General Assembly

Raised Bill No. 463

February Session, 2010

LCO No. **2361**

*02361_____ET_*

Referred to Committee on Energy and Technology

Introduced by:
(ET)

AN ACT CONCERNING FINANCING OF ENERGY EFFICIENCY AND RENEWABLE ENERGY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. (NEW) (*Effective from passage*) (a) As used in this section:

(1) "Eligible entities" means (1) any residential, commercial, institutional or industrial customer of an electric distribution company or natural gas company, as defined in section 16-1 of the general statutes, as amended by this act, who employs or installs an eligible in-state energy savings technology, (2) an energy service company certified as a Connecticut electric efficiency partner by the Department of Public Utility Control, or (3) an installer certified by the Renewable Energy Investments Fund;

(2) "Energy savings infrastructure" means tangible equipment, installation, labor, cost of engineering, permits, application fees and other reasonable costs incurred by eligible entities for operating eligible in-state energy savings technologies designed to reduce electricity consumption, natural gas consumption, heating oil consumption or to promote renewable energy technologies or

combined heat and power systems; and

(3) "Eligible in-state energy savings technologies" means Class I renewable energy sources, as defined in section 16-1 of the general statutes, as amended by this act, solar hot water technologies for domestic hot water only, combined heat and power systems with an engineered efficiency rating of not less than sixty per cent, and energy conservation and load management technologies that reduce energy consumption, including, but not limited to, heating oil, natural gas and electricity consumption. Such technologies may include, but not be limited to, high efficiency insulation and windows, boilers and furnaces, commercial burners, high efficiency heating, ventilating and cooling systems and electric energy savings investments and shall be installed and operated within Connecticut.

(b) Each electric distribution company shall establish an energy savings infrastructure loan program to provide ____ interest loans to eligible entities for investments in energy savings infrastructure through the purchase of eligible in-state energy savings technologies. Each such company shall establish such program for its service territory. Such company shall establish an entity to administer such program within the division or department of each company having cognizance of financial management. Each such division or department shall work with in-state banks and investment organizations to establish private sector funding opportunities.

(c) To qualify for a loan, eligible entities shall meet the following requirements:

(1) For boilers and furnaces, the existing boiler or furnace shall be not less than seven years old with an efficiency rating of not more than seventy-five per cent and the new boiler or furnace shall have an efficiency rating of not less than eighty-four per cent if oil-fired and not less than ninety per cent if gas-fired;

(2) For combined heat and power systems, that the system

optimizes fossil fuel consumption for generating electricity and simultaneous thermal energy for space heating, space cooling or process manufacturing requirements;

(3) For Class I renewable energy resources, that such technologies will reduce demand on the grid or fossil fuel consumption; and

(4) For energy conservation and load management technologies, that energy saving measures were reviewed and certified by a licensed contractor with a state license held in good standing.

(d) Eligible entities seeking a loan under the loan program established in this section shall (1) contract with Connecticut-based licensed contractors, installers or tradesmen for the installation of an eligible in-state energy savings technology; (2) provide evidence of the cost of purchase and installation of the eligible in-state energy savings technology; and (3) periodically provide evidence of the operation and functionality of the eligible in-state energy savings technology to ensure that such technology is operating as intended during the term of the loan. If the electric distribution company determines pursuant to this subsection that an eligible in-state energy savings technology has not functioned as intended or designed for more than sixty days, such loan shall be immediately due in full at the discretion of such electric distribution company.

(e) At the request of an eligible entity, electric distribution companies and natural gas companies shall provide for repayment of loans made pursuant to this section as part of the loan recipient's monthly electric or gas bill. An eligible entity participating in the loan program established pursuant to this section may transfer their loan to a subsequent property owner if (1) the loan is current, (2) the eligible in-state energy savings technology is functioning as intended or designed, and (3) the new owner agrees to continue to adhere to the operational parameters of the technology. An eligible entity that participates in the loan program may pay back the loan principal with no prepayment penalties. The term of the loan shall be for a period that

shall not exceed the lesser of (A) the estimated period needed to pay for one hundred twenty-five per cent of the investment through savings, or (B) the manufacturer's rated useful life of the eligible in-state energy savings technology.

(f) Each electric distribution company shall develop a prescriptive one-page loan application. Such application shall include, but not be limited to: (1) Detailed information, specifications and documentation of the eligible in-state energy technology's installed costs and projected energy savings, and (2) for requests for loans in excess of one hundred thousand dollars, certification by a licensed professional engineer with a state license held in good standing.

(g) No single project shall receive a loan for more than one million dollars and investments in any one eligible in-state energy savings technology shall not exceed twenty-five per cent of the energy savings infrastructure loan account, as established in section 2 of this act. Not less than ____ per cent of each company's loan program shall be reserved for residential projects and not less than ____ per cent shall be approved for projects in any one county. Class I renewable energy resources, as defined in section 16-1 of the general statutes, as amended by this act, shall receive not less than ____ per cent of available funds for such loan program, with the following commitments: (1) ____ per cent for solar photovoltaic installations, and (2) ____ per cent for fuel cell installations. Combined heat and power technologies shall receive not less than ____ per cent of available funds for such loan program. Conservation and load management projects shall receive not less than ____ per cent of available funds for such loan program.

(h) Each electric distribution company may examine additional funding resources for the energy savings infrastructure loan program, including, but not limited to, American Recovery and Reinvestment Act funds, federally mandated congestion charges, the Renewable Energy Investments Fund, regional greenhouse gas initiative auction

revenue and forward capacity market revenue.

(i) On or before October 1, 2010, each electric distribution company shall establish a plan that includes procedures and parameters for its energy savings infrastructure loan program established pursuant to this section and submit such plan to ____ for approval or modification. The ____ shall approve or modify such plan within thirty days. If the ___ does not respond within thirty days, the plan shall be deemed to be approved.

(j) On or before January 15, 2011, and annually thereafter, each electric distribution company shall, in accordance with the provisions of section 11-4a of the general statutes, report to the joint standing committee of the General Assembly having cognizance of matters relating to energy with regard to the energy savings infrastructure loan program established pursuant to this section and the loans provided pursuant to such program.

Sec. 2. Section 16-245a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) An electric supplier and an electric distribution company providing standard service or supplier of last resort service, pursuant to section 16-244c, shall demonstrate:

(1) On and after January 1, 2006, that not less than two per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(2) On and after January 1, 2007, not less than three and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(3) On and after January 1, 2008, not less than five per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(4) On and after January 1, 2009, not less than six per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(5) On and after January 1, 2010, not less than seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(6) On and after January 1, 2011, not less than **[**eight**]** seven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(7) On and after January 1, 2012, not less than **[**nine**]** seven and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(8) On and after January 1, 2013, not less than **[**ten**]** eight per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(9) On and after January 1, 2014, not less than **[**eleven**]** eight and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(10) On and after January 1, 2015, not less than **[**twelve and one-half**]** nine per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(11) On and after January 1, 2016, not less than **[**fourteen**]** nine and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(12) On and after January 1, 2017, not less than **[**fifteen and one-half**]** ten per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(13) On and after January 1, 2018, not less than **[**seventeen**]** ten and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(14) On and after January 1, 2019, not less than **[**nineteen and one-half**]** eleven per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources;

(15) On and after January 1, 2020, not less than **[**twenty**]** eleven and one-half per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I or Class II renewable energy sources.

(b) An electric supplier or electric distribution company may satisfy the requirements of this section (1) by purchasing certificates issued by the New England Power Pool Generation Information System, provided the certificates are for (A) energy produced by a generating unit using Class I or Class II renewable energy sources and the generating unit is located in the jurisdiction of the regional independent system operator, or (B) energy imported into the control area of the regional independent system operator pursuant to New England Power Pool Generation Information System Rule 2.7(c), as in effect on January 1, 2006; (2) for those renewable energy certificates under contract to serve end-use customers in the state on or before October 1, 2006, by participating in a renewable energy trading program within said jurisdictions as approved by the Department of Public Utility Control; or (3) by purchasing eligible renewable electricity and associated attributes from residential customers who are net producers.

(c) Any supplier who provides electric generation services solely from a Class II renewable energy source shall not be required to comply with the provisions of this section.

(d) An electric supplier or an electric distribution company shall base its demonstration of generation sources, as required under subsection (a) of this section on historical data, which may consist of data filed with the regional independent system operator.

(e) (1) A supplier or an electric distribution company may make up any deficiency within its renewable energy portfolio within the first three months of the succeeding calendar year or as otherwise provided by generation information system operating rules approved by New

England Power Pool or its successor to meet the generation source requirements of subsection (a) of this section for the previous year.

(2) No such supplier or electric distribution company shall receive credit for the current calendar year for generation from Class I or Class II renewable energy sources pursuant to this section where such supplier or distribution company receives credit for the preceding calendar year pursuant to subdivision (1) of this subsection.

(f) The department shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of this section.

(g) (1) Notwithstanding the provisions of this section and section 16-244c, for periods beginning on and after January 1, 2008, each electric distribution company may procure renewable energy certificates from Class I, Class II and Class III renewable energy sources through long-term contracting mechanisms. The electric distribution companies may enter into long-term contracts for not more than fifteen years to procure such renewable energy certificates. The electric distribution companies shall use any renewable energy certificates obtained pursuant to this section to meet their standard service and supplier of last resort renewable portfolio standard requirements.

(2) On or before July 1, 2007, the department shall initiate a contested case proceeding to examine whether long-term contracts should be used to procure Class I, Class II and Class III certificates. In such examination, the department shall determine (A) the impact of such contracts on price stability, fuel diversity and cost; (B) the method and timing of crediting of the procurement of renewable energy certificates against the renewable portfolio standard purchase obligations of electric suppliers and the electric distribution companies pursuant to subsection (a) of this section; (C) the terms and conditions, including reasonable performance assurance commitments, that may be imposed on entities seeking to supply renewable energy certificates; (D) the level of one-time compensation, not to exceed one mill per kilowatt hour of output and services associated with the renewable

energy certificates purchased pursuant to this subsection, which may be payable to the electric distribution companies for administering the procurement provided for under this subsection and recovered as part of the generation services charge or through an appropriate nonbypassable rate component on customers' bills; (E) the manner in which costs for such program may be recovered from electric distribution company customers; and (F) any other issues the department deems appropriate. Revenues from such compensation shall not be included in calculating the electric distribution companies' earnings to determine if rates are just and reasonable, for earnings sharing mechanisms or for purposes of sections 16-19, 16-19a and 16-19e.

(3) On or before October 1, 2010, each electric distribution company shall determine (A) the cost of a certain percentage of each electric supplier and electric distribution company's total output or services of any such supplier or company from Class I renewable energy sources, (B) the manner in which such supplier or company shall recover such cost from customers, and (C) the manner in which such supplier or company will deposit such amount into an energy savings infrastructure account, which shall be a separately held account. The costs determined pursuant to subparagraph (A) of this subdivision shall be the present day value pursuant to subdivision (4) of this subsection for the following percentages: (i) In 2011, one per cent; (ii) in 2012, one and one-half per cent; (iii) in 2013, two per cent; (iv) in 2014, two and one-half per cent; (v) in 2015, three and one-half per cent; (vi) in 2016, four and one-half per cent; (vii) in 2017, five and one-half per cent; (viii) in 2018, six and one-half per cent; (ix) in 2019, seven and one-half per cent; and (x) in 2020, eight and one-half per cent.

(4) Each electric distribution company shall determine the present day value of the costs determined pursuant to subdivision (3) of this subsection shall be no less than ___ dollars per megawatt hour and shall not exceed the noncompliance penalty value and submit such determination to the Department of Public Utility Control for

approval. Once approved, such mount shall be transferred into a separately held account pursuant to said subdivision (3).

Sec. 3. Section 16-243i of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) The Department of Public Utility Control shall, not later than January 1, 2006, establish a program to grant awards to retail end use customers of electric distribution companies to fund the capital costs of obtaining projects of customer-side distributed resources, as defined in section 16-1, as amended by this act. Any project shall receive a one-time, nonrecurring award in an amount of **[**not less than**]** two hundred dollars **[**and not more than five hundred dollars**]** per kilowatt of capacity for such customer-side distributed resources, recoverable from federally mandated congestion charges, as defined in section 16-1, as amended by this act. **[**No such award may be made unless the projected reduction in federally mandated congestion charges attributed to the project for such distributed resources is greater than the amount of the award. The amount of an award shall depend on the impact that the customer-side distributed resources project has on reducing federally mandated congestion charges, as defined in section 16-1. Not later than October 1, 2005, the department shall conduct a contested case proceeding, in accordance with chapter 54, to establish additional standards for the amount of such awards and additional criteria and the process for making such awards.**]**

(b) The Department of Public Utility Control shall, not later than January 1, 2006, establish a program to grant to an electric distribution company a one-time, nonrecurring award to educate, assist and promote investments in customer-side distributed resources developed in such company's service territory: **[**, which resources the department determines will reduce federally mandated congestion charges, in accordance with the following:**]** (1) On or before January 1, **[**2008**]** 2011, two hundred fifty dollars per kilowatt of such resources, (2) on or before January 1, **[**2009**]** 2012, one hundred **[**fifty**]** forty dollars

per kilowatt of such resources, (3) on or before January 1, **[**2010, one hundred**]** 2013, thirty dollars per kilowatt of such resources, and (4) **[**fifty**]** twenty-five dollars per kilowatt of such resources thereafter. Payment of the award shall be made at the time each such resource becomes operational. The cost of the award shall be recoverable from federally mandated congestion charges. Revenues from such awards shall not be included in calculating the electric distribution company's earnings for the purpose of determining whether its rates are just and reasonable under sections 16-19, 16-19a and 16-19e.

Sec. 4. Subdivision (44) of subsection (a) of section 16-1 of the 2010 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(44) "Class III source" means the electricity output from combined heat and power systems with an operating efficiency level of no less than fifty per cent, determined quarterly on a rolling annual average basis, that are part of customer-side distributed resources developed at commercial and industrial facilities in this state on or after January 1, 2006, a waste heat recovery system installed on or after April 1, 2007, that produces electrical or thermal energy by capturing preexisting waste heat or pressure from industrial or commercial processes, or the electricity savings created in this state from conservation and load management programs begun on or after January 1, 2006;

Sec. 5. Subsection (a) of section 16-243q of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) On and after January 1, 2007, each electric distribution company providing standard service pursuant to section 16-244c and each electric supplier as defined in section 16-1 shall demonstrate to the satisfaction of the Department of Public Utility Control that not less than one per cent of the total output of such supplier or such standard service of an electric distribution company shall be obtained from Class III sources. On and after January 1, 2008, not less than two per

cent of the total output of any such supplier or such standard service of an electric distribution company shall, on demonstration satisfactory to the Department of Public Utility Control, be obtained from Class III sources. On or after January 1, 2009, not less than three per cent of the total output of any such supplier or such standard service of an electric distribution company shall, on demonstration satisfactory to the Department of Public Utility Control, be obtained from Class III sources. On and after January 1, 2010, not less than four per cent of the total output of any such supplier or such standard service of an electric distribution company shall, on demonstration satisfactory to the Department of Public Utility Control, be obtained from Class III sources. Electric power obtained from customer-side distributed resources that does not meet air and water quality standards of the Department of Environmental Protection is not eligible for purposes of meeting the percentage standards in this section. Notwithstanding section 16-243t, the number of Class III credits supplied by programs supported by the Energy Conservation and Load Management Fund shall not constitute more than twenty-five per cent of the requirements for any calendar year, as set forth in this section, for any electric supplier or electric distribution company providing standard service based on the prior calendar year's load in megawatt hours.

Sec. 6. Section 16-243h of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2010*):

On and after January 1, 2000, each electric supplier or any electric distribution company providing standard offer, transitional standard offer, standard service or back-up electric generation service, pursuant to section 16-244c, shall give a credit for any electricity generated by a customer from a Class I renewable energy source or a hydropower facility that has a nameplate capacity rating of two megawatts or less and, on and after the effective date of this section, shall give a credit for any electricity generated by a customer from a combined heat and power system. The electric distribution company providing electric distribution services to such a customer shall make such

interconnections necessary to accomplish such purpose. An electric distribution company, at the request of any residential customer served by such company and if necessary to implement the provisions of this section, shall provide for the installation of metering equipment that (1) measures electricity consumed by such customer from the facilities of the electric distribution company, (2) deducts from the measurement the amount of electricity produced by the customer and not consumed by the customer, and (3) registers, for each billing period, the net amount of electricity either (A) consumed and produced by the customer, or (B) the net amount of electricity produced by the customer. If, in a given monthly billing period, a customer-generator supplies more electricity to the electric distribution system than the electric distribution company or electric supplier delivers to the customer-generator, the electric distribution company or electric supplier shall credit the customer-generator for the excess by reducing the customer-generator's bill for the next monthly billing period to compensate for the excess electricity from the customer-generator in the previous billing period at a rate of one kilowatt-hour for one kilowatt-hour produced. The electric distribution company or electric supplier shall carry over the credits earned from monthly billing period to monthly billing period, and the credits shall accumulate until the end of the annualized period. At the end of each annualized period, the electric distribution company or electric supplier shall compensate the customer-generator for any excess kilowatt-hours generated, at the avoided cost of wholesale power. A customer who generates electricity from a generating unit with a nameplate capacity of more than ten kilowatts of electricity pursuant to the provisions of this section shall be assessed for the competitive transition assessment, pursuant to section 16-245g and the systems benefits charge, pursuant to section 16-245*l*, based on the amount of electricity consumed by the customer from the facilities of the electric distribution company without netting any electricity produced by the customer. For purposes of this section, "residential customer" means a customer of a single-family dwelling or multifamily dwelling

consisting of two to four units.

This act shall take effect as follows and shall amend the following sections:		
Section 1	*from passage*	New section
Sec. 2	*from passage*	16-245a
Sec. 3	*from passage*	16-243i
Sec. 4	*from passage*	16-1(a)(44)
Sec. 5	*from passage*	16-243q(a)
Sec. 6	*July 1, 2010*	16-243h

Statement of Purpose:

To establish an energy savings infrastructure loan program by securitizing certain moneys and leveraging private investments, as well as to commit to a goal of fifty per cent of RPS to be Connecticut-based investments by 2020; to commit to building an energy-based economy; to commit to supporting Connecticut-based technologies; to allow for a financing term equal to the useful life of a technology; to enable financing of technology to be tied to meter rather than property owner; to reduce dependence on foreign fuel and to reduce carbon emissions.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]