

<http://www.neo.ne.gov/>

The mission is to promote the efficient, economic and environmentally responsible use of energy.



2006 STATE ENERGY PROGRAM ACTIVITIES REPORT

State Energy Program. The State Energy Program (SEP) formula grant supports:

- ◆ administration of formula and Special Projects grants plus required monitoring and reporting;
- ◆ public information such as maintaining the agency's Web site (<http://www.neo.ne.gov/>); the Nebraska Energy Quarterly electronic newsletter and maintaining the state's energy data base;
- ◆ financing energy efficiency improvements with the Dollar and Energy Saving Loan Program;
 - ◆ This oil-overcharge funded revolving loan program has generated \$186.5 million in energy-efficiency improvements made by borrowers through December 31, 2006. Created in 1990, \$24 million in oil overcharge funds have revolved nearly eight times and leveraged \$89.23 million from participating lenders. Ninety-three (93) percent of the 23,308 energy projects have been made in the residential sector.
- ◆ building energy efficiency supports building code training and information activities plus the Nebraska Green Building Program; and
- ◆ energy assurance including energy shortage management and emergency planning.

SEP Special Projects. Nebraska has been awarded more than \$2.3 million through 21 grants since this national competition for funding started in 1996. Cost-share for these projects exceeds \$11.6 million from non-federal sources. The value of all projects is more than \$13.9 million through December 31, 2006, with some work still in progress. Recent awards include:

- ◆ *Building Codes and Standards.* On July 1, 2005, the 2003 International Energy Conservation Code (IECC) became the Nebraska Energy Code. Under an SEP Special Projects grant, the Energy Office provided workshops targeting local code officials, builders, contractors, architects, engineers and heating, ventilation and air-conditioning installers. A total of 993 individuals participated in training through 2006. Additional training is scheduled in 2007, and will focus on facilitating the certification of local code officials in the following areas: Residential Energy Inspector/Plans Examiner, Commercial Energy Inspector, and Commercial Energy Plans Examiner.
- ◆ *Building America.* The agency, working with the Nebraska State Home Builders Association, provided training for 86 remodelers and homebuilders on how to apply systems engineering approaches (including production techniques, products and technologies) to the construction of homes that use up to 50 percent less energy than conventional homes and cost no more to build. A second grant provided for the development, testing and research needed to construct a prototype of an affordable house suitable for a first-time homeowner and set the standard for affordable housing in the state. A design manual was completed in 2006 which showcases the demonstration house and illustrates details of other house designs based on the systems engineering approach.
- ◆ *Rebuild America.* The Continuous Commissioning Process was demonstrated in 14 buildings with more than 3.7 million square feet. Those building owners contributed more than \$1.63 million for improvements. Four other buildings qualified for the Energy Star designation. Owners of 36 additional

buildings invested more than \$14 million after detailed evaluations revealed potential annual cost savings of more than \$3 million per year. Additional work in the commercial sector was made possible with the award of a new Rebuild America grant in 2005. During 2006, 40 building owners were recruited to participate in this project. Preliminary energy evaluations were conducted on 28 buildings, and dedicated energy meters were installed on 10 buildings. Technology transfer is on-going.

◆ Industries of the Future. A SEP-Special Projects grant, awarded in 2005 through the Industries of the Future category, enables the Energy Office to offer energy assessments and the Continuous Commissioning Process in the industrial sector. During 2006, 14 building owners were recruited to participate in this project. Preliminary energy evaluations were conducted on 13 buildings, and comprehensive energy studies were conducted on two facilities.

1. SEP formula grants - federal funding and state match

Fiscal Year (July 1 – June 30)	SEP Federal formula grant	20% State Match
2000-2001	\$ 324,000	\$ 64,800
2001-2002	370,000	74,000
2002-2003	437,000	87,400
2003-2004	436,000	87,200
2004-2005	428,000	85,600
2005-2006	432,000	86,400
2006-2007	338,000	67,600

2. Dollar and Energy Saving Loan Program

As of	Leverage from lenders	Total Energy Improvements
12/31/2006	\$89,233,399	\$186,525,747

3. SEP Special Projects, competitive award funding and cost-Share, through December 31, 2006

Fiscal Year	Number	Number active	SEP SP Federal Award	Cost-Share (non-federal)	Total Value of Project(s)
1996-1997	3	-	\$ 370,000	\$ 3,516,766	\$ 3,886,766
1997-1998	2	-	355,510	1,294,150	1,649,660
1998-1999	3	-	550,000	1,779,580	2,329,580
1999-2000	2	-	114,500	70,615	185,115
2000-2001	1	-	189,751	205,035	394,786
2001-2002	2	-	131,000	4,169,557	4,300,557
2002-2003	3	-	254,855	334,984	589,839
2003-2004	1	-	99,334	138,198	237,532
2004-2005	1	-	32,223	17,104	49,327
2005-2006	3	3	224,275	(planned/work in progress) 106,274	(planned/work in progress) 330,549
2006-2007	0	0	0	0	0
	21	3	\$ 2,321,448	\$ 11,632,263	\$ 13,953,711

NEBRASKA

Other activities. The Nebraska Energy Office operates a number of other federal and state energy efficiency programs:

◆ **New Home Construction.** In cooperation with the state's environmental agency, the Energy Office developed an Internet-based library of recycled content product materials, dozens of efficient design details appropriate for new home construction and an informational series dedicated to design and building issues that stressed resource conservation.

◆ **Green Built Homes.** More than \$900,000 in oil overcharge funds provided by the agency jumpstarted the Certified Nebraska Green Built Home program in which new homes were built to exacting standards and used methods that reduced construction waste, reduce water consumption and achieve high energy efficiency.

◆ **Low Income Weatherization Assistance Program.** The agency has operated the Low Income Weatherization Assistance Program since 1979. To date, energy-saving improvements have been made in 58,468 homes saving an estimated \$75.1 million. The agency also provides weatherization services to Low Income Home Energy Assistance Program households.

◆ **Wind Powering America.** Nebraska possesses the 6th best wind energy resources in the nation, but has struggled to harness that energy to produce electricity because of the state's traditionally low electric rates. Through the support of DOE's Wind Powering America, the state has been able to chart a course that lead to small, but growing, wind generation capacity. In 2006, the Energy Office received a grant from the Department of Energy to deliver wind energy information to interested Nebraskans, and to continue the work of the State Wind Working Group. At the end of 2006, nearly 74 megawatts of electricity was generated from turbines at six sites.

◆ **National and Regional Organizational Support.** Since 1992, the Energy Office has served as the administrative headquarters for the Governors' Ethanol Coalition, and provided support for the Governors' Public Power Alliance.