Updated January 2019

2019 Dane County Departmental SMART Fund

Funding Opportunity Description

The Sustainability Subcommittee of the Public Works and Transportation Committee is responsible for distributing grant money to county departments from a dedicated fund in the county's capital budget. This fund supports the county's goal of becoming more sustainable by, for example, investing in initiatives that reduce greenhouse gas emissions by implementing systems that result in more efficient energy use and investments in renewable energy production at county facilities. The fund is a foundational part of the county's continued efforts to ensure that important natural resources and ecosystem services are maintained for current and future generations while working to increase equity and inclusion in all that we do. The fund can be used by your department to help you implement strategies identified in the Dane County Government Sustainable Operations Plan, to supplement current budget items that do not have enough funds to incorporate additional sustainable measures, or to fully fund projects that are not in the current budget, but that will improve the sustainability of county operations and reduce long-term costs.

The subcommittee will select projects to fund based on their consistency with the sustainability principles adopted by the Dane County Board (on October 18, 2012) to guide county government management, operations, and policy making, as well as based on their ability to further implement the Dane County Government Sustainable Operations Plan. The subcommittee will consider applications that might not provide a large financial return on investment but that can be demonstrated by the applicant department to incorporate strong sustainability education benefits for county staff and the public. The subcommittee will also look favorably at innovative pilot projects that test new sustainability technologies in county operations and that can be demonstrated by the applicant department to hold promise for additional future benefits for county facilities.

Benefits of this fund:

- Alignment of departments and staff toward a common understanding of sustainability
- Clarity and consistency in assessing and organizing actions and programs for sustainable government operations
- Enhanced policies and programs incorporating a sustainability perspective
- Enhanced reputation as a proactive contributor to a more sustainable community
- Education of county staff and public on sustainability issues
- Reduced operating costs

Dane County's Sustainability Principles:

Dane County strives to operate in a sustainable way that will:

- Reduce and eventually eliminate county government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;
- Reduce and eventually eliminate county government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances;
- Reduce and eventually eliminate county government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems); and
- Reduce and eventually eliminate county government's contribution to conditions that undermine people's ability to meet their basic human needs.

Eligible Applicants:

Dane County Departments

Award Information:

Application Deadlines: There are 3 application deadlines for 3 rounds of funding. Solicitations for applications will go out via email about 1 month before each deadline.

1. **February 6, 2019** — At this time up to 50% of the funds will be awarded.
2. **June 3, 2019** — At this time up to an additional 25% of the funds will be awarded.
3. **October 4, 2019** — At this time the remainder of the funds will be awarded.

The subcommittee generally makes award decisions within a couple of weeks of the application deadline depending on complexity of the proposals and the subcommittee meeting schedule.

Examples of types of projects that would be eligible:

- Renewable energy or energy efficiency improvement investments for county facilities, such as solar lighting, LED lighting upgrades, energy efficient boilers, etc.
- Purchase of new or upgraded equipment that will improve the overall efficiency of facilities and reduce greenhouse gas emissions, reduce the use and disposal of toxic products, reduce maintenance costs and/or staff time using the equipment, and/or facilitate better tracking, measurement, and verification of sustainable outcomes in county operations
- Water conservation improvements

Application and Submission Information:

Apply electronically to Lisa MacKinnon at Mackinnon@countyofdane.com and Greg Brockmeyer at Brockmeyer@countyofdane.com.

Please include the following in your application:

1) A detailed description of your proposed project
2) How the project, if carried out, will meet the county's sustainability principles
3) How the project, if carried out, will implement specific goals, objectives, and strategies identified in the Dane County Sustainable Operations Plan. Indicate which goals, etc.
4) How the county might build upon the sustainability outcomes of the proposed project
5) How your department intends to track and measure the outcomes of the project, if funded, such as cost savings, energy reductions, maintenance reductions, etc., who will be responsible for measurement and verification, and an estimated timeline for delivery of measurement and verification of outcomes.
6) Budget Sheet: Include all costs of achieving the objectives of the project.
7) Estimated cost savings to the county due to implementation of the project and the payback period. NOTE: Include here information on estimated Focus on Energy incentive savings if your project is eligible for FOE incentives (see https://focusonenergy.com/business or contact Lisa MacKinnon for assistance in getting this information) or other financial incentives that will offset the cost to the county

Questions are to be directed to Lisa MacKinnon at 267-1529 or Greg Brockmeyer at 266-4519.

Project Information:

Please provide the following information (take as much space as you need to provide details):

Department: Alliant Energy Center Address: 1919 Alliant Energy Center Way Madison WI 53713	Total project costs: $183,214 Funding amount in current budget: $0 Funding amount requested: $183,214
Project Title: LED Fixture Lighting	
Project Location: Exposition Hall Monona Rooms 1-8, Lake Rooms 1-4 & Board Room	
Project Description: This project will replace 189 3 lamp 4 X 8 T8 fixtures and 162 down lights with 267 2x4 LED fixtures.& 10 LED Exit lights.	

Describe how the proposed project moves the county toward meeting the following Sustainability Principles. (See the guiding questions in the box below.) Responses to this section will be used to determine the relative level of sustainability for each project.

- Reduce and eventually eliminate county government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;

  This project will significantly reduce the county's reliance on fossil fuels. By replacing the extensive lighting system required to illuminate the eight Mendota rooms, four Lake rooms and board room inside the Alliant Energy Center's Expo Hall, we expect to reduce its power draw in those facilities by almost 60 percent. The 189 florescent fixtures draw power at a rate of 90W each, equaling 17.01 kWh. An additional 162 down lights currently draw 75W, or 11.66 kWh in total. Together, the lights in the spaces pull 60,215 kWh over the course of a year. By contrast, the 267 proposed LED fixtures would draw just 45W each. In one year, the county could expect to use 34,983.9 fewer kWh of electricity. This diminished power draw would allow the project to pay for itself. In addition, a significant savings would be generated by the heat-reduction from the incandescent bulbs.

  However, this timetable is likely to shorten given to factors: cost and use. Energy costs have risen by over 60 percent since 2001, according to data from the U.S. Energy Information Administration. Should this trend continue into future decades, energy-efficient LED fixtures are likely to realize even greater returns. Also, these estimates assume that the Expo Hall rooms covered in this proposal will continue to be used for about 2,100 hours every year. Given that Dane County and the city of Madison have planned for substantial redevelopment around the Alliant Energy Center, including more amenities, hotels and transportation services, it seems safe to assume that the rooms in question are likely to receive more use as Madison's south side becomes a gateway to the city. More use means that energy efficient investments made now will show greater returns as demand to use the rooms increases.

  All told, the power saved by installing the lights is equal to approximately 24.8 metric tons of carbon dioxide emitted into the atmosphere each year. Replacing the lights in the Lake and Mendota rooms of the Alliant Energy Center's Expo Hall would be the same as taking more than five cars off the road, planting over 30 acres of forest or leaving 57.4 barrels of oil in the ground, according to the EPA.

- Reduce and eventually eliminate county government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances; **N/A**
- Reduce and eventually eliminate county government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems); **N/A** and
- Reduce and eventually eliminate county government's contribution to conditions that undermine people's ability to meet their basic human needs. **N/A**

Include in your description any estimated reductions of GHGs / CO2 equivalent emissions related to your proposal. Please use the following calculator to do this: http://www.epa.gov/cleanenergy/energy-resources/calculator.html

Describe how the proposal furthers implementation of the Dane County Government Sustainable Operations Plan goals, objectives, and strategies in your department and/or countywide. Please identify specific plan goals, objectives, and strategies accomplished.

This project will cut greenhouse gas emissions by greatly reducing the amount of energy needed to illuminate the eight Mendota rooms, four Lake rooms and conference room in the Alliant Energy Center's Expo Hall. Lower emissions generated by county facilities is an express goal of the Sustainable Operations Plan. The move will help Dane County build resilience in the face of global climate change on government operations and our community.

Describe how the county might build upon the outcomes of the proposed project to work toward greater sustainability. **The Alliant Energy Center sees frequent use by other county staff and departments. The large-scale adoption of LED fixtures in the Expo Hall's meeting rooms seem likely to spark discussion about the cost savings and benefits of applying for SMART funds. Specifically, other departments with extensive lighting systems to embrace a switch to LED fixtures.**
Does the proposed project include a strong sustainability education component? If yes, describe the educational component, who it will reach, and how it will be communicated. **The work of replacing hundreds of lighting fixtures to brand new energy-efficient alternatives would be a large job that has the potential to attract coverage from local media. The Alliant Energy Center's public information and marketing officer would alert local media to the work being done ahead of time by providing outlets with a press release, fact sheet and images. Outside of local media coverage, the marketing officer would publish pictures, video and graphics about the switch to LED lights on the Alliant Energy Center's social media pages so that its audience, numbering in the tens of thousands could see the investments the county is making in reducing its dependence on fossil fuels.**
Does the proposed project pilot an innovative new sustainability-advancing technology in county operations and can it be demonstrated by the applicant department to hold promise for additional future applications in county facilities? If yes, describe the elements of the innovative technology being proposed. **This project is not a pilot project of an innovative new sustainability-advancing technology.**
Describe how your department will track and measure outcomes of the proposed project (i.e., annual cost savings, annual energy savings, resource use reductions, maintenance reductions, etc.). Include a timeline for measurement and reporting outcomes, and the staff member contact who is responsible for conducting the tracking and measurement and reporting back. **The outcomes of this project will be measured by savings in the Alliant Energy Center's electric costs. Savings from this project can be calculated based on hours that the rooms are used for event-related occupancy, calculating the kWh savings.**

Contact person: Don Kraft	Phone: 608-267-3983 E-mail: kraft.donald@alliantenergycenter.com

Guiding questions for the project description. Applicants should include a detailed discussion of the work planned and/or the technical approach used that illustrates what the project will achieve and how it will comply with and implement the county's four sustainability principles and the Dane County Government Sustainable Operations Plan. The following questions provide a guideline to help your department frame and describe the project. Please feel free to address additional issues.

- Will this project reduce wasteful dependence upon fossil fuels, underground metals, and minerals?
- Will this project ensure that the smallest possible amount of resources is used?
- Has the proposal included green procurement standards for required goods, materials, and services?
- Will this project lead to a decrease in greenhouse gas emissions?
- Will this project reduce the need for fossil fuel-dependent transport, increase public transit use, or increase walking and bicycling?
- Will this project support businesses that emit less polluting or hazardous substances to air, water, soil and ecosystem services?
- Will this project raise awareness about waste prevention and recycling and will it help reduce the amount of waste going into the landfill?
- Will this project still be relevant when looking at the demographic changes ahead?
- Will this project consider the most up-to-date technology for recycling and waste reduction?
- Will this project use products that are non-polluting or come from an environmentally friendly source that will reduce negative impacts of the project on the environment, e.g., FSC wood, non-toxic, and non bio-accumulative chemicals?
- Will this project avoid the risks of water, air, and soil contamination?
- Will this project support the provision of environmental and social services in a certain area (e.g., flood prevention, water purification, air cleaning)?
- Will this project be beneficial in helping the county to adapt to the effects of climate change (e.g., changes in precipitation, flood and drought risks, heat emergencies, etc.)?
- Is this project avoiding negative impacts on water bodies, wetlands, etc., and is this project supporting the establishment and management of protected areas in water bodies, wetlands, etc.?
- Is this project proposing activities to raise awareness about water scarcity, water conservation, or water recycling and will this lead to an improvement of the water quality of a certain water body?
- Will this project still be beneficial once the funding is used and what, if any, public funding will need to be used for ongoing maintenance?
- Will this project support jobs in the eco-technology field and/or does this project include training for relevant stakeholders in renewable energy and other clean and sustainable technology?
- Has this project developed a strategy for measuring anticipated outcomes of the project?
- Has this project developed a strategy for how to disseminate results or best practices?
- Will this project improve equity outcomes for everyone?
- Will this project improve access to community services and facilities for all people of the community?