

Section E1: Delaware Energy Efficiency Programs

Legislative History

Electric Utility Restructuring Act of 1999

(140th General Assembly, House Bill No.10 and amendments)

The Electric Utility Restructuring Act of 1999 created an environmental incentive fund (26 Del. C. §1014) to support conservation and energy efficiency programs in Delmarva Power service territory. The Delaware Economic Development Office established and administered the fund from Oct. 1, 1999 until the passage of the Delaware Energy Act in 2003. The Act designated,

- \$0.000178 per kWh from each rate class is placed into the environmental incentives fund (later the Green Energy Fund); and
- \$0.000095 per kWh from each rate class goes to support low-income program fund administered by the Department of Health and Social Services, Division of State Service Centers.

Proceeds from the funds amount to about \$1.5 million annually for renewable energy, conservation and energy efficiency programs, and \$0.8 million annually for low-income assistance.

Delaware Energy Act

(142nd General Assembly, Senate Bill No. 93 w/S.A. 1 and Senate Bill No. 145)

In 2003, the Delaware Energy Act (29 Del. C. § 8051 et seq.) established the Delaware Energy Office in the Office of the Secretary of the Delaware Department of Natural Resources and Environmental Control. The Act changed the environmental incentive fund into the Green Energy Fund and shifted its administration to the Delaware Energy Office. The Act also designated program goals and funding allocations for initiatives to be supported by the Green Energy Fund.

Purchase of Energy Efficient Products

(142nd General Assembly, House Bill No. 435)

This Act (29 Del. C. § 6939) amended the state procurement process in 2004 to require state agencies to purchase Energy Star rated products when available.

Lifecycle Costing Analysis

(142nd General Assembly, Senate Bill No. 307)

Enacted in 2004, the Lifecycle Costing Analysis legislation (29 Del. C. § 6902 and 29 Del. C. § 6909A) defined lifecycle-costing analysis and the conditions for which it must be applied to public works projects and equipment purchases.

The Energy Performance Contracting Act
(143rd General Assembly, Senate Bill No. 73)

The Energy Performance Contracting Act (29 Del. C. § 6970) gave state agencies the authority to enter into energy performance contracts. Energy performance contracting enables energy efficiency upgrades to be financed by the projected savings those upgrades will generate.

An Act to Amend the Green Energy Fund
(143rd General Assembly, Senate Bill No. 44)

This 2005 legislation amended the Green Energy Fund (29 Del. C. § 8057) to include biodiesel manufacturing plants as an eligible renewable technology. The Act also specified that funding from the Green Energy Fund could be used to promote energy efficiency efforts. It did not, however, change the program funding allocation established by the Delaware Energy Act.

The Energy Efficiency Financial Incentives Act of 2006
(143rd General Assembly, Senate Bill No. 281)

The Energy Efficiency Financial Incentives Act appropriated \$8,000,000 to be used for an energy efficiency program pursuant to the Green Energy Fund (29 Del. C. § 8057). Incentives are to be divided evenly between residential and non-residential customers located in Delaware. The Office of the Secretary, Department of Natural Resources and Environmental Control has developed the program and the details are listed below.

Program Information

Energy Efficiency Financial Incentives Act of 2006: Residential Programs

Program funding comes from General Funds, therefore all Delaware electric customers are eligible for the incentives. During October 2006, electric customers may also redeem a coupon for a set of two compact fluorescent light bulbs (CFLs) at their local libraries.

Program Category	Technologies	Clients	Description
Rebates			
Delaware Energy Answers for Home Appliances	High efficient appliances <ul style="list-style-type: none"> ○ Energy Star Refrigerators 15 cubic feet or larger - \$100/unit ○ Energy Star Freezers - \$50/unit ○ Energy Star Washing Machines <ul style="list-style-type: none"> - Top Loading - \$50/unit - Front Loading - \$100/unit ○ Energy Star Window AC - \$25/ unit <ul style="list-style-type: none"> - 8000 Btu to 13,999 Btu with EER of 10.8 	Residential	Rebates. Applicable to purchases made after July 1, 2006. New construction is not eligible. Limited to any combination of five rebates

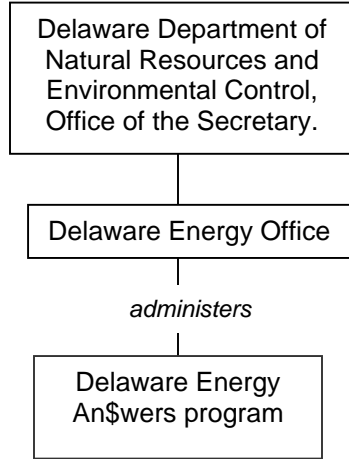
	<ul style="list-style-type: none"> - 14,000 Btu to 19,999 Btu with EER of 10.7 - >= 20,000 Btu with EER of 9.4 o Electric Water Heaters - GAMA rated EF >= 0.93. - \$25/unit o Central AC with Programmable Thermostats (professionally sized and installed only) with greater than or equal to SEER 15. - \$350/system 		with maximum total amount of \$500 per residential account.
Weatherization			
Delaware Energy Answers for Home Performance	Weatherization, doors and windows, and high-efficiency appliances.	Residential	Under development. Set to launch Spring 2007.

Energy Efficiency Financial Incentives Act of 2006: Non-Residential Programs

Businesses with facilities in Delaware may apply for any combination of the following options up to \$100,000 per facility or up to \$200,000 for businesses with two or more facilities. Projects that have simple payback periods shorter than 18 months will not be eligible for grants.

Program Category	Technologies	Clients	Description
Audits and Technical Assistance			
Delaware Energy Answers for Business: Just Answers:	<p>Energy audit, feasibility study and design assistance.</p> <p>Grants up to 50% of the cost. Limit of \$10,000 per facility or up to \$20,000 for businesses with two or more facilities.</p>	Commercial and Industrial	Provides incentives and technical assistance for new and retrofit upgrades.
Rebates			
Delaware Energy Answers for Business: Prescribed Answers	Lighting, refrigeration, HVAC and motor retrofits.	Commercial and Industrial	Rebates.
Grants			
Delaware Energy Answers for Business: Customized Answers	Provides grants for non-standard energy efficiency measures or prescribed measures bundled into a comprehensive full-facility upgrade that maximizes energy savings and cost effectiveness. These grants are determined by the calculated energy (kWh) and demand (kW) savings of the upgrade and may require a Professional Engineer to verify the predicted performance calculations.	Commercial and Industrial	Grants.

Program Structure



Program Performance

The Delaware Energy Answers Program was launched Sept. 25, 2006. The Energy Efficiency Financial Incentives Act of 2006 stipulated reporting requirements.

The Secretary of the Department of Natural Resources and Environmental Control must conduct cost-benefit analysis estimating energy savings realized from the funded initiatives. The analysis must be submitted to the Director of the Office of Management and Budget, the Controller General and the co-chairs of the Joint Finance Committee by March 31, 2007 and annually thereafter.

Section E2: Delaware Renewable Energy Programs

Legislative History

Electric Utility Restructuring Act of 1999

(140th General Assembly, House Bill No.10 and amendments)

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Proceeds from the funds amount to about \$1.5 million annually for renewable energy, conservation and energy efficiency programs, and \$0.8 million annually for low-income assistance. The low-income program fund supports the Weatherization Assistance Program and complements the federally funded Low-Income Household Energy Assistance Program, both administered by the Division of State Service Centers.

Delaware Energy Act

(142nd General Assembly, Senate Bill No. 93 w/S.A. 1 and Senate Bill No. 145)

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Lifecycle Costing Analysis

(142nd General Assembly, Senate Bill No. 307)

Enacted in 2004, the Lifecycle Costing Analysis legislation (29 Del. C. § 6902 and 29 Del. C. § 6909A) defined lifecycle-costing analysis and the conditions for which it must be applied to public works projects and equipment purchases.

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An Act to Amend the Green Energy Fund
(143rd General Assembly, Senate Bill No. 44)

This 2005 legislation amended the Green Energy Fund (29 Del. C. § 8057) to include biodiesel manufacturing plants as an eligible renewable technology. The Act also specified that funding from the Green Energy Fund could be used to promote energy efficiency efforts.

Renewable Energy Portfolio Standards Act
(143rd General Assembly, Senate Bill No. 74 and amendments)

The Renewable Portfolio Standards established by this Act require electricity suppliers to supply a percentage of their total annual electricity sales from renewable energy resources. The percentage incrementally increases from 1% in 2007 to 10% by 2019. Renewable energy credits (RECs) derived from eligible resources are used to track and verify compliance. Eligible renewable energy resources include solar electric power, wind energy, geothermal energy, ocean energy, fuel cells, small hydropower, landfill gas and sustainable biomass. Alternative compliance payments and purchases of RECs from within the PJM territory can be used, with restrictions, to satisfy the RPS requirement.

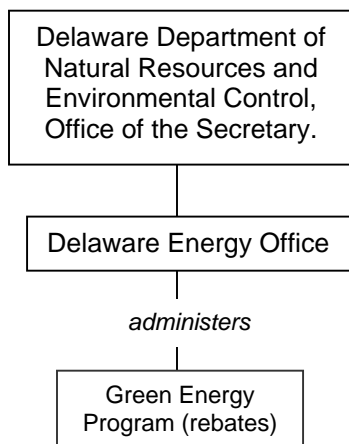
Program Information

Program Category	Technologies	Clients	Description
Rebates			
Green Energy Endowment Program	<p>Solar Electric, Solar Water Heating, Wind Energy, and Geothermal Pumps.</p> <ul style="list-style-type: none"> ○ Rebates for solar electric, solar water heating, wind energy and geothermal pumps. ○ The rebates are for up to 50% of qualified system cost or the following limits, which ever is less. <p>Delmarva Power territory:</p> <ul style="list-style-type: none"> - Solar electric: \$22,500 for residential and \$250,000 for non-residential systems. Installed cost of solar electric system must be less than \$12.00/W. - Wind energy: \$22,500 for residential and \$100,000 for non-residential systems. Installed cost of wind system must be less than \$5.00/W. 	Residential, Commercial, and Industrial.	<p>Rebates for renewable energy installations are currently available for Delmarva Power and Delaware Electric Cooperative (DEC) customers.</p> <p>Municipal customers will be eligible for the Green Energy Program starting January 1, 2007.</p>

	<ul style="list-style-type: none"> - Solar water heating: \$3,000 for residential and \$250,000 for non-residential systems. - Solar water heating systems integrated into radiant heating: \$5,000 for residential and \$250,000 for non-residential systems. - Geothermal systems: <ul style="list-style-type: none"> Residential (per dwelling) <ul style="list-style-type: none"> -\$600/ton, not to exceed \$3,000, if EER of 15.0 and COP of 3.4; -\$500/ton, not to exceed \$2,500, if EER of 14.0 and COP of 3.0. Non-residential (per facility) <ul style="list-style-type: none"> -\$600/ton, not to exceed \$25,000, if EER of 15.0 and COP of 3.4; -\$500/ton, not to exceed \$25,000, if EER of 14.0 and COP of 3.0. Delaware Electric Cooperative <ul style="list-style-type: none"> - Solar electric: \$15,000 for residential and \$30,000 for non-residential systems. Installed cost of solar electric system must be less than \$12.00/W. - Wind energy: \$15,000 for residential and \$30,000 for non-residential systems. Installed cost of wind system must be less than \$5.00/W. - Solar water heating: \$3,000 for residential and \$10,000 for non-residential systems. - Solar water heating systems integrated into radiant heating: \$5,000 for residential and \$10,000 for non-residential systems. - Geothermal systems: <ul style="list-style-type: none"> Residential <ul style="list-style-type: none"> -\$600/ton, not to exceed \$3,000, if EER of 15.0 and COP of 3.4; -\$500/ton, not to exceed \$2,500, if EER of 14.0 and COP of 3.0. Non-residential <ul style="list-style-type: none"> -\$600/ton, not to exceed \$20,000, if EER of 15.0 and COP of 3.4; -\$500/ton, not to exceed \$20,000, if EER of 14.0 and COP of 3.0. 		
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Grants			
Research and Development Grants	<p>Passive solar space heat, solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaics, landfill gas, wind, biomass, hydroelectric, renewable fuel vehicles, geothermal electric, fuel cells, municipal solid waste, hydrogen, solar, daylighting, anaerobic digestion, renewable fuels, ethanol, methanol, biodiesel. (DSIRE, Incentives in Delaware.)</p> <p>Up to 35% cost of qualifying projects. Limit of \$250,000 per project.</p>	Commercial and Institutional.	Support projects that improve the engineering adaptation, or development of products that directly relate to renewable energy technology.
Technology and Demonstration Grants	<p>Passive solar space heat, solar thermal electric, photovoltaics, wind, hydroelectric, fuel cells, biodiesel manufacturing facilities, storage, conversion and conditioning equipment. (DSIRE, Incentives in Delaware)</p> <p>Up to 25% of eligible equipment costs. Limit of \$200,000 per project. Must include public education component.</p>	Commercial and Institutional	Provide funding to projects that demonstrate the market potential for renewable technologies and accelerate the commercialization of these technologies.

Program Structure



Program Performance

Table 2: Green Energy Program Installations and Grant Distributions (2002 to 2007)

State FY	Geothermal Pumps			Solar Electric (PV)			Solar Hot Water		Wind	Total Green Energy Program Installations	Total Green Energy Program Grants Distributed
	Installations	Installed Capacity (Tons)		Installations	Installed Capacity (DC KW)		Installations	Installed Capacity (Sq. Ft.)	Installations		
		Res.	Non Res.		Res.	Non Res.		Res.			
2002	0	0.00	0.00	2	0.00	59.24	0	0.00	0	2	\$131,691
2003	6	28.00	0.00	5	14.00	342.00	0	0.00	0	11	\$790,619
2004	15	70.50	21.00	3	0.00	27.20	0	0.00	0	18	\$145,065
2005	17	83.50	0.00	3	19.35	0.00	0	0.00	0	20	\$100,958
2006	33	127.50	52.50	7	18.90	26.79	1	64.00	0	41	\$280,532
2007	6	28.50	0.00	12	48.05	70.00	0	0.00	0	18	\$453,320
Total	77	338.00	73.50	32	100.30	525.23	1	64.00	0	110	\$1,902,185

Source: Delaware Energy Office

Res.=Residential installation

Non Res.= Non residential installation

Section E3: Delaware Low Income Energy Programs

Legislative History

Electric Utility Restructuring Act of 1999

(140th General Assembly, House Bill No.10 and amendments)

The Electric Utility Restructuring Act of 1999 created an environmental incentive fund (26 Del. C. §1014) to support conservation and energy efficiency programs in Delmarva Power service territory. The Delaware Economic Development Office established and administered the fund from Oct. 1, 1999 until the passage of the Delaware Energy Act in 2003. The Act designated \$0.000095 per kWh from each rate class goes to support low-income program fund administered by the Department of Health and Social Services, Division of State Service Centers.

Delaware Energy Act

(142nd General Assembly, Senate Bill No. 93 w/S.A. 1 and Senate Bill No. 145)

In 2003, the Delaware Energy Act allocations \$1,000,000 from the environmental incentive fund to the state low-income program fund.

Act to Provide Supplemental Funds for the Delaware Energy Assistance Program

(143rd General Assembly, Senate Bill 280)

Senate Bill 280, signed in April of 2006, appropriated \$2,000,000 from the General Fund to the Department of Health and Social Services, for the Delaware Energy Assistance Program (DEAP). SB 280 also required the Secretary of the Department to report to the Director of the Office of Management and Budget and the Controller General with a projection of the long-term needs of the DEAP through fiscal year 2010.

Program Information

Federally Funded Programs

LIHEAP and WAP are administered by the Division of State Service Centers (DSSC). DSSC contracts Catholic Charities to identify clients for both LIHEAP and WAP. Weatherization services are contracted out to the Neighborhood House for clients in New Castle County and First State Community Action Agency for Kent and Sussex Counties. These agencies subcontract to energy service companies to provide the weatherization services.

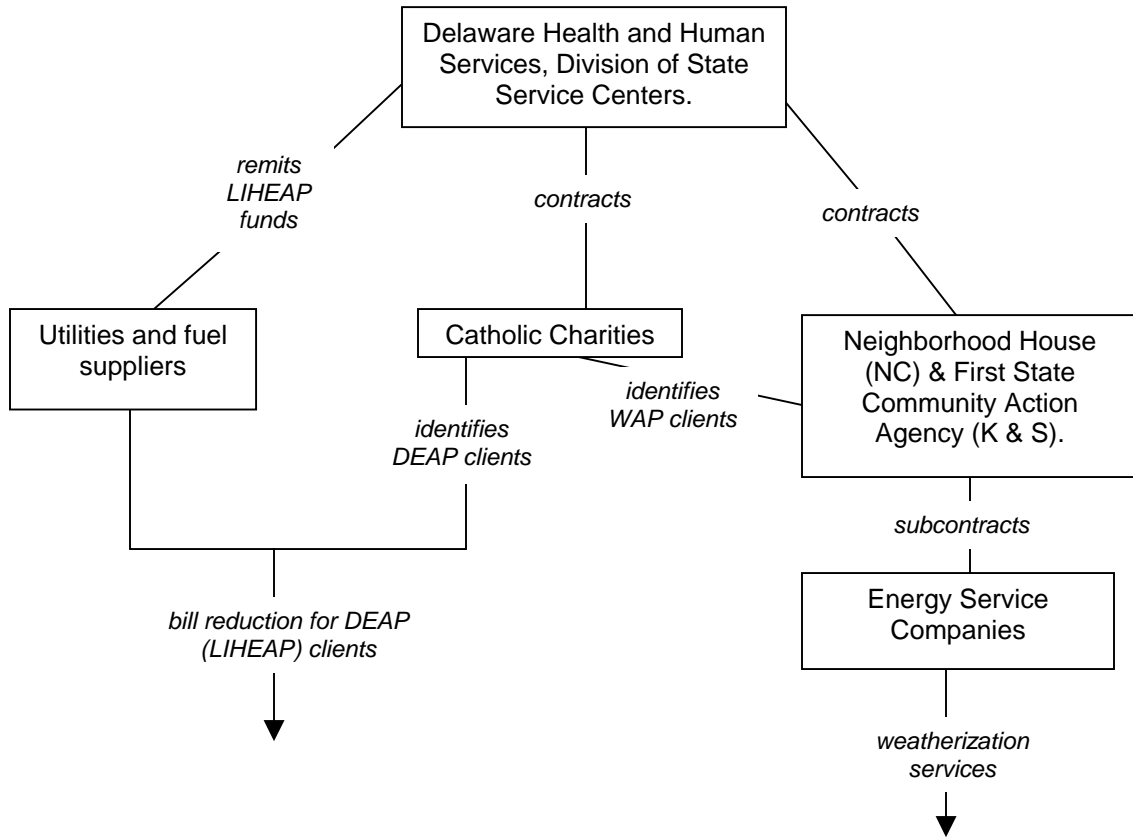
In 2006, Delaware's LIHEAP received \$10,140,746 and the WAP program received \$612,727 in funding. Residents must be at or below 200% of the federal poverty level to be eligible. In 2005 participating households were given \$283 on average for heating assistance through LIHEAP, and 12,950 households were served.

State Funded Programs

In addition to creating the Green Energy Fund mill rate, the Electric Utility Restructuring Act of 1999 created a fund to support the state’s low income energy programs at a rate of \$0.000095 per kWh from each rate class, or about \$800,000 annually. The fund supports the Weatherization Assistance Program and complements the federally funded Low-Income Household Energy Assistance Program, both administered by the Division of State Service Centers.

In addition, in April 2006, the state allocated an additional \$2 million from the State General Funds to the Low-Income Household Energy Assistance Programs for both weatherization and fuel assistance.

Program Structure



Program Performance

Combined state and federal funding for low-income energy programs totals approximately \$13.6 million (including the \$2 million one-time transfer in 2006). Approximately 450 households receive weatherization services each year, saving an average of \$227 and 2,268 kWh of electricity per household.