercial clothes washers
- Condensing furnaces in cold climates



Substantial Progress

- Energy Star residential windows
- Energy Star new homes
- CFLs/fixtures
- Home electronics
- Packaged commercial refrigeration
- Commercial new construction
- Real estate, schools
- Premium efficiency motors
- Compressed air systems



Some Progress

- Residential a/c installation & maintenance
- Duct sealing
- Ground-source heat pumps
- Cool roofs
- Retrocommissioning
- Commercial lighting design
- Motor management practices
- Furnace fans



Little Progress

- Heat pumps water heaters



Attributes Linked with Success

- Have low incremental cost
- Rapid paybacks
- Substantial non-energy benefits
- Primarily improvements to existing technologies
- Incorporated into codes and standards
- Greater level of effort



Other Lessons Learned

- Work with major players in the market
- Target needs to be achievable but not too easy
- Pay attention to efficiency metrics
- Need to differentiate efficient products and services in eyes of consumers
- Promotion very important
- Training of service providers important



Other Lessons Learned (2)

- Incentives can be helpful, particularly early in an initiative
- Successful initiatives generally multi-pronged
- Keep programs simple from a consumer perspective
- Product/service needs to be valuable and work well



Directions for MT's Second Decade

- How do we spread to other regions?
- More attention to promoting efficient practices
- Leveraging codes & standards should continue
- Look at new opportunities (e.g. emerging technologies)
- Pay attention to sustaining efforts and organizations in the long-term



For More Information

- Full ACEEE report on *A Decade of Work* available on the web:
 - www.aceee.org/pubs/a036full.pdf
- ACEEE also has a new series of reports on possible new initiatives:
 - Packaged refrigeration (www.aceee.org/pubs/a022full.pdf)
 - Unit heaters (www.aceee.org/pubs/a031full.pdf)
 - Commercial lighting (www.aceee.org/pubs/a032full.pdf)
 - Fan and pump systems (www.aceee.org/pubs/a034full.pdf)
 - Retrocommissioning (www.aceee.org/pubs/a035full.pdf)

