



OLR RESEARCH REPORT

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FUNDING HEATING SYSTEM CONVERSIONS IN HOUSING AUTHORITIES

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You asked for a description of programs that could provide funding for a housing authority to convert from oil to natural gas heating.

SUMMARY

PA 11-1(October 2011) Special Session, creates a program specifically for this purpose, which is also open to nonprofit organizations that own their own buildings.

PA 11-80 creates two programs that could help provide funding for a housing authority to convert from oil to natural gas heating. One program provides financing to replace heating equipment and a second provides other financial incentives for this purpose. The act also creates the Clean Energy Finance and Investment Authority (CEFIA) and appears to allow it to finance the purchase of efficient gas heating equipment.

While programs created by PA 11-1 and PA 11-80 could help a housing authority convert its heating equipment from oil to natural gas, it does not appear that they would cover the costs of connecting the authority's buildings to the gas distribution system.

PROGRAMS ESTABLISHED BY PA 11-1

This act authorizes \$5 million in general obligation bonds per year for FY 12 and FY 13 to the Department of Energy and Environmental Protection (DEEP) for an energy efficiency boiler program for housing authorities and nonprofit organizations that own their own buildings. The housing authorities must use the funds for dwelling units they own. The Fuel Oil Conservation Board administers the program, which must provide funds for replacing boilers and furnaces or upgrading and repairing existing units to meet the same standards as the replacement equipment.

The act requires the DEEP commissioner and the board to conclude an agreement for the (1) purchase and installation of the replacement units or (2) repair or upgrades of existing equipment. The replacements must have electronically commutated blower motors, an efficiency rating of at least 86%, and either a thermal purge or temperature reset controls. Existing boilers that can achieve an efficiency rating of at least 75% with repairs or upgrades must be repaired or upgraded rather than replaced.

The act required the Connecticut Housing Finance Authority to provide a list of housing authorities that use oil furnaces or boilers for heating to the DEEP commissioner. By January 1, 2012, the commissioner, in conjunction with the board, had to (1) develop a process for identifying and notifying eligible nonprofit organizations and housing authorities about the program, (2) establish an application process, and (3) to start making preliminary eligibility determinations.

Housing authorities and nonprofit organizations applying for the program must simultaneously sign up for and accept the services of the Connecticut Energy Efficiency Board's (CEEB) weatherization programs.

The act requires the Fuel Oil Conservation Board, in conjunction with CEEB, to establish criteria for determining:

1. the condition of the boilers and furnaces,
2. whether they are inoperable or unsafe or less than 65% efficient,
3. if the unit is inoperable or unsafe and requires replacement, and
4. whether it is more cost-effective to switch to natural gas heating based on a five-year payback.

If it is not cost-effective to switch or no pipeline is available, the boards can choose to replace the applicant's oil tank. If the boards decide on natural gas, the replacement gas furnace must be at least 95% efficient and the gas boiler at least 90% efficient.

The Fuel Oil Conservation Board must act on applications in the order it receives them unless there is an emergency in which the nonprofit or housing authority has no heat or the equipment is unsafe or inoperable. The board must issue a request for proposal for the units needed for the program.

PROGRAMS ESTABLISHED BY PA 11-80

This act establishes programs to (1) finance the replacement of inefficient residential heating equipment and (2) provide financial incentives for such replacement equipment.

Financing Replacement Heating Systems

Under the act, DEEP must establish a program to allow residential customers to finance the installation of energy efficient natural gas or heating oil burners, boilers, and furnaces to replace (1) existing inefficient equipment or (2) electric heating systems. The new equipment must replace boilers and furnaces that are at least seven years old with an efficiency rating of not more than 75%. Replacement fuel oil furnaces and burners must have an efficiency rating of at least 86% and burners must have thermal purge or temperature reset controls. Replacement natural gas boilers must have an annual fuel utilization efficiency rating of at least 90% and a gas furnace must have an annual fuel utilization efficiency rating of at least 95%. To participate in the program, a customer must first have a home energy audit. The cost of the audit can also be financed under the program.

The act does not define “residential customer” for purposes of this program. In practice, utilities often consider multi-family housing to be a commercial rather than residential customer.

A customer who participates in the program must repay the financing as part of his or her monthly gas or electric bill or by other means. The program may be funded by the residential financing program supported by the Connecticut Energy Efficiency Fund or the Clean Energy Fund.

Financial Incentives

The act also requires DEEP to establish a pilot program providing financial incentives to eligible entities that install energy efficient heating oil burners, boilers, and furnaces, as well as natural gas boilers and furnaces. The entities include (1) any residential, commercial, institutional, or industrial customer of an electric or natural gas company, who employs or installs an eligible savings technology, (2) an energy service company that DEEP certifies as a Connecticut electric efficiency partner, or (3) an installer certified by the CEFIA.

Financial incentives must provide (1) private financial institutions with loan loss protection or grants to lower borrowing costs and (2) grants to the lending institution to lower borrowing costs and allow for a 10-year loan, if DEEP considers this necessary. The financial incentive package must ensure that the applicant's annual loan payment is no more than the projected annual energy savings less \$100. Any loan provided as a financial incentive must include the cost of any related incentives, as determined by DEEP. DEEP must arrange with the heating energy supplier to provide for payment of any loan made as financial assistance through the loan recipient's monthly electric or gas bill.

DEEP must develop a one-page loan application that must at least include: (1) detailed information, specifications, and documentation of the eligible energy technology's installed costs and projected energy savings and (2) for loan requests of more than \$100,000, certification by a licensed professional engineer, licensed contractor, installer, or tradesman with a state license held in good standing.

Loan applicants must (1) contract with Connecticut-based licensed contractors, installers, or tradesmen; (2) provide evidence of the cost of purchase and installation of the eligible technology; and (3) periodically provide evidence of the operation and functionality of the technology to ensure that it is operating as intended during the term of the loan.

The act also creates CEFIA and requires it to develop separate programs to finance and otherwise support clean energy investment in residential, municipal, small business, larger commercial, and other projects. Under the act, "clean energy" consists primarily of renewable resources, but also includes financing energy efficiency projects. If the replacement heating system was more efficient than the current one, it appears that CEFIA could finance its acquisition.

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