More Mass. homes, businesses benefit from energy programs

By David Riley, Daily News Correspondent GateHouse News Service

Posted Aug 07, 2011 @ 12:00 AM

(David Riley can be reached at 508-626-3919 or driley@wickedlocal.com.)

Copyright 2011 The Milford Daily News. Some rights reserved

Ever look at a monthly utility bill, notice a charge for "energy efficiency" and wonder where that extra dollar or two goes?

In part, that money is helping to fund a three-year state initiative to upgrade Massachusetts homes, businesses and government buildings so they waste less power.

In two reports this summer, state agencies said the effort's first year reached many of its goals, saving enough electricity to power an estimated 85,000 homes for a year and enough natural gas to heat about 14,000 households annually.

State energy officials argued the program is on track to ultimately pay off for utility customers, in both environmental and financial terms, more than they pay in.

"By reducing our demand, that inherently will have a benefit to all ratepayers in terms of cost," said Mark Sylvia, commissioner of the state Department of Energy Resources.

Some of the state's largest utility companies also are calling the initiative a success so far, touting expanded and streamlined energy-saving programs they have rolled out across the state.

"The energy efficiency programs in Massachusetts have really taken a leadership role in the country," said Penni Conner, vice president of customer care at NStar.

The effort is not without skeptics. Paul Bachman of the Beacon Hill Institute, a fiscally conservative think tank at Suffolk University, said hard-to-foresee energy prices can make it difficult to accurately predict long-term savings.

Energy efficiency programs also will likely address the "low-hanging fruit" - the cheapest, easiest-met needs - in the early years, he said. That could make it more challenging to continue reining in energy demand in future years, he said.

"Then you're going to have to start replacing windows and other things that are much more costly and wouldn't have as high of a return," said Bachman, director of research for the Beacon Hill Institute.

Program leaders said they already are pursuing more comprehensive, "deeper" projects to reduce energy use. They also described efforts to verify expected savings, from carefully engineering estimates to surveying past participants to check how upgrades work out.

State energy officials said they also are working to boost participation in sectors underserved by energy efficiency programs, including low-income residents and mid-size and larger businesses.

"That's where the major savings are," Sylvia said of the commercial and industrial sector. "They're the biggest users of energy and there's the most opportunity for deeper energy retrofits."

The state's energy efficiency efforts stem from the 2008 Green Communities Act, which required large utilities to invest in energy efficiency whenever it is cheaper to do so than buying additional power.

The effort also is a key part of the state's plan to cut Massachusetts greenhouse gas emissions 25 percent below 1990 levels by the end of this decade.

The state's three-year goal is to reduce retail electricity demand 2.4 percent, natural gas 1.2 percent and greenhouse gas emissions nearly 1.6 million tons in three years. The plan calls for about \$2.1 billion to be invested in energy projects from 2010 to 2012, with savings predicted to total \$6 billion over the full life of improvements.

That funding comes from several sources, but most is through utility bill surcharges and emission allowances that power plant operators pay.

With that funding, the state's major utilities said they have expanded and streamlined energy efficiency programs such as energy audits, rebates and incentives for everything from heating to lighting upgrades, and financing for some improvements.

The utilities offer their services through a single initiative - Mass Save - and customers can explore their options at masssave.com.

In the program's first year, major utilities spent about \$301 million on energy efficiency projects, about 10 percent less than planned. These upgrades are expected to save \$1.4 billion over their lifetime, according to a report by the Mass. Energy Efficiency Advisory Council.

Annual electricity savings totaled 98 percent of the state's goal for the first year, the report said. Annual natural gas savings slightly exceeded the state's first-year target, while greenhouse gas emission cuts met 99 percent of the goal.

The state report said more than 1 million people participated in efficiency programs for residents last year. That is considerably more than the state's goal of 663,000, largely through higher-than-expected participation in a program for home lighting, said Tina Halfpenny, energy efficiency director at the Department of Energy Resources.

"We were pleasantly surprised," she said.

Small businesses also exceeded the state's goal, with 5,000 taking advantage of energy efficiency programs, 1,000 more than the state's goal.

Programs targeted at low-income homeowners and renters fell shy of their 29,000-participant goal, with 24,000 participants. Large commercial programs also did not quite meet expectations, with 6,000 participants instead of the 7,000 sought.

Robert Rio, senior vice president for governmental affairs at Associated Industries of Massachusetts, said while energy efficiency is worthwhile, but the options for savings can be confusing for businesses.

"Once you get out of the homeowner sector, it can get very complicated," Rio said.

The state also predicts its energy efficiency initiative will create or retain roughly 4,000 jobs.

More was budgeted for energy efficiency programs for fiscal 2011 - \$581.9 million for electric customers and \$151.3 million for natural gas. Funding ramps up this fiscal year, with \$706.1 million for electric and \$203.4 million for gas, according to Halfpenny.

While utility customers who participate directly in energy-saving programs will see the greatest benefit, all ratepayers will gain from the state's effort, in part by requiring less fuel from sources out-of-state, Halfpenny said.

"There's that much less infrastructure being supported or that needs to be added to the system," she said. "Ultimately, there's that much less emissions coming out."