

Energy Efficiency Question 16: Have energy efficiency programs in Michigan or other jurisdictions addressed long-lifecycle programming such as interest rate buy-downs, home performance programs, industrial whole process programs, and deep savings programs for business customers?

Executive Summary

1. A variety of programs are offered by Michigan utilities that encourage long-term energy savings including deep residential retrofits (e.g. Home Performance with Energy Star), commercial new construction programs, and interest rate buy-downs for energy efficiency loans such as offered by Michigan Saves.
2. Numerous states have set objectives to encourage deeper project savings. A common way to achieve this is by offering graduated incentives—where the amount of the incentive increases as savings achieved increases.
3. Deep energy saving programs are active in Michigan, California, the Pacific Northwest, New Jersey, Maryland, Washington D.C., Wisconsin, and Connecticut. These programs serve as examples of a variety of approaches utilities can potentially take to achieve deep savings.

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1. **A variety of programs are offered that encourage long-term energy savings, including, deep residential retrofits (e.g. Home Performance with Energy Star), commercial new construction programs, and “Michigan Saves” which offers interest rate buy-downs for energy efficiency loans.**

This type of interest-rate buy-down, and/or the use of financing or interest rate buy-downs, is becoming more common across the United States. However, it is still not a dominant feature of energy efficiency nor has it been shown to significantly result in dramatic increases in program participation. All the same, offering innovative financing options provides customers more choice, and for some, will facilitate participation.

One innovative financing option in recent years is the “Property Assessed Clean Energy” (PACE), mechanism, which is designed to offer financing for efficiency or renewable upgrades, with a provision that the financing terms remains with the premise in cases of transfer of property ownership. Such a financing option has some significant challenges, and the implementation of PACE-type programs has been delayed around the country due to financial concerns regarding the potential for default. However, some states (e.g. Maine), have enacted legislation to address such concerns and have an operating PACE program.

Response from Consumers Energy

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- 2. Numerous states have set objectives to encourage deeper project savings. A common way to achieve this is by offering graduated incentives—where the amount of the incentive increases as savings achieved increases.**

Consumers Energy has developed a pilot to try to encourage C&I customers to pursue more comprehensive actions. This pilot, known as the “Multiple Measure Pilot,” offers additional incentives when rebates for two or more types of measures are applied for simultaneously.

- 3. Deep energy saving programs are active in Michigan, California, the Pacific Northwest, New Jersey, Maryland, Washington D.C., Wisconsin, and Connecticut. These programs can serve as examples of a variety of approaches utilities can potentially take to achieve deep savings.**

Table 1 provides examples of a variety of “deep” energy savings programs offered in Michigan and around the country.

Response from Consumers Energy

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Table 1: Deep Energy Savings Program and Definitions

| Jurisdiction | Program/Source | Type | Definition | Incentive |
|---------------------------|--|---------------------------------------|--|---|
| Michigan | Consumers Energy Multiple Measure Business Program | Multiple measures | Bonus incentive for project with more than one measure category. Sum of all secondary measure categories must equal at least 15% of total incentives. | 15% bonus incentive |
| Michigan | Home Performance with Energy Star Multiple Measure Bonus | Multiple measures | Homeowners earn a bonus for installing 3 or more energy efficiency measures as part of whole-home approach. | Tiered bonus beginning at \$200 for 3 measures and increasing to \$500 for 7 measures |
| California | California Nonresidential Standard Performance Contract Program (SCE, PG&E, SDG&E) | Multiple measures | Lighting incentives only allowed in projects where at least 20% of energy savings come from non-lighting measures; utilities limited to 30% of incentive budget for lighting | No bonus |
| California | SMUD Small Commercial Deep Energy Retrofit (DER) Demonstration Program | Savings threshold | ≥30% energy savings, customer must agree to demonstrate emerging technologies identified by SMUD | Up to \$5,000 design incentive, efficiency incentives of up to 80% of incremental costs |
| Pacific NW | NEEA BetterBricks Existing Buildings Renewal Initiative | Savings threshold | ≥30% energy savings from two or more efficiency measures, over CBECS baseline | Not yet determined |
| N/A | Theoretical "DEEP" Program (Institute for Building Efficiency, Rocky Mountain Institute) | Savings threshold | ≥30% energy reduction | Additional incentive of 20% total cost |
| N/A | American Institute of Architecture Studies (Research Paper) | Savings threshold | ≥50% energy cost savings over building baseline, measured prior to renovation | N/A |
| N/A | University of Colorado, Boulder, Rocky Mountain Institute (Conference Paper) | Savings threshold | ≥60% annual operating cost savings over CBECS baseline, with positive NPV | N/A |
| New Jersey | Pay for Performance Program (New Jersey Office of Clean Energy) | Savings threshold / Multiple Measures | Minimum reduction of 15% of total energy consumption from baseline benchmark, at least two measures where lighting makes up no more than 50% of savings, IRR of at least 10% | Three incentives: (1) \$0.10/sq.ft. for Energy Reduction Plan, (2) up to 25% of project cost based on projected savings, (3) if goal met, up to 25% of project cost based on realized savings |
| Maryland, Washington D.C. | Pepco (Maryland, D.C.) Multiple Measure-Type Bonus Incentive | Multiple measures | Two of more separate prescriptive measure-types completed (within six months of each other) | 10% bonus incentive (based on total incentive amount) |
| Wisconsin | Focus on Energy (Wisconsin) Energy Bundle Bonus | Multiple measures | Two or more "unrelated energy-using systems" receive a bonus incentive, with increasing bonuses for up to five "energy-using systems" | 2 systems - 25% bonus incentive, 3 systems - 50%, 4 systems - 75%, 5 systems - 100% |
| Connecticut | Connecticut Energy Opportunities Program (CL&P, UIC, CEEP) | Multiple measures | "Comprehensive" project consists of at least two end-uses with no one measure having more than 85% of the projects annual cost savings | 50% of project installed cost, or one-year avoided energy cost |