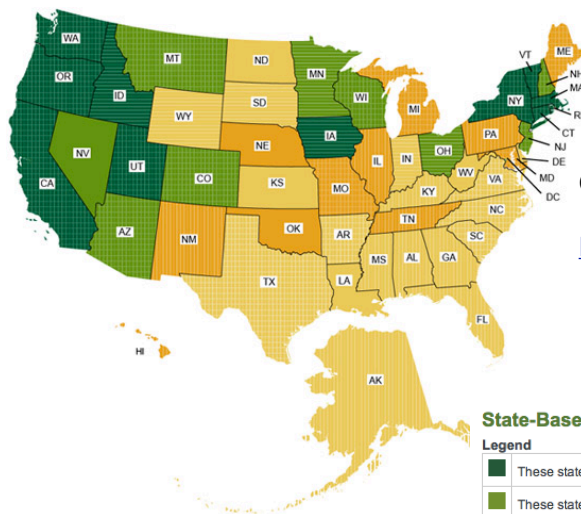


Exploiting Rebates Quarterly

by the Building Advisor™

According to a report issued by the Lawrence Berkeley National Laboratory, total ratepayer-funded energy efficiency program spending in the U.S. is projected to more than double in the next decade, increasing to over \$7 billion per year by 2020.¹ Today much of the spending is concentrated in a few states that have traditionally provided strong support. Together, California, New York, New Jersey, Washington, and Massachusetts account for nearly 60% of the total utility program spending, with California alone accounting for nearly one-third. According to the report however, “much of the projected increase will be centered in populous states that historically have been relatively minor players on the national energy efficiency stage, but have recently enacted aggressive new energy efficiency policies, including Illinois, Maryland, Michigan, North Carolina, Ohio, and Pennsylvania.” These states are expected to account for more than 60% of the expected increase in program spending in the next decade. The bottom line – states that have traditionally budgeted a higher percentage of utility revenue in energy efficiency programs will continue to do so, and states that haven’t will start. Industry professional who haven’t already done so, it’s time to take notice.



Graphic reproduced from [U.S. Department of Energy's Energy Efficiency and Renewable Energy Federal Energy Management Program.](#)

¹ Barbose, Galen, Charles Goldman, and Jeff Schlegel, *The Shifting Landscape of Ratepayer-Funded Energy Efficiency in the U.S.*, Lawrence Berkeley National Laboratory, October 2009.

Why Utilities Pay Their Customers to Use Less

Simply put, utility demand side management programs encourage a utility's customers to use less energy. At first glance, it doesn't make sense for a utility to pay its customers to buy less of its product. As Eric Hirst, from Oak Ridge National Laboratory writes, "Does General Motors urge us to carpool and keep our cars longer?"² Actually, they might, if their factories were at capacity and it was prohibitively expensive to add capacity. This is the issue many utilities are facing. At times of peak demand the generation and distribution systems are at or near capacity. And, the expense and the necessary environmental and regulatory approvals required to add capacity makes that option very unattractive. According to Hirst, "Energy efficiency programs are often low-cost alternatives to the construction and operation of new power plants."

Free Money Falling From the Sky

To understand how industry professionals can take advantage of energy efficiency programs to increase service and retrofit work, it's helpful to understand first how utility programs work. Utility programs generally fall into one of three categories:

Prescriptive Programs – These programs pay a preset amount for specific, common activities such as replacing inefficient lighting or air conditioning systems with more efficient ones. For example, in Minnesota Xcel Energy will pay a rebate of \$165 per ton to replace a 50-ton rooftop unit with an efficiency of 12 EER.

Custom Programs – Custom programs pay a rebate for activities that save energy, but aren't covered by a prescriptive program. Generally, rebates claimed under custom programs combine several, more complex measures that when implemented result in lower consumption or demand. An engineering analysis that calculates the projected savings is nearly always required in order to claim the rebate. Another important difference – while prescriptive rebates can be claimed after the purchase of qualifying equipment, custom measures nearly always have to be approved ahead of time in order to claim the rebate.

In New York City under the New York State Energy Research and Development Authority's (NYSERDA) Existing Facilities Program an incentive of \$0.16 per kWh is paid for projects that deliver energy savings. The replacement of an outdated building control system with a system that uses energy saving techniques as variable air volume or supply air reset is an example of a project that could be awarded a rebate from a custom program. While potentially very lucrative, the complexity associated with the analysis has often been a deterrent to many mechanical contractors claiming all of the rebates that may be available.

² Hirst, Eric, *Electric Utilities and Energy Efficiency*, Oak Ridge National Laboratory

Energy Study Programs – The first step in saving energy is identifying energy conservation measures that are appropriate and cost effective. Engineers and consultants have traditionally been the resource the industry has relied upon to conduct the energy studies necessary to uncover savings opportunities and determine the potential return on investment from implementing the recommended measures. To encourage projects to move forward, many utilities also offer programs to help defray the cost of these studies. For instance, Wisconsin's Focus on Energy Program pays building owners \$0.05 per square foot toward the cost of an energy study designed to identify and quantify energy conservation measures. In order to earn the incentive the building owner must agree to spend up to \$10,000 to implement measures having a payback period of less than 1.5 years. Focus on Energy has recognized that most buildings offer significant low and no cost opportunities to reduce energy waste, and through its funding of energy studies, can be a catalyst for action.

Resources and Information

[DSIRE](#)- Database of State Incentives for Renewables & Efficiency

Contact the local Utilities for programs in your market

The Times They Are A-Changin³

Working with utility programs can be time and labor-intensive, because they all have rules that must be followed and forms that must be filled out to qualify for rebates. However, tools like those provided with the BuildingAdvice™- the industry proven energy services delivery platform can greatly simplify the process to provide the documentation and engineering support needed. BuildingAdvice™ allows HVAC and Mechanical Contractors and Consultants to easily develop the capability in-house to manage utility rebate programs for their clients. The value of obtaining rebates goes beyond covering a portion of the project cost, as you will see from some of contractor stories below. Rebates remove financial and psychological barriers to energy efficient investments while creating interest in the project and enhancing the image of contractor, building and management. For rebate reviewers facing stacks of proposals, the compelling simplicity of the BuildingAdvice™ reports show how projects will deliver the proposed savings.

Example 1 – Using BuildingAdvice™ as the Analysis Tool for a Custom Program

Evansville ARC (EARC) is a nonprofit adult disability rehab and child daycare facility in Evansville, IL, with a longstanding maintenance contract through local HVAC contractor J.E. Shekell. As the recession's effects were felt in decreased revenues from fundraising, EARC's executive director was aggressively seeking savings opportunities to offset the bottom line.

³ Dylan, Bob, 1964.

Lead engineer Aaron Derr conducted an Energy Benchmark on the building, which showed an annual energy spend of \$82,000 and an ENERGY STAR rating of 26, much worse than average buildings in their area. A subsequent BuildingAdvice Energy Savings Audit showed that the energy spend could be decreased by over \$50,000 a year by implementing a proposed \$200,000 in HVAC project work, which included controls upgrades and equipment replacement. Also proposed was the installation of BuildingAdvice Verify™, an ongoing energy monitoring system to establish baseline usage and measure the “real time” effect of the project work. Total payback on the proposed \$210,000 worth of upgrades was predicted to be less than two years with rebates and grants.

EARC began securing funding for the upgrades. Based largely on data contained in the BuildingAdvice Energy Audit™ report, the Indiana Office of Energy Development awarded EARC a block grant in April of 2010 totaling \$100,000. In early 2011, EARC received rebates totaling over \$20,000 from their local utility, Vectren, as part of their custom energy efficiency program.

“All of the predicted energy dollars saved came from the BuildingAdvice™ report,” Derr attests. Vectren’s third party auditor, Nextant, which verifies proposed savings for their rebate program, worked with Derr and AirAdvice to review supporting documentation for the proposed savings and the calculations behind them. Working directly with Nexant on behalf of J.E. Shekell, the AirAdvice support team was able to provide the necessary supporting documentation to ensure all of the rebates applied for were awarded. Read the full story on Contracting Business here: <http://bit.ly/iIRZ9t>

Example 2 - Getting Creative with Energy Studies

Traditional marketing doesn’t work in Anchorage, Alaska, Control Contractors’ (CCI) Kevin Smith had realized. Despite email, direct mail and advertising, he shared, “It’s a very small community, and they would be very suspicious of you for making outlandish claims. I had to get more creative with my marketing.”

CCI has been doing HVAC service for Chugach Electrical Association for several years, but when Smith purchased the BuildingAdvice program in 2009, his relationship with the member-owned utility gave him the idea to take the potential of BuildingAdvice further.

Chugach Electrical Association is affiliated with Anchorage area local utilities and the Alaska Energy Authority (AEA), which includes utilities Anchorage Municipal Light and Power, Enstar Natural Gas Company, Matinusca Electrical Association and Homer Electrical Association. The five utilities are comprised of government facilities, nonprofit organizations, and member-owned cooperatives.

In early 2010, Smith broke new ground by landing a grant proposal to AEA for a study of energy in the Anchorage area. His proposal was simple, but bold: CCI would provide BuildingAdvice benchmarking and energy assessment services to the business

residents of two of the AEA's member companies, or approximately 1% of the Anchorage area's 4,000 commercial facilities. The AEA would pay for it. He'd share the ENERGY STAR scores and energy conservation recommendations with building management, and use his findings to complete a study on energy usage in the Anchorage area. The AEA agreed, and contacted approximately 60 building owners and managers to request participation in the study by undergoing energy benchmarking and assessment reports.

"With the utility calling first, we've only had one person say no," Smith reports. "I'm getting my foot in the door with people who otherwise would be happy to stay with their current building controls or maintenance providers. They wouldn't have answered the phone before." Smith's BuildingAdvice kit was booked solid for months. The utilities' willingness to fund the energy study allowed Smith and CCI an entry point into Alaska's tightly-knit community that it otherwise wouldn't have had.

In closing

Utility rebates are designed to incentivize energy efficiency, but many individuals in the commercial real estate sector remain unaware of or unwilling to take advantage of grant and rebate funding. Documentation and detail in proving projected energy savings remains a major hurdle to the rebate application process.

BuildingAdvice's technology has the depth of data collection and reporting needed to satisfy the utilities' requirements to justify and prove that adjustments to operations and system upgrades and retrofits save energy.

Some owners are motivated by reputation, others by the bottom line. In any case, if a HVAC and Mechanical Contractor is willing to make a small investment in producing the documentation necessary to obtain rebates, that Contractor will have a competitive advantage by decreasing the customer's payback period and providing the highest level of differentiated services.