

*Residential Air Conditioning
Exemplary Program*

*Cool Advantage
New Jersey Clean Energy Collaborative*

PROGRAM OVERVIEW

Cool Advantage was designed to transform the residential HVAC market to one in which quality installations of high-efficiency equipment are commonplace. The program promotes the sale of high-efficiency equipment and improvements in sizing and installation practices that affect operating efficiency. To achieve its long-term goal, the program must overcome a number of market barriers, including: (1) split incentives (between builders and homebuyers and between owners and renters); (2) consumers' lack of information on the benefits (both energy and non-energy) of efficient equipment and installations; (3) lack of training for HVAC contractors on key installation issues and approaches to "selling" efficiency; and (4) consumers' inability to differentiate between good and poor work or between quality contractors/technicians and those less well qualified.

Cool Advantage employs several key strategies to overcome these barriers:

- Incentives for the sale or purchase and installation of high-efficiency equipment for which documentation of proper sizing and installation is provided;
- Aggressive consumer marketing campaign on key elements and benefits of efficiency;
- Direct marketing to HVAC distributors and contractors through "outreach coordinators;"
- Training of HVAC contractors on key elements of quality installations;
- ENERGY STAR[®] sales training for contractors (i.e., how to sell efficiency); and
- Promotion of HVAC technician certification.

Cool Advantage has relied on an extensive market study completed in late 2001. This study documented market share for efficient equipment, typical sizing and installation practices, consumer awareness and attitudes, contractor awareness and attitudes, and manufacturer/distributor perceptions. This extensive market research established a baseline for the program and was critical to designing an effective program.

PROGRAM PERFORMANCE

This program is perhaps the most comprehensive attempt anywhere in the country to promote energy efficiency in the residential HVAC market. A notable feature is its effort to capture the substantial savings associated with improving equipment sizing and the overall quality of the installation. Initial evaluation work suggests that the program has already succeeded in changing some practices—even among non-participants. It also has increased the market share for efficient equipment to levels well above those documented anywhere else (around 30 percent compared to the national average of 4–5 percent for SEER 13 and up, and 20–25 percent compared to the national average of 1–2 percent for SEER 14 and up). Consequently, the program probably captures more peak demand savings from the residential sector (relative to the eligible market) than any other market-driven program in the United States.

LESSONS LEARNED

Several features of the program are highly innovative. For example, it was the first program in the country to tie rebates not only to the purchase of efficient equipment, but also to the documentation of both proper sizing and installation, including airflow and refrigerant charge. Equally important, other programs are starting to model themselves after Cool Advantage. The Long Island Power Authority is now running a program based on the New Jersey model. National Grid is about to launch a program in Rhode Island that also is modeled on the New Jersey Program. Other states and regions also have expressed interest, including California, Texas, and the Midwest.

PROGRAM AT A GLANCE

Program Name:

Cool Advantage

Targeted Customer Segment:

Residential customers with central air conditioners or heat pumps in New Jersey

Program Start Date:

1999

Program Participants

Year 2002: 17,963

Since inception: approx. 66,000

Approximate Eligible Population:

50,000 annually

Participation rate: Around 30%

Annual Energy Savings Achieved

Year 2002: 14,000,000 kWh (projected)

Program to date: around 52,800,000 kWh

Peak Demand (Summer) Savings Achieved

Year 2002: 12,461 kW

Program to date: 47,520 kW

Other Measures of Program Results to Date:

Current market share is about 30% for SEER 13 and up, and 20–25% for SEER 14 and up.

Budget

Year	Utility Costs
2001	\$11.2 million
2002	\$17 million
2003 (projected)	\$13.5 million

Funding Source: Statewide systems benefit charge

Best Person to Contact for Information about the Program

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