



helping Minnesota communities determine their energy future

CERTS PARTNERS

University of Minnesota Regional Sustainable Development Partnerships

The Green Institute

Southwest Regional Development Commission

The Minnesota Project

Office of Energy Security, Minnesota Department of Commerce



CERTs 2010 Seed Grant Recipients

As we kick off 2010, we are excited to announce the projects awarded CERTs seed grants in each of the seven Minnesota CERTs regions.

These catalyzing grants of up to \$11,000 will help projects garner further funding and bring communities together in identifying and implementing energy efficiency and renewable energy projects. CERTs received 122 proposals requesting a total of \$829,224; of these, 55 proposals were funded for a total granting amount of \$280,000.

Read on for all of the details and thanks to everyone who submitted a proposal! Once again, thanks to all of you who have dedicated your time and effort to the CERTs program. If you are interested in our proposal process or want to prepare for our next round of funding visit www.cleanenergyresourceteams.org and click Community Project > RFP.

CENTRAL REGION

Rabideau Conservation Academy & Learning Center: Solar Contest

Black Duck, Bemidji & Cass Lake, MN – The Rabideau Conservation Academy and Learning Center (CALC) will hold a solar heating design contest for high school students in Black Duck, Bemidji and Cass Lake School Districts. A panel of three judges will choose the winning design which will then be constructed by a group of youth, with guidance from the winning design team. The solar heating units will supply supplemental heat to a series of greenhouses, and ultimately, lengthen the growing season for Rabideau Gardens. The solar heater will be used as a public education model on solar energy and local food production and be a permanent youth learning program at Rabideau CALC. (Clean Energy & Education; \$5,000)



City of Park Rapids: Armory Square Project Feasibility Study

Park Rapids, MN – This project is a comprehensive feasibility study to evaluate the technologies and methods available to retrofit the former 24,000 square foot armory building in downtown Park Rapids. The study will identify ways to integrate energy management systems, weatherization, heating & cooling zoning, peak load energy management, on-site generation of renewable energy, and off-peak energy storage technology. The project serves to showcase real-world building energy efficiency applications, substantially reduce the carbon footprint of the building, and bring a valuable historical asset back into the life of the community. (Research; \$7,000)

Northland Arboretum: Induction Lighting Demonstration

Brainerd & Baxter, MN – The Northland Arboretum, encompassing over 580 acres of urban Brainerd and Baxter, MN, will upgrade their seven 250 watt mercury vapor lights to higher-efficiency induction lighting. This project is estimated to reduce energy consumption by over 1,051 kWh annually, resulting in over 20,000 kWh over the life of the project. In addition, they will construct an outdoor display kiosk to educate visitors about the efficiency of induction lighting, develop an indoor monitor to display up-to-date energy savings, and host an annual workshop on the lighting technology. (Energy Efficiency & Education; \$4,500)

Leech Lake Tribal College: Sustainable Development Plan

Cass Lake, MN – This project will create a master campus development plan for Leech Lake Tribal College. With a primary vision of designing future buildings to incorporate geothermal and solar energy technology as primary heating and cooling sources, the plan will also include options for retrofitting their four existing buildings for increased energy efficiency and use of renewable energy sources. LLTC will construct all future buildings to at least LEED Silver standards. (Research; \$6,000)

Rural Renewable Energy Alliance: Solar for Local Units of Government in Region 5

Cass, Crow Wing, Morrison, Todd & Wadena Counties, MN – The Rural Renewable Energy Alliance (RREAL) will conduct feasibility studies on government buildings and determine the most applicable solar technology or technologies for each particular location. With approval from local governmental units on the recommended plan(s), the appropriate technology will be implemented to reduce local dependence on fossil fuels, energy costs, and greenhouse gas emissions, as well as promote educational activities about and further advance understanding of solar energy technologies. (Clean Energy & Research; \$5,000)

Rural Renewable Energy Alliance: Solar Space Heat Performance Estimation

Pine River, MN – This project will create a user-friendly performance simulation module for solar space heat applications. The module will be created by TESS (Thermal Energy System Specialists), a company which has significant expertise and experience in solar performance modeling. Upon completion of the module, it will be made available upon request to Minnesota research institutions, Community Action / Weatherization Agencies who wish to employ the technology, and local units of government who wish to conduct analyses of solar air heat on publicly-owned buildings. This innovation will help determine the feasibility and applicability of solar air heat technology in particular locations and buildings compared with the use of other renewable technologies. (Research; \$5,000)

St. Cloud Joint Planning District: Sustainability Framework Plan

Stearns, Benton & Sherburne Counties, MN – The St. Cloud Joint Planning District Sustainability Committee, in collaboration with professionals, local communities, and the public and private sectors, will establish a vision and outline best practices in several focus areas: sustainable land use, multi-modal transportation, alternative energy, efficiency, education, groundwater resources, and food systems. This plan will aid in achieving reductions in greenhouse gas emissions, economic savings for greener practices, alternative energy projects, and adoption of modern ordinances. In addition, a regional approach to sustainability will allow the area's residents and entities the greatest opportunity to adapt and adjust to the challenges that lie ahead. (Research; \$7,500)

METRO REGION

Chisago Lakes Middle School: Project Independence Solar PV

Lindstrom, MN – Project Independence is the installation of a 10kW solar photovoltaic system on the south wall of Chisago Lakes Middle School. The project is in its second year, having already secured an installer, done significant fundraising, and developed partnerships. The system will serve as an educational tool for students as well as a training site for electricians through a partnership with IBEW Local 110. The seed grant will help to cover labor costs for installation, and the panels will be ready for dedication on Earth Day 2010. (Clean Energy, Education & Research; \$5,000)



Mahtomedi Area Green Initiative: Zephyr Wind Project

Mahtomedi, MN – The Zephyr Wind Project seeks to bring renewable energy, future-focused educational experiences and a vision for a more sustainable community to the Mahtomedi area through the installation of a 10kW wind turbine. The project is a grassroots effort led by the Mahtomedi Area Green Initiative, a volunteer citizen group that has been working together since 2006 to encourage enduring community commitment to sustainability. This will be MAGI's first renewable energy project and will pave the way for other renewable energy and energy efficiency projects aimed at bringing our community together around the common theme of reducing our carbon footprint and building a more sustainable community. The seed grant funding will be used for system installation and electrical and trenching labor, paired with fundraising efforts. (Clean Energy, Education & Research; \$5,000)

Women's Environmental Institute: Green Energy for Food Justice

Minneapolis, MN – The purpose of the Green Energy for Food Justice Project is to develop and evaluate renewable energy heat sources for the greenhouses that are part of the Little Earth of United Tribes Urban Farm Center as a demonstration project for eventual expansion to other parts of Phillips Neighborhood and beyond. Instead of relying on traditional electricity to heat the greenhouses, the project will evaluate the possibility of obtaining all or some of the energy from passive solar and heat generated by compost piles inside the greenhouses. The seed grant funding will be used to pay for compost/vermiculture training, neighborhood outreach and organizing, labor to build the greenhouse, construct and maintain the compost piles, and stipends for youth apprentices. (Clean Energy, Education & Research; \$5,500)

Minnesota Renewable Energy Society: Grid Neutral Schools MN 2020 Planning Grant

Statewide in MN – The proposal for the MRES Grid Neutral Schools project is to develop a comprehensive plan to implement renewable energy technologies, energy efficiency, and energy-focused curriculum in schools throughout Minnesota. The goal is that all K-12 schools in Minnesota be grid-neutral by 2020. This project will build on the successful legacy of CERTs' Schools Cutting Carbon program, and will result in a plan to present to the MN Office of Energy Security to obtain funding and support for MRES to lead the Solar on Schools mandate. The seed grant funding will be used for researching and writing the plan. (Clean Energy, Energy Efficiency & Education; \$4,000)

Neighborhood Energy Connection: Home Energy Squad Outreach & Training Project

St. Paul, MN – The Home Energy Squad Outreach & Training Project is designed to achieve greater participation in residential energy conservation careers, increased understanding of home energy and environment topics, and home energy efficiency-based savings among new Americans for whom English is a second language; specifically in Saint Paul's Hmong community. The project will involve recruiting a home energy trainee, providing training, conducting outreach, and completing home energy squad visits in the Hmong community, and will eventually create a long-term staff position for the trainee at the NEC. The seed grant funding will cover labor and training for the new recruit. (Energy Efficiency & Education; \$5,000)

East Side Neighborhood Development Company: East Side Building BLOCKS

St. Paul, MN – East Side Building BLOCKS (Business, Livability, Opportunity, Community, Knowledge, Sustainability) is a sustainable redevelopment strategy for a low income neighborhood devastated by the foreclosure and vacancy crises. This strategy will incorporate new development, existing building rehab, resource conservation, and the addition of renewable energy. Redevelopment will include the residential, commercial, and public spaces within select blocks of the neighborhood in an effort to sustainably revive a struggling community. This comprehensive, long-term plan will have a lasting impact on a focused area and will eventually be replicable in other urban neighborhoods. The seed grant funding will go towards energy conservation consultants and planners. (Energy Efficiency & Research; \$5,000)

City of Lakes Community Land Trust: Energy Efficient Homes Initiative

Minneapolis, MN – The City of Lakes Community Land Trust (CLCLT) Energy Efficient Homes Initiative is a pilot project to enhance their existing rehab program by integrating energy efficiency measures through a Home Energy Rating System (HERS) analysis. CLCLT is a non-profit organization that provides affordable housing through the community land trust model to low to moderate income homebuyers across the City of Minneapolis, with close to 100 homes in the land trust to date. The CERTs seed grant will provide the funds to hire a home energy consultant do a HERS analysis of a pilot group of 10-20 CLCLT homes with the goal of increasing the energy efficiency of the homes by 15-30 percent. (Energy Efficiency & Education; \$5,000)

St. Paul District 10 Community Council: Como Park Home Energy Efficiency Project (CHEEP)

St. Paul, MN – CHEEP is a community-based project driven by residents and volunteers who wish to impact change in the Como Park neighborhood and the broader community; inspire long-term, widespread shifts in energy use; and promote education about how energy-efficiency impacts the global environment. The primary goal of CHEEP is to increase knowledge among District 10 Como Park residents about how to lower energy usage and encourage residents to implement the lessons learned from the project. The project includes three primary phases: (1) complete the "energy use reduction" pilot test group that began in February 2009 including documentation of physical changes to dwellings and changes in habits; (2) results analysis and development of best practices and education campaign materials; and (3) implementation of education campaign strategies. The seed grant funding will cover database costs to track the project progress, consultant fees, outreach and marketing. (Energy Efficiency & Education; \$3,000)

Bakken Museum: Renewable Energy Exhibits Feasibility Study

Minneapolis, MN – This project will consist of a feasibility study for outdoor and indoor renewable energy exhibits or "Green Stations" at the Bakken Museum in Minneapolis. This series of stations throughout the Bakken building and grounds will showcase practical and aesthetic applications of sustainable electric power. Green Stations will inspire visitors to imagine a green energy future by providing concrete examples of the technology's potential. The Green Stations will eventually be viewed by many of the public visitors to the Bakken Museum, whose audience currently numbers about 45,000 per year. CERTs seed grant funding will be used to provide an analysis of options for these Green Stations, including costs, technical considerations, educational opportunities, and exhibit interpretation plans. (Research & Education; \$2,500)

NORTHEAST REGION

City of Ely: Boundary Waters Renewable District Energy Project

Ely, MN – The city of Ely will conduct an Engineering and Economic Analysis to initiate supplemental consideration of a municipal combined heat and power (CHP) system. This study will align with a technical feasibility study completed in November, 2009, to determine how The Boundary Waters Renewable District Energy System can implement a formal Turboden CHP District heating system. By substituting fossil fuels with locally harvested biomass, Ely hopes to eliminate an equivalent of 1.4 million tons of fossil fuel consumption per year. Indirect, intangible benefits to the area and the Superior National Forest include a 7,000 tons per year carbon emissions reduction, and the creation of 53 local long-term and short-term job opportunities. (Clean Energy & Research; \$5,000)



Common Ground Construction: Duluth Energy Efficiency Program (DEEP)

Duluth, MN – The Duluth Energy Efficiency Program (DEEP) has created a comprehensive community strategy to move residents from knowledge of energy efficiency to specific actions. DEEP is creating an online energy portal to encourage two-way communications that inform and engage citizens in energy efficiency via behavioral change and weatherization/air sealing of one's home. *Continued next page*

Continued from previous page This portal will aid in disseminating information on energy efficiency, provide information on various programs available in the Duluth area, and allow residents to sign up for home performance testing and weatherization programs. The site will also feature neighborhood data on home energy performance. (Education; \$2,500)

Adventure Inn: Design for a Green Motel Building

Ely, MN – The Adventure Inn will work to replace an old, energy inefficient guest building with a state-of-the-art green guest building. By incorporating many new technologies, such as passive solar construction, solar thermal heating, occupancy sensors, reused materials, and other green design strategies, the Inn plans to reduce their energy usage by at least 50 percent. The project will also be the basis for a student internship in sustainable tourism and workshops for area plumbers and HVAC installers. (Clean Energy, Energy Efficiency, Education & Research; \$2,500)

Arrowhead Regional Development Commission & Iron Range Resources: Developing a Community Energy Action Plan

Northeast, MN – The Arrowhead Regional Development Commission and Iron Range Resources will be working with a to-be-determined community group in northeast MN to develop an Energy Action Plan in cooperation with local government, resulting in an officially adopted addendum to an existing Comprehensive Plan. The Energy Action Plan will identify goals, strategies, and implementation action steps for energy conservation, energy efficiency, and renewable energy projects in the community, providing them with the framework to move forward in implementing the actions. (Education; \$5,000)

Hartley Nature Center: Energy Explosion on the Move

Duluth, MN – During the 2008-2009 academic year, the Hartley Nature Center found great success with their Energy Explosion pilot program, a portable alternative energy demonstration for K-12 students within their primary service area. The program's wide reception has prompted an expansion. Energy Explosion on the Move will incorporate an updated lesson plan, operations manual, and graphical elements for use by their educational demonstration trailer, the Electron. Also, by training temporary contract educators to take the program beyond the Hartley Nature Center's primary service area, the program will reach a wider audience, further sharing this interactive program with educators and students throughout the state. (Education; \$1,265)

Cook County Local Energy Project: Grand Marais Recreation Park Solar Hot Water System

Grand Marais, MN – The Cook County Local Energy Project (CCLEP) is coordinating an effort with the North House Folk School, Community Education, Grand Marais Recreational Park (campground), and the City of Grand Marais to plan, engineer, and install a solar hot water system into the shower complex at the city campground. In addition to the expected energy savings, especially during the peak tourism season in the summer, the project will also include on-site training during installation and an interpretive, informational site for visitors, residents, and businesses alike. (Clean Energy & Education; \$5,000)

Community Action Duluth: Green Duluth

Duluth, MN – This project will duplicate a successful energy efficiency campaign that targets single-family homes, presents residents with information on energy conservation, and provides auditing services, as well as financial incentives for efficiency upgrades. A canvass manager will assist youth from the Duluth Youth Energy Summit Team in conducting the door-to-door information campaign. The canvassers will also meet local folks in academia, government and the private sector, who work in green and environmentally-related fields, to learn about their career paths and the work they do. (Education; \$5,000)

Iron Range Partnership for Sustainability: Iron Range Earth Fest 2010

Mountain Iron, MN – Iron Range Earth Fest is a celebration of local traditions and practical resources for sustainable living on the Iron Range. Participants are invited to learn about new and existing technological approaches as well as rediscover local traditions. With presentations and exhibits by experts, speakers and vendors, this event hopes to stimulate conversation about sustainability, motivate sustainable behaviors in participants' daily lives, and help them understand their role in sustaining their economy, environment and communities. (Education; \$5,000)

Lake Superior Energy Association: Education, Capacity Building & Energy Info Center Planning

Duluth, MN – The Lake Superior Energy Association will collaborate with key partners to establish an Energy Information Center. This project will help LSEA achieve its goals of: organizational capacity building, outreach and education through workshops, introducing a speaker series, holding information nights at community education sites, developing a website, and completing a feasibility study for a physical building to serve as a community energy information hub. (Education; \$2,500)

St. Louis County & Rural Renewable Energy Alliance: St. Louis County Garage Solar Air Heating

Duluth, MN – The proposed project is a collaborative effort between St. Louis County (SLC) and the Rural Renewable Energy Alliance (RREAL) to install Solar Air Heating (SAH) on the SLC Maintenance Garage on the Chris Jensen Campus. As the garage is currently heated with natural gas, the use of SAH would annually reduce carbon emissions by approximately 3,487 lbs, as well as particulate matter and heavy metals. (Clean Energy; \$3,735)

Mesabi Range Community & Technical College: Wind Energy Technology Turbine

Eveleth, MN – The Mesabi Range Community and Technical College has secured funding for a Morpheic ST-20 wind turbine that will provide students in the Wind Energy Technology and Electrical Industrial Automation Technology programs with hands-on training. The turbine will also provide continuing education opportunities for incumbent workers in wind power generation industries, as well community members interested in wind energy. (Clean Energy & Education; \$2,500)

NORTHWEST REGION

Rabideau Conservation Academy & Learning Center: Solar Contest

Black Duck, Bemidji & Cass Lake, MN – The Rabideau Conservation Academy and Learning Center (CALC) will hold a solar heating design contest for high school students in Black Duck, Bemidji and Cass Lake School Districts. A panel of three judges will choose the winning design which will then be constructed by a group of youth, with guidance from the winning design team. The solar heating units will supply supplemental heat to a series of greenhouses, and ultimately, lengthen the growing season for Rabideau Gardens. The solar heater will be used as a public education model on solar energy and local food production and be a permanent youth learning program at Rabideau CALC. (Clean Energy & Education; \$5,000)



Concordia Language Villages: BioHaus – Engaging Middle School Teachers & Students in Hands-on Activities with Renewable Energy Models

Bemidji, MN – This project will give middle school science teachers in NW Minnesota the opportunity to incorporate Concordia Language Villages' BioHaus Environmental Living Center into their curriculum. BioHaus is the first certified Passive House in North America and achieves energy savings of 85 percent annually. Teachers will attend a one-day workshop at BioHaus to learn applications of a variety of renewable energy models and how to incorporate them into a curriculum. Teachers can then bring 22-28 students to BioHaus for a full-day fieldtrip where they will calculate their own ecological footprints and evaluate their behavior patterns, in hopes of gaining an understanding of the relationship between personal choices and energy conservation alternatives. (Clean Energy & Education; \$5,000)

Clear Waters Life Center: Gonvick Efficiency Project

Gonvick, MN – The CWLC-Gonvick Project will improve the energy efficiency of heating and cooling the old Gonvick school building, which was purchased by the Clear Waters Life Center for conversion into a community-based facility. The building will serve to educate the public about the benefits of alternative energy sources and energy efficiency. (Energy Efficiency & Education; \$4,000)

Bemidji State University: Climate Action Planning

Bemidji, MN – Bemidji State University and Bemidji city officials have made written commitments to reduce greenhouse gas emissions. To comply with these commitments, the partners will collaborate with a hired consultant to form a city Sustainability Commission and draft a Climate Action Plan that will advise the Mayor and City Council on projects that impact the local community members and environment. (Education & Research; \$10,000)

Northwest Technical College: Ethanol-Fueled ATV Demonstration

Bemidji, MN – The project is designed to demonstrate the potential benefits of modifying engines to better utilize ethanol-blend fuels in the regionally-manufactured Arctic Cat all-terrain vehicle (ATV). Students and faculty from the Northwest Technical College's High-Performance Engine Machinist Program and Arctic Cat employees will conduct research in this unique partnership. Their findings will be used to educate decision-makers and the public about the modifications, resulting efficiency gains, cost-effectiveness, potential applications and markets for the engine modifications, exciting areas for further study and testing, and the potential opportunities for further developing bio-fueled engine industries. (Research & Education; \$5,000)

University of Minnesota-Crookston Center for Sustainability: Students Paving a Green Path

Crookston, MN – Students at the University of Minnesota - Crookston will be paired with a faculty or staff member to work on research projects. The projects will include the feasibility and design layout of a methane digester, as well as an inventory of building-to-building energy usage and creating a dorm energy conservation competition. Projects are designed to develop leadership skills, and incorporate a real-world, living laboratory through collaboration between students, faculty, and staff on clean energy projects related to sustainable development. (Education; \$11,000)

SOUTHEAST REGION

Trulson Dental Clinic with HG Wind Power, Inc.: 10 KW Roof-Mounted Wind Turbine

Stewartville, MN – The Trulson Dental Clinic will install a virtually silent, vibration-free wind turbine to generate clean energy for the building. This pilot project is the first of its kind in Stewartville, with the hopes that the magnetically-levitated, vertical-axis wind turbine will serve as a model to test the efficacy of capturing wind energy from a rooftop installation. (Clean Energy; \$5,000)



Northfield School of Art and Technology (ARTech): Greenhouse Project

Northfield, MN – The Northfield School of Art and Technology will construct an environmentally-friendly greenhouse. The project will be student-led in conjunction with an adult mentor. The greenhouse will be used for life science and sustainable food production seminars, and will also provide a space for students to do individual projects involving plants. Finally, the greenhouse will be used for growing organic produce, which will be sold to the local food co-op. (Clean Energy & Education; \$5,000)

Winona County Clean Energy: Clean Energy Methane Collection Project

Winona, MN – The Clean Energy Methane Collection Project will collect approximately 50 percent of the methane that is emitted by the Winona County Landfill and use it to heat a green aquaculture, hydroponic and greenhouse facility. Students from local universities and high schools will assist in the design, development, and construction of the facility. Curriculum will also be available based on mechanical and engineering components of the project, as well as plant and animal biological sciences. An entrepreneurial curriculum will also be offered to students and the local immigrant population. (Clean Energy; \$5,000)

Three Rivers Community Action, Inc.: Home Matters – Energy Efficient Rehabilitation of Foreclosed Homes

Northfield, MN – Home Matters will purchase five foreclosed homes in downtown Northfield MN, rehabilitate them with green and healthy improvements, sell them to low income families, and provide community education throughout the process. The project will address health and safety issues such as moisture and lead-based paint, as well as outdated HVAC systems, inadequate windows, inefficient appliances, and insufficient insulation. In one of the houses they will install a solar hot water heater. Each of these houses will serve as a real-world application of energy efficiency to educate Northfield citizens about green technology and building practices. (Energy Efficiency & Education; \$5,000)

Perpetual Harvest: Solar Thermal Hot Water for Dairy Pipeline Sanitization

Goodhue, MN – Perpetual Harvest will install a solar thermal hot water system for dairy pipeline washing and sanitizing. The benefits of this project will be communicated to other farmers through the creation of a web presence and a cooperative. The three-part plan walks participants through low-cost and no-cost efficiency education for tangible results (solar hot water can save farmers up to 41 percent), and it helps farmers incorporate technologies such as wind, biomass, and solar PV. Finally, by pooling the energy savings and utilizing state and federal incentives, the cooperative will be able to implement higher-cost grid-tied renewable energy solutions. (Clean Energy; \$5,000)

Winona Soil & Water Conservation District: Prairie Sustainable Biofuel Project II

Winona, MN – The Winona Soil & Water Conservation District will work with Pork & Plants and Winona State University to develop a model for how perennial grasses and forbs can be pelletized and produced at a farm-scale level on marginal land, and used as an alternative source of renewable fuel. The project will include the planting, managing, harvesting, and pelletizing of biomass produced at Pork & Plants farm with the aim of demonstrating the offset of the current energy demand at the farm. (Clean Energy; \$5,000)

Region Nine Development Commission: Renewable Energy Inventories

Mankato, MN – Region Nine Development Commission will inventory renewable energy resources in three of nine chosen Minnesota counties, compile completed renewable energy data and/or conduct a gap analysis of renewable energy data. This project aims to increase understanding of existing energy resources which is critical in to determine best use of local energy resources while being environmentally conscious. (Research; \$3,000)

Olmsted County: Think Green Sustainability Fair

Rochester, MN – The Olmsted County Environmental Services in Rochester will hold a Think Green Sustainability Fair to motivate participants to take individual actions at home, at work, and on their farms that will contribute to the reduction of carbon emissions and other positive environmental impacts. The Think Green Sustainability Fair will provide public education and outreach that supports the development of renewable energy, water and energy conservation, expansion of green purchasing, support for local and/or organic food, and waste reduction at home and at work. (Education; \$2,000)

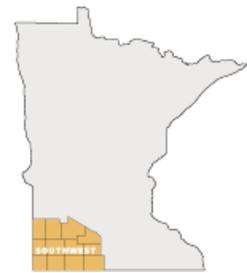
Habitat for Humanity of MN: We Built It Green Homeowner Education Curriculum

Statewide in MN – Habitat for Humanity of Minnesota will develop and administer a homeowner orientation curriculum for high-efficiency homes; the orientation will be targeted to low-income first-time homebuyers but can be easily replicated for existing homeowners. The curriculum incorporates energy conservation behaviors, elements of home maintenance, and environmentally-healthy activities at the home, community, municipal, and state levels. (Energy Efficiency & Education; \$5,000)

SOUTHWEST REGION

Youth Energy Summit & Springfield Public Schools: Green Roof Project

Springfield, MN – The Springfield Youth Energy Summit Team has been researching the placement of and will be contracting for an assessment of a green roof on a portion of the school. A green roof would reduce energy costs, remove pollutants from the water and air, reduce greenhouse gas emissions and runoff, improve the life of the roof, and be the first of its kind in the Springfield community. Additional components of the project include actual modifications of the roof, curriculum development, and community outreach. (Energy Efficiency, Education & Research; \$10,000)



Western Community Action: Energy Efficiency Project

Lincoln, Lyon, Redwood, Cottonwood & Jackson Counties, MN – This project is to identify households that do not meet Energy Assistance Program or Weatherization Program criteria, but are in need of energy efficiency consultation, and offer them energy audits of their home at no cost to the household. The goal is to lower their energy costs up to 25 percent through audits and community education courses in the techniques and benefits of energy efficiency. This grant will cover audits for 40 different homes. (Energy Efficiency & Education; \$10,000)

Redwood County Area Development Corporation & Region 9 Development Commission: AURI Renewable Energy Template

Redwood, Brown, Watonwan & Martin Counties, MN – The Agricultural Utilization & Research Institute (AURI) Renewable Energy Template is a planning tool for county and regional economic developers. The objective of the project is to give county the capacity to estimate local resources and local demand for energy in order to stimulate economic development, using this tool. The template will serve as a community-based research tool as it offers data to estimate county level energy use and renewable energy feasibility and potential. Two separate awards were made for this project: (1) Redwood County Area Development Corporation for Redwood County: \$5,000; and (2) Region 9 Development Commission for Brown, Watonwan, Martin Counties: \$9,000. (Research; \$5,000 & \$9,000)

Prairieland Solid Waste Management: Cellulosic Waste to Ethanol

Martin County, MN – The Prairieland Cellulosic Waste to Ethanol project is designed to determine the feasibility of converting waste paper from the Prairieland Solid Waste Management facility into cellulosic ethanol. This study will determine the proper economics and a business plan for the facility, including the cost savings of converting waste paper to ethanol, sending less material to landfills, creating revenue from ethanol sales, and more. (Clean Energy & Research; \$6,000)

WEST CENTRAL REGION

Damstrom Farm: Wind Energy Project

Alexandria, MN – Craig Damstrom is building a 3 MW community wind project outside of Alexandria, MN. Energy generated will power the Damstrom Farm's irrigation needs and will supply energy for use by the local community. After turbine installation, all wells and irrigators will be run by green power, with excess energy sold to the utility to power other local farmers irrigation needs, homes and businesses. The project will increase local knowledge of the benefits of wind energy, create jobs for local contractors working on the project, and offer green energy to co-op area customers. (Clean Energy; \$3,750)



Prairie Woods Environmental Learning Center: Expanding Solar Heating Capacity and Educational Opportunity

Spicer, MN – This project will add 12 solar hot water panels to their maintenance building and implement a system to pre-heat veggie oil for a biodiesel processor. The biodiesel will fuel program vehicles and equipment and may also provide supplemental heating for the shop. This project will enable Prairie Woods to heat their buildings using virtually no fossil fuels through a combination of solar air, solar hot water and biomass. This project will provide renewable energy learning opportunities for visitors and students from throughout west central and southwestern Minnesota. (Clean Energy; \$5,000)

Greater Milan Initiative: Community Energy Education and Efficiency Project

Milan, MN – The project will hold workshops to educate Milan area residents on ways to reduce energy use and costs, and document energy savings in order to build momentum for further energy saving programs in the future. The workshop series will focus on energy efficiency and conservation and will educate 20 – 30 residents. Practical assistance will be provided to workshop participants to implement low- and no-cost energy efficiency upgrades. Results and workshop materials will be shared at community events to further outreach and education. (Energy Efficiency & Education; \$5,000)

Clean Up the River Environment (CURE): Montevideo Sustainable Housing Training and Demonstration Project

Montevideo, MN – Montevideo's Clean Up the River Environment (CURE) and Habitat for Humanity are working with other community organizations to build a cost-effective house that is 40 percent more energy efficient than conventional homes. The home may also have a solar hot water heater that will provide 63 percent of the hot water needs. This project will hold at least three public meetings to educate contractors, students and the general public about solar energy design and construction. (Energy Efficiency & Education; \$10,000)

Adult Training & Habilitation Center: Recycle Your Holidays™

Statewide in MN – Recycle Your Holidays™ is a holiday light recycling program. By providing bins to businesses and community centers across the state, the program plans to recycle 50,000 pounds of old holiday light strands. Through media outreach and promotion at events, they will educate the public on the importance of recycling their old inefficient holiday lights and the benefits of using LED holiday lights. The project will also provide employment opportunities to individuals with disabilities and related conditions. (Energy Efficiency & Education; \$2,500)

St. Cloud Joint Planning District: Sustainability Framework Plan

St. Cloud, MN and Surrounding Area – St. Cloud Joint Planning District Board will create a regional Sustainability Framework Plan. The plan will outline best practices for 17 different key sustainability focus areas. The plan aims to yield reductions in greenhouse gas emissions, economic savings for greener practices, clean energy projects, and adoption of green ordinances. The plan will be made by and for local communities, professionals, public and private sector and the sustainability committee to guide future generations toward sustainability. (Research; \$5,000)

Youth Energy Summit: Little Theater Solar Thermal Panels

New London, MN – The New London Little Theater is building and installing solar thermal panels for supplemental heat, using 10 mm clear vinyl for direct solar. The vinyl is a readily available, lightweight, inexpensive, and highly insulating material. The panels will cover an area 28 feet long and 8 feet tall and are expected to cut the theater's heating needs by 50 percent. The theater will be working with Youth Energy Summit (YES) to conduct a "How to build your own Solar Thermal panels" workshop and provide resources to community members interested in building their own panels. (Clean Energy; \$5,000)

University of Minnesota-Morris: Regional Fitness Center Pool Solar Thermal Project

Morris, MN – The University of Minnesota Morris is installing a solar thermal system on the roof of the Regional Fitness Center in Morris, Minnesota. The solar thermal system will be used to partially heat the indoor community swimming pool and projects to save 29,899 lbs of CO2 emissions per year. The project will educate fitness center members about the solar thermal system by installing an informational kiosk other launching other outreach campaigns. (Clean Energy; \$3,750)