CHAPTER 7:
Energy Programs

The department's primary energy-related responsibilities focus on administering the federally funded state Weatherization Assistance Program (WAP) and conducting the overall State Energy Program (SEP). The SEP consists of the general pursuit of all energy-related activities and is funded by the Department of Energy (DOE). Specific efforts include the administration and implementation of the Nebraska State Energy Code and administering the long standing and successful Dollar and Energy Saving Loan (DESL) program. The WAP and DESL programs provide financial resources for Nebraska citizens to install upgrades to their homes or businesses to make them more energy efficient and decrease energy costs.

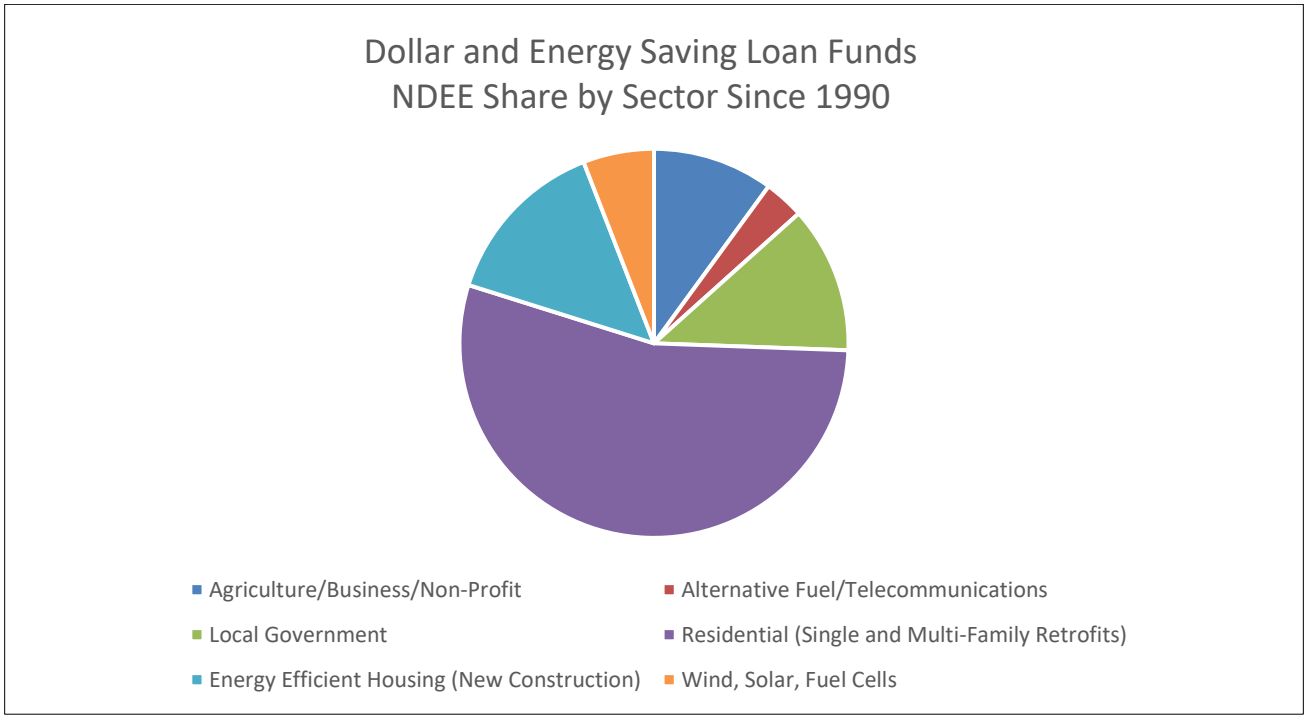
The Energy Programs team continued to develop several new programs which focused on enhancing grid resiliency, improving energy efficiency in schools and increasing energy efficiency in homes. Details of these programs are described below.

A comprehensive annual report on energy activities is required by statute; the 2025 report will be included in a separate report submitted to the Governor and the Clerk of the Legislature by February 15, 2026. The State Energy Annual Report for 2024 may be found at Annual State Energy Report, 2024 | DWEE NE

Dollar and Energy Savings Loan Program

The Dollar and Energy Saving Loans (DESL) program has helped tens of thousands of Nebraska residents, local businesses, school districts, and municipalities make their homes and buildings more energy efficient and helped them reduce energy bills by providing low-cost financing for energy-efficient equipment and projects. NDEE partners with Nebraska-based lending institutions by purchasing a portion of each loan (50-90%) thus incentivizing lower interest rates to the borrowers while leveraging lender funds for energy-saving projects.

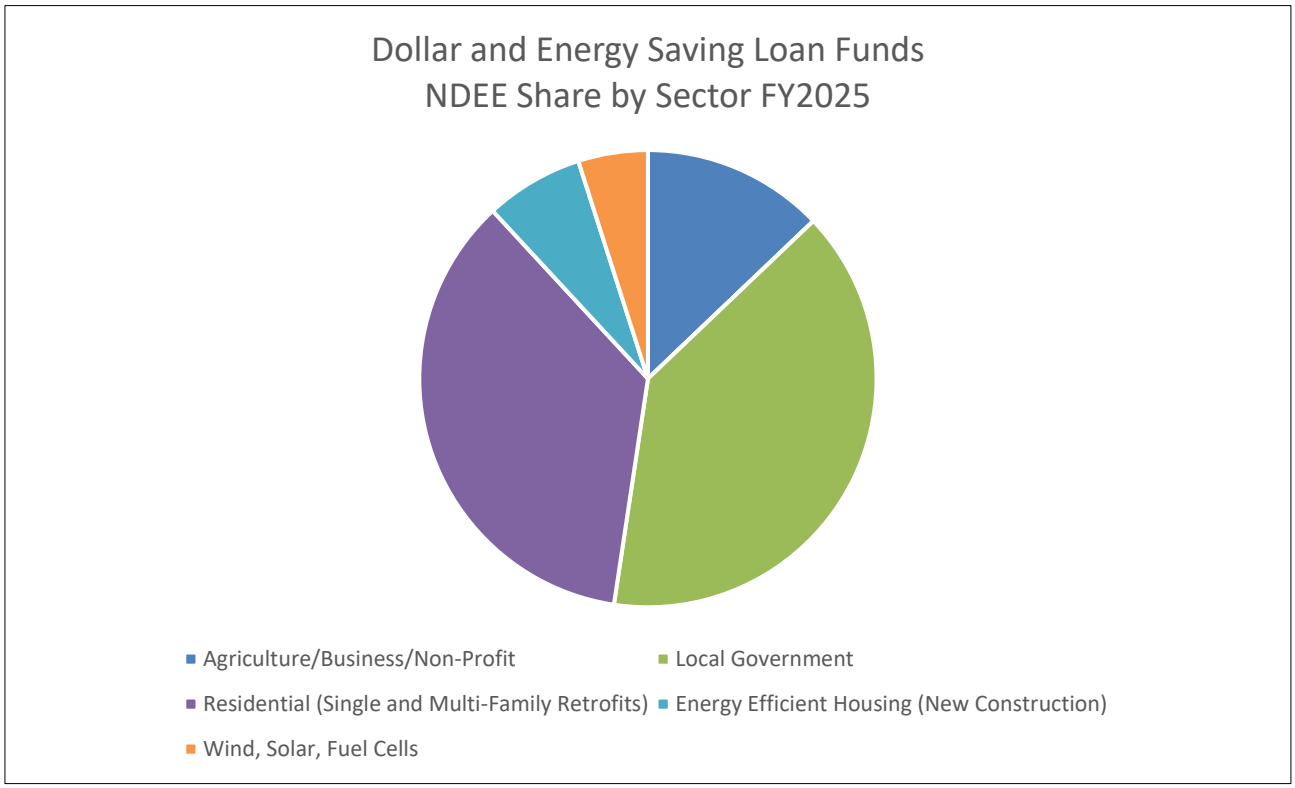
Since the inception of the program in 1990, the DESL program has helped finance 31,530 energy saving projects over 30,765 loans with the total cost of all improvements totaling over $419 million. The DESL revolving loan system will continue to provide energy conservation loans far into the future since the funding pool is continually replenished by loan repayments. These energy loans can be used for a multitude of energy-related projects including replacing inefficient lighting; installing highly rated, energy-efficient heating and cooling systems; adding new solar or wind generation; providing better thermal resistance with added insulation and replacing old windows and doors; installing large and small-scale solar projects; and constructing and long-term financing on new, above-code energy-efficient housing.



Dollar and Energy Saving Loan Funds – NDEE Share by Sector Since 1990

SECTOR	TOTAL PROJECT COST	NDEE SHARE OF PROJECT COST	NUMBER OF PROJECTS
Agriculture/Business/Non-Profit	$44,514,822	$21,577,158	1,738
Alternative Fuel/Telecommunications	$11,473,505	$7,147,364	44
Local Government	$36,988,805	$26,239,288	166
Residential (Single and Multi-Family Retrofits)	$223,692,793	$116,669,310	29,043
Energy Efficient Housing (New Construction)	$82,464,709	$30,641,681	305
Wind, Solar, Fuel Cells	$19,177,189	$12,670,698	234
TOTALS	$ 418,311,823	$ 214,945,499	31,530

In fiscal year 2025, the DESL program helped finance over $16.4 million for 334 new loans that improved energy efficiency for 356 new projects. Over that time the DESL program is estimated to have saved 275,289 kilowatt-hours of electricity, 207,039 therms of natural gas and reduced carbon emissions by almost 28,905 tons.



FY 2025 Dollar and Energy Saving Loan Funds – NDEE Share by Sector

SECTOR	Total Loaned	NDEE Share	Total Projects
Agriculture/Business/Non-Profit	$1,894,757	$1,231,592	2
Alternative Fuel/Telecommunications	$0	$0	0
Local Government	$5,809,910	$5,228,919	5
Residential (Single and Multi-Family Retrofits)	$5,256,245	$3,495,957	336
Energy Efficient Housing (New Construction)	$1,022,900	$518,929	2
Wind, Solar, Fuel Cells	$724,923	$464,266	11
TOTALS	**$14,708,735**	**$10,939,663**	**356**

DESL Project Highlights FY 2025

Pictured Above: Exeter-Milligan Public Schools - $1.2 Million Heating, Cooling, and Automation Project
Top Row: Exeter-Milligan School Gym Entrance (top-left), new ductwork in gym (top-right).
Middle Row: Roof-top cooling units.
Bottom Row: Automation controls (bottom-left), new boiler units (bottom-right).

Pictured Above: Nebraska City Public Schools - $500 Thousand Lighting, Cooling, and Ductwork Project.
Top Row: Front of Hayward Elementary (top-left), gym lighting and sealed ductwork (top-right).
Bottom Row: New lighting in Nebraska City High School gymnasium (top-left), Front of High School (top-right).

Pictured Above: Gretna Sanitation - $350 thousand new fleet vehicle addition; fueled with Compressed Natural Gas.




Pictured Above: Single-Family and Multi-Family Residential Projects.
Top Row: New Air Conditioning Condenser (top-left), Window Replacements (top-center), New Photovoltaic System (top-right).
Bottom Row: Hayward Place Condominiums - $367 thousand window replacement project.

State Energy Program and Special Projects

The US Department of Energy (DOE) provides funds to states for the general operations of State Energy Offices. These funds support the day-to-day energy responsibilities of NDEE. Funds are used to monitor the price and supply of traditional energy sources throughout the year and provide support for the DESL program along with serving as a primary funding source for several other efforts that are the responsibility of the Energy Programs. A description of those efforts follows.

Energy Codes

In 2019, the Nebraska Energy Code was updated from the 2009 standards established by the International Energy Conservation Code to the 2018 standard. Nebraska was among the first states to adopt the 2018 standard. With the adoption of the updated code, homeowners of the typical three-bedroom house are projected to save between $165 and $206 annually on energy costs.

NDEE staff continue to be actively involved in providing training on the 2018 code through training partnerships with the Midwest Energy Efficiency Alliance (MEEA) and other organizations. Through the partnership with MEEA, more than three dozen virtual and in- person training sessions have been held on many different aspects of the Nebraska Energy Code. NDEE is continuing virtual and in-person training efforts through this partnership and will be hosting practical trainings with an emphasis on teaching stakeholders in Nebraska how to perform the new testing and verification methods defined in the Nebraska Energy Code. NDEE and MEEA host the Nebraska Energy Codes Collaborative Meeting where stakeholders and code officials from across the state meet quarterly to discuss the hurdles that Nebraska faces in energy conservation in building practices. Strategies and experience overcoming these hurdles are shared to improve compliance with the Nebraska Energy Code. Ideas and strategies for future energy conservation in Nebraska are also discussed.

NDEE performs on-site inspections each year when receiving complaints from owners of newly built houses. If a home is found to not comply with the Nebraska Energy Code within two years after construction, NDEE issues an order to the prime contractor to take the necessary actions to bring the building into compliance.

NDEE also reviews all new buildings constructed in whole or in part with state funds to ensure that these buildings are being designed with the energy efficiency and conservation measures intended by the Nebraska Energy Code. The department reviews anywhere from two to four dozen different state funded building applications per year. This fiscal year the department reviewed 43 applications. If the designs are found to not comply with the Nebraska Energy Code, NDEE issues an order to the prime contractor to take the necessary actions to bring the building design into compliance.

In 2025, the Nebraska Department of Environment and Energy (NDEE) provided a new Energy Impact Study Report, prepared by an independent firm, to show how updating Nebraska's Energy Code can affect energy savings for households. Reports are available for both the 2021 and 2024 International Energy Conservation Codes (IECC) and can be accessed online or by request. On average, upgrading to the 2021 IECC could save Nebraska households about $183 per year on energy costs compared to the 2018 code. Even greater savings—around $354 per year—are projected for households that move directly to the 2024 IECC. The 2024 report also highlights faster payback periods, meaning homeowners can recover their upgrade costs more quickly while experiencing lower energy bills.

Emergency Support Function 12 – Energy

Emergency response at the state level is organized into 15 Emergency Support Functions (ESFs), each addressing a specific area such as public health and medical services, communications, public works, and transportation. Emergency Support Function 12 (ESF-12) focuses on energy. NDEE's ESF-12 coordinators participate in more than two dozen meetings, webinars, and trainings each year, collaborating closely with federal, state, local, and industry partners. These include the U.S. Department of Energy's Office of Cybersecurity, Energy Security, and Emergency Response; the National Association of State Energy Officials; the Pacific Northwest National Laboratory; the U.S. Department of Homeland Security Region VII; the Federal Energy Regulatory Commission; the North American Electric Reliability Corporation; and the Southwest Power Pool. At the state and industry level, partners include the Nebraska Propane Gas Association, National Propane Gas Association, Nebraska Petroleum Marketers & Convenience Store Association, Nebraska Rural Electric Association, Nebraska Farmers Union, Nebraska Power Association, Nebraska Pipeline Association, Nebraska's electric utilities, the Nebraska Ethanol Board, Black Hills Energy, Metropolitan Utilities District, Nebraska Public Service Commission, Nebraska Emergency Management Agency, and Nebraska Information Analysis Center. NDEE ESF-12 also coordinates with Nebraska's fuel terminals, the Oil Price Information Service, the National Association of Regulatory Utility Commissioners, and energy officials from other states, U.S. territories, and the District of Columbia.

At these sessions, ESF 12 coordinators were briefed on energy risks, reliability and resilience, transmission planning, electrical resource adequacy, energy markets, energy needs at planting and at harvest, fuel inventory levels, energy market dynamics, fuel transportation, hours-of-service waivers, cybersecurity, infrastructure protection, disaster recovery, and overall energy security planning.

ESF 12 coordinators participated in quarterly exercises to practice response to a radiological disaster at Cooper Nuclear Station. Each of the quarterly exercises consisted of two sessions: a dress rehearsal and an evaluation.

ESF 12 coordinators participated in quarterly internal training sessions covering a variety of topics and scenarios, such as hours-of-service waivers and who to contact in specific disasters.

Energy Security Plan

An energy security plan is a comprehensive operating manual for state government leaders charged with the responsibility of ensuring the health and safety of its citizens during periods of energy emergencies. Basic information, such as Nebraska's energy profile, is updated annually. Other information, such as contact information, is updated more frequently.

Section 40108 of the Infrastructure Investment and Jobs Act (IIJA) requires states to either submit their State Energy Security Plan or have their governors provide an annual letter to the U.S. Secretary of Energy by September 30 each year. The letter must confirm that the state's energy security plan addresses six Congressionally defined elements. Compliance with this requirement is necessary to receive federal financial assistance for energy programs. This provision is set to expire on October 31, 2025.

State Heating Oil and Propane Program (SHOPP)

The Energy Information Administration (EIA), the independent statistical and analytical agency within DOE, conducts the State Heating Oil and Propane Program (SHOPP) from October to March —the heating season— each year. NDEE staff collect heating oil and propane prices for the program each week from selected Nebraska vendors and submits the prices to EIA. EIA combines the data from multiple states and publishes state, regional and national average prices.

The data is used by NDEE to monitor the prices during the winter season in an effort to maintain awareness of developing price or supply irregularities. The data is also used by policymakers, industry analysts, and consumers.

Price data may be found at:

- Propane Prices: https://dee.nebraska.gov/state-energy-information/energy-statistics/fuels/propane/nebraska-residential-propane-prices
- Heating Oil Prices: https://dee.nebraska.gov/state-energy-information/energy-statistics/fuels/heating-oil/average-residential-heating-oil-prices-nebraska Annual Report: https://dee.nebraska.gov/state-energy-information/state-nebraska-heating-oil-and-propane-program-shopp

Midwestern Petroleum Shortage Response Collaborative

NDEE is working with a group of states to share resources and strengths to assist each other in the event of regional energy emergencies. This collaborative is named the Midwestern Petroleum Shortage Response Collaborative. The Collaborative includes energy and emergency management agencies from Nebraska, Wisconsin, North Dakota, Illinois, Missouri, Indiana, Iowa, Tennessee, Kentucky, Michigan, Kansas, Ohio, and Minnesota.

The Collaborative is a state-led initiative intended to enhance regional fuel planning and response among State Energy Offices and State Emergency Agencies, through the development of catastrophic fuel response frameworks and consistent regional engagement. The National Association of State Energy Officials and the National Emergency Management Association, with support from the U.S. Department of Energy's Office of Cybersecurity, Energy Security, and Emergency Response, have supported the development of a Regional Petroleum Response Collaborative in the Midwest. The Collaborative is the first official working group in its region comprised of critical public sector players (e.g. State Energy Offices, State Emergency Management agencies, and federal partners) in the energy-emergency management nexus with the unique task of regional catastrophic fuel planning.

The Collaborative meets on a quarterly basis during steady state to provide member states an opportunity for peer-sharing and information exchange. During these calls, planning developments, lessons learned, preparedness activities, training, state exercises, and points of coordination are discussed, along with other topics of interest to the group. Member states benefit from deliberate examination, dissection, and cross-referencing of existing state and regional response plans, concepts, and annexes, and leverage peer expertise to improve respective state emergency fuel plans while working toward regional coordination. During a fuel supply disruption, this regional collaborative can leverage its established network of trusted state collaborators and industry partners for situational awareness and response.

New Energy Programs

The Infrastructure Investment and Jobs Act (IIJA) of 2021, and the Inflation Reduction Act (IRA) of 2022 provide $97 billion in funding to the U.S. Department of Energy (DOE) for investments in climate and energy over several years.

Over time NDEE's State Energy Program expects to receive approximately $37 million in IIJA formula funds and approximately $93 million from IRA formula funds from the DOE for grid resilience, energy efficiency and conservation, renewable energy technologies, and workforce development. Formula funding is predetermined and noncompetitive, but NDEE must apply for it.

Preventing Outages and Enhancing the Resilience of the Electric Grid

In 2025, the NDEE awarded $15.6 million in Grid Resiliency Program grants to support local communities in strengthening Nebraska's electric grid. Funded through the U.S. Department of Energy's Grid Deployment Office under the Preventing Outages and Enhancing the Electric Grid/Hazard Hardening Program, these grants are part of a nationwide effort to modernize and secure critical energy infrastructure.

The program supports projects that improve grid reliability, resilience to extreme weather, and recovery after disruptive events. Funded upgrades include:

- Replacing aging power poles, transformers, and substations
- Installing stronger, more efficient transmission lines
- Deploying advanced monitoring and management technologies
- Undergrounding power lines to reduce outage risks

Each recipient community contributed matching funds to cover remaining project costs, demonstrating strong local commitment to energy security and infrastructure improvement.

These investments mark a significant step toward safer, more resilient energy systems that will benefit Nebraska communities for years to come.

Recipient	Project Description	Grant Amount
Ansley	Update distribution system from 2.4kV delta to 12.5kV grounded wye. Replace poles, transformers, overhead conductors, and regulators. Add a primary feed from CPPD Substation to provide a dedicated circuit into the community.	$1,097,047
Central City	Replace 34.5kV transmission line with 69kV transmission line. Perform upgrades to two substations, including transformers. New equipment includes 69kV power lines, new poles, new 69kV to 12.5kV transformers.	$1,800,000
Chimney Rock Public Power District	Install new electronic reclosers with control panels, install distribution automation radios with ethernet ports, and add new software and programing for all equipment in existing substations.	$457,353

Recipient	Project Description	Grant Amount
Cozad	Replacement of power poles and construction of distribution tie lines to add redundancy. The project objective is to harden the system against severe weather incidents that could cause at-risk power poles to fail and customers to lose power.	$838,919
Fairbury	Retire existing 34.5kV line and install 1.5 miles of new, weather-resistant 34.5 kV line. The new line is anticipated to address existing system susceptibilities, improve reliability, guarantee system redundancies, and reduce system losses by increasing the line's thermal and transfer capacity.	$855,049
Falls City	Upgrade existing 5kV infrastructure with a 13.8kV system to ensure the continuity of essential services, such as power supply to critical facilities. The project will install underground cabling, replace the 50-plus-year-old wooden structure with modern, resilient components, and implement of advanced monitoring equipment.	$ 548,524
Fremont	Relocate one of the 69kV transmission circuits, which will include storm mitigation-based design standards using upgraded poles and conductors. The transmission relocate will be a total of three miles. Eliminates a double-circuited power supply.	$1,914,455
The Midwest Electric Cooperative Corporation	Rebuild 14.5 miles of a radial line on the 69kV transmission system connecting the Grant and Venango substations. The rebuild line will have shorter spans and more robust poles to be able to better withstand wind and ice loading and reduce the chance of wind causing lines to slap together.	$1,914,455
Nebraska City Utilities	Replace switchgears and relays and incorporate substation into existing SCADA. Construction of climate-controlled enclosure for equipment. The objective is to enhance the resilience and reliability to reduce future outage durations.	$1,419,708
Nelson	Inspect, repair, or replace aging utility poles and cutouts in the city's distribution system. Replace cracked and potentially hazardous cutouts to ensure the safety of maintenance workers and the public	$362,994
Northeast Nebraska Public Power District	Replace distribution system infrastructure. The project will manage utility poles, harden power lines, and replace old overhead conductors or underground cables.	$1,914,455
Oxford	Convert the remainder of the system to 12.5kV, replace switchgear breakers, install underground circuits, and construct a 12.5kV distribution line around the community.	$646,190

Recipient	Project Description	Grant Amount
Red Cloud	New underground and overhead power lines will provide an upgraded circuit to 13.8Y/7.96kV. It will include a combination of conductors, new poles, and underground equipment, providing redundancy.	$626,203
Tecumseh	Add and replace substation equipment, including switchgears and transformers; install new meters; and add building to house equipment for protection from inclement weather.	$851,358
Wymore	Replace and rebuild critical infrastructure replacing and rebuilding aging H structure poles along the feed lines from the substation, upgrading existing transformers and adding additional transformers to meet load requirements.	$381,143
Total		**$15,627,853**

Energy Efficiency and Conservation Block Grant Program

In 2024, the Nebraska Department of Environment and Energy (NDEE) awarded more than $1.1 million in Energy Efficiency and Conservation Block Grant (EECBG) funding to 14 communities across Nebraska. Funded through the U.S. Department of Energy (DOE) and the Infrastructure Investment and Jobs Act (IIJA), these grants are designed to help local governments implement high-impact, self-sustaining clean energy projects that benefit entire communities.

Program Goals:

The EECBG program supports initiatives that improve energy efficiency, expand the use of renewable energy, and promote conservation. Eligible projects include:

- Upgrading to energy-efficient lighting and windows
- Installing renewable energy systems on public buildings
- Developing alternative transportation infrastructure, such as pedestrian walkways and bicycle paths
- Supporting public education to promote energy efficiency and conservation

2024 Grant Awards:

A total of 14 communities received funding for projects ranging from lighting upgrades to renewable energy systems:

- Beatrice – $58,041 for efficient lighting at the auditorium and police station
- Bloomfield – $71,682 for lighting and window upgrades at the library
- Curtis – $87,871 for energy-efficient streetlights
- Hickman – $100,000 for efficient streetlights and signage
- Mitchell – $24,324 for lighting upgrades at multiple city facilities
- Nebraska City Utilities – $100,000 for efficient streetlights across eight communities
- North Platte – $100,000 for lighting upgrades at city facilities and recreational spaces
- Peru – $81,731 for efficient downtown streetlights
- Shickley – $83,148 for efficient streetlights
- South Sioux City – $100,000 for lighting upgrades at the ball field
- Wahoo – $100,000 for efficient streetlights
- Walthill – $51,696 for solar streetlights

- Emerson – $100,000 for a 500kW photovoltaic solar tracking facility at the wastewater treatment plant
- Glenvil – $55,434 for sidewalk and pathway updates

These investments will have a statewide impact to:

- Reduce energy costs for local governments and taxpayers
- Enhance community infrastructure and livability
- Support Nebraska's clean energy goals and environmental stewardship

By leveraging federal funding, NDEE continues to empower local communities to take meaningful steps toward energy efficiency, sustainability, and resilience.

State Energy Program – IIJA/BIL Funding

The purpose of this formula grant is to provide funding to States for planning activities and programs that help reduce carbon emissions in all sectors of the economy. NDEE received $4,603,380.00 from DOE to support K-12 public schools with grants for energy audits to identify retrofit projects that could improve energy efficiency and/or air quality in school buildings and other planning activities and programs to reduce carbon emissions. This program is under development.

Energy Efficiency Revolving Loan Fund Capitalization Grant Program

This formula grant provides capitalization grants to States to establish a revolving loan fund, through which the State will provide loans and grants for energy efficiency audits, upgrades, and retrofits to increase energy efficiency and improve the comfort of buildings. NDEE plans to support energy efficient measures in residential, public, and commercial buildings, with an emphasis on K-12 schools, by providing low-interest loans to finance projects. NDEE will partner with Nebraska lenders by purchasing a percentage of the loans at zero interest, which lowers the interest rate and leverages lender funds for each loan. NDEE will use a portion of the funding to provide free energy audits to qualifying schools. NDEE's application is pending with DOE.

Home Efficiency Rebates (IRA §50121) (HER)

The purpose of this program is to award grants to state energy offices to develop a whole-house energy saving retrofits program that will provide rebates to homeowners for whole-house energy saving retrofits. Depending on whether a project meets several different rules, eligible projects can include attic insulation, whole home air sealing, duct sealing and insulation. NDEE received $1,145,342 from DOE to begin developing this program.

Home Electrification and Appliance Rebates (IRA §50122) (HEAR)

This program provides federally funded rebates to eligible property owners who replace energy inefficient appliances with efficient ones or have other work performed to improve the energy efficiency of the property. NDEE received $1,138,678 from DOE to begin developing this program. Example electrification projects include:

- electric heat pump water heater;
- electric heat pump for space heating and cooling;
- electric stove, cooktop, range, or oven;
- electric heat pump clothes dryer;
- electric load service center (e.g. circuit breaker panel);

- insulation;
- air sealing and materials to improve ventilation; or electric wiring.

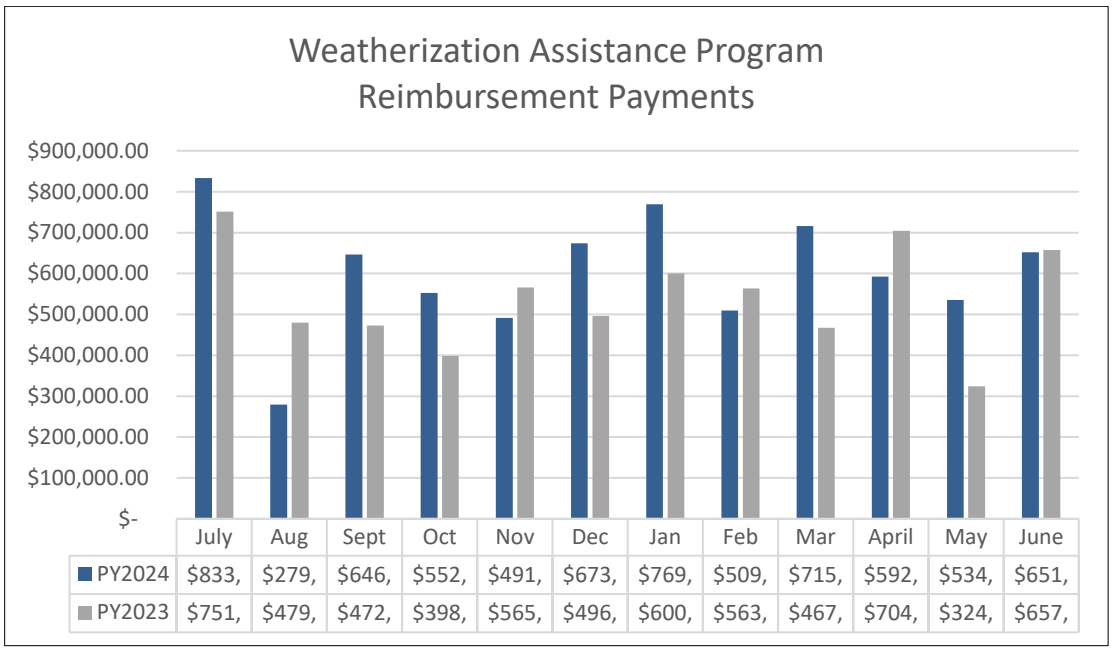
Weatherization Assistance Program

This federally funded program enables low-income families in Nebraska to reduce their energy bills by making their homes more energy efficient. Program staff evaluate the homes of clients that meet income requirements and are approved for weatherization assistance services to identify the most effective energy- and dollar-saving improvements. Seven community action agencies and one non-profit agency are responsible for implementing the home weatherization improvements in Nebraska.

The types of improvements vary based on an energy audit analysis of the home; improvement investment averages between $6,000 and $8,000 per home, excluding the cost of health and safety improvements such as furnace repairs. The most common improvements are adding insulation, air sealing the home, repairing and replacing furnaces, installing energy- efficient lighting, and installing weather-stripping. Beyond the energy savings achieved, clients generally notice an increase in comfort due to reduced drafts and a more even temperature throughout their home. Between July 1, 2024 and June 30, 2025, 532 units were weatherized across the state, helping to reduce the energy burden for low-income Nebraskans.
Weatherization Program staff inspect a minimum of 10-15% of all completed homes to ensure the quality of work performed.

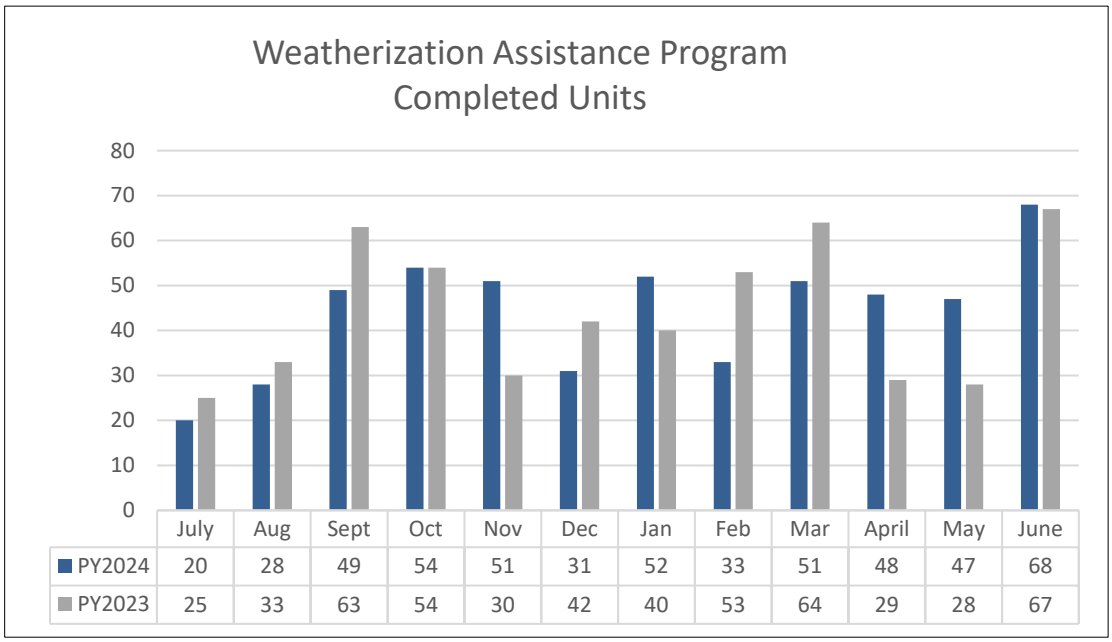
In program year PY2024 the program received funding from four sources: DOE's Weatherization Assistance Program, DOE Infrastructure Investment and Jobs Act (IIJA), Low-Income Home Energy Assistance Program (LIHEAP) financed through the Nebraska Department of Health and Human Services, and State Petroleum Violation Escrow (PVE) Funds. Since the WAP began in 1977, $247 million has been provided to make energy efficiency improvements towards 72,108 units. The Department is allowed to use $750,000 from the LIHEAP budget for Heating and Cooling Repair and Replacement Assistance (HCRRA), with a limit of $6,000 per client. This program offers furnace and AC repair or replacement assistance to extremely low-income clients. Between July 1, 2024, and June 30, 2025, 115 clients received Heating and Cooling Repair and Replacement Assistance.

The chart on the next page shows the Weatherization Assistance Program reimbursements for FY2023/2024 (PY23) and FY2024/2025 (PY24).



	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
PY2024	$833,	$279,	$646,	$552,	$491,	$673,	$769,	$509,	$715,	$592,	$534,	$651,
PY2023	$751,	$479,	$472,	$398,	$565,	$496,	$600,	$563,	$467,	$704,	$324,	$657,

The following chart shows the Weatherization Assistance Programs production for FY2023/2024 and FY2024/2025.



	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
PY2024	20	28	49	54	51	31	52	33	51	48	47	68
PY2023	25	33	63	54	30	42	40	53	64	29	28	67

Like many entities involved in the construction and/or rehabilitation industry, Nebraska's Weatherization network participants continue to face the challenges associated with material and labor shortages and increased costs. NDEE Weatherization Assistance Program staff continue to work with and collaborate with sub-grantees and federal funding partners to ensure Nebraska's low-income families receive safe, quality, cost-effective services and equipment.