

**Environment and Natural Resources Trust Fund
2011-2012 Request for Proposals (RFP)**

LCCMR ID: 147-F3+4

Project Title: Statewide Lodging Facilities: Energy & Water Conservation Expansion

Category: F3+4. Renewable Energy

Total Project Budget: \$ \$470,000

Proposed Project Time Period for the Funding Requested: 2 yrs, July 2011 - June 2013

Other Non-State Funds: \$ 0

Summary:

Help 50% of lodging facilities statewide (roughly 1200) adopt energy efficiency and water conservation practices and save over 2.5 million kilowatt-hours, 4.5 million gallons of water, and 765,000 therms.

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Sponsoring Organization: U of MN

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Location

Region: Statewide

Ecological Section: Statewide

County Name: Statewide

City / Township:

<input type="checkbox"/> Funding Priorities	<input type="checkbox"/> Multiple Benefits	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Knowledge Base
<input type="checkbox"/> Extent of Impact	<input type="checkbox"/> Innovation	<input type="checkbox"/> Scientific/Tech Basis	<input type="checkbox"/> Urgency
<input type="checkbox"/> Capacity Readiness	<input type="checkbox"/> Leverage	<input type="checkbox"/> Employment	<input type="checkbox"/> TOTAL <input type="checkbox"/> %

I. PROJECT STATEMENT:

Tourism is a cornerstone of Minnesota’s economy, generating \$11.2 billion in sales revenue and providing over 10% of the state’s private sector employment. Statewide the tourism industry—and the lodging industry in particular (i.e., hotels, motels, resorts and bed & breakfasts)—is interested in moving toward a more sustainable tourism model: one that protects natural resources while helping these businesses thrive. Explore Minnesota Tourism’s database documents that roughly 25% of the state’s lodging facilities have adopted some “green practices,” such as green cleaning products and recycling, but struggle with achieving broader adoption of water conservation practices and implementing cost-saving energy efficiency practices. A 2010 tourism industry survey indicates that lodging owners are interested in adopting more sustainable practices, but lack the time and energy to make sense of available information to move toward implementation.

The Clean Energy Resource Teams (CERTs) and the University of Minnesota Tourism Center are eager to provide this sought-for guidance on energy efficiency and water conservation practices to the state’s lodging facilities. Our goal is to reach out, via existing tourism associations and one-on-one contacts, to lodging facilities around the state, to provide the tools they need to take voluntary action on energy and water conservation, and to document that 50% of these facilities (roughly 1,200 facilities) adopt at least one new energy efficiency or water conservation best practice over the next two years. Specifically, we seek statewide adoption of a wide variety of conservation technologies including, but not limited to:

- *low-flow showerheads and faucet aerators*
- *compact fluorescent light (CFL) bulbs*
- *light-emitting diode (LED) exit signs*
- *lighting occupancy sensors*
- *smart power strips*
- *VendingMisers*

By developing a series of step-by-step Action Kits for Energy and Water Conservation in Lodging Facilities and associated Implementation Campaigns for each of the six above-listed technologies, we aim to save over 2.5 million kilowatt-hours, 4.5 million gallons of water, and 765,000 therms.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: *Coordinate Development of 6 Action Kits & Bulk Purchase* Budget: \$ 120,000

CERTs, UM Tourism Center and other partners will collectively develop a series of easy-to-understand Action Kits and Implementation Campaigns that that address barriers such as confusion about the technology options, the overwhelming feeling of stepping out alone, and high upfront costs. These Action Kits will provide technology options tailored to Minnesota lodging facilities, a step-by-step guide for implementation, and bulk-buy opportunities.

Outcome	Completion Date
1. Work with existing lodging associations and tourism partners to develop the slate of Action Kits to target and schedule for dissemination. This will help foster industry collaboration, ensure that the right technologies are targeted, and that Action Kits convey the right messages and incentives for action.	Nov. 2011
2. Develop Action Kits for each technology that provide information on the technology, steps to take action, and cost incentives. Supporting web-based materials would include savings calculations, frequently asked questions, case studies, installation information, order forms, and signage/branding to explain actions taken to guests.	Feb. 2013
3. Coordinate bulk purchases for each technology to buy-down the initial price, help facilities save money, and encourage technology adoption.	May 2013

Activity 2: *Carry out Implementation Campaigns to Move 50% of Minnesota’s Lodging Facilities (roughly 1,200) to Adopt at least one Best Practice* Budget: \$ 300,000

CERTs and the UM Tourism Center will work with existing tourism associations, CERT Regional Coordinators, utilities, media outlets and others to roll out this project to all lodging facilities across the State. Each Action Kit will be promoted via a three-month Implementation Campaign to help lodging staff understand each technology, connect with local technical assistance, and adopt a best practice.

Outcome	Completion Date
1. Coordinate broad-based project roll out and dissemination of Implementation Campaigns to accompany each Action Kits with lodging industry partners.	March 2013
2. Identify key lodging targets and coordinate contacts and site visits by CERT Regional Coordinators, UM Tourism Staff, and other project partners to secure bulk-purchase sign-up and adoption for each technology.	April 2013
3. Present Action Kits at regional & statewide tourism meetings/conferences.	May 2013
4. Follow up with participants to confirm installation of energy efficiency or water conservation technologies.	May 2013

Activity 3: Report Energy Efficiency and Water Conservation Adoption and Associated Savings
Budget: \$50,000

CERTs and the UM Tourism Center will collaborate with partners to document the energy and water saving actions taken by lodging owners.

Outcome	Completion Date
1. Summarize # of technology units installed through Implementation Campaigns	June 2013
2. Calculate energy and water savings associated with Implementation Campaigns	June 2013
3. Create interactive online participant map to show other lodging facilities who else is taking action and thereby generate peer-to-peer pressure and reassurance to act.	June 2013
4. Develop evaluative report on outcomes, including outreach strategies used, number of people reached, number of people who took action, collective savings from technologies adopted, and participant case studies & testimonials.	June 2013

III. PROJECT STRATEGY

A. Project Team/Partners:

- CERTs is a collaboration among five partners who seek to connect communities with resources to identify and implement clean energy projects. Three partners will provide regional coordination capacity: UM Regional Sustainable Development Partnerships (UMRSDP), Southwest Regional Development Commission, and Green Institute. UM RSDP Staff will provide overall project coordination and lead Action Kit development, outreach, & bulk purchasing. (Requesting funds)
- University of Minnesota Tourism Center prepares the tourism industry for success and sustainability. For 25 years the Center has worked toward sustainable tourism, currently hosts the travel green website for MN and is a primary source for tourism research in Minnesota. The Center will draw on existing research to help assess the most effective approaches, help identify likely adopters, and coordinate with existing tourism organizations. (Requesting funds)
- Explore Minnesota Tourism (EMT) is the state’s tourism marketing organization. As a next step to their Minnesota Travel Green recommendations, EMT will promote and disseminate information to the industry through their industry website, regional tourism associations, state conference and bi-weekly electronic newsletter. (EMT is not requesting funding).

B. Timeline Requirements: This is a two-year project. We anticipate a phased roll-out of each of the step-by-step Action Kits, essentially one every 3-4 months, to allow our CERT Regional Coordinators, UM Tourism Center staff, industry associations, and regional CERT members to make a concerted outreach push for each corresponding Implementation Campaign and to facilitate technology bulk purchases. Action Kits will be ready at least one-month before roll-out and documentation and tracking will occur following the wrap-up of each Implementation Campaign.

C. Long-Term Strategy: Our long-term goal is to see these energy and water conservation strategies as common practice across Minnesota lodging facilities and to see existing tourism organizations adopt this work as their own. CERTs co-coordinates Minnesota Schools Cutting Carbon – an effort targeted directly to schools – this project will build on that experience but explore how to tailor our work toward a business audience. This project is intended to serve as a pilot for future CERTs-Industry collaborations.

2011-2012 Detailed Project Budget

IV. TOTAL TRUST FUND REQUEST BUDGET 2 years

BUDGET ITEM <i>(See list of Eligible & Non-Eligible Costs, p. 13)</i>	AMOUNT
Univ of MN Regional Sustainable Dev. Partnerships (UM RSDP)	
Personnel: UM RSDP (for CERTs) will employ a (25% time) project coordinator to guide project, coordinate with industry partners, network with Utilities. (75% salary, 25% fringe) 2 years.	\$ 37,000
Personnel: UM RSDP (for CERTs) will hire a (100% time) Action Kit Coordinator to do much of the research, action guide development, metrics tracking, and database management. (80% salary, 20% fringe) 2 year.	\$ 98,000
Personnel: UM RSDP (for CERTs) will hire (25% time) Web and Communications Coordinator for web content development, updating Action Kit materials, adding all guides, on-line forms, technical resources, & partners to website. (80% salary, 20% fringe) 2 years.	\$ 28,000
Personnel: Each UM RSDP region (five: CEN, NE, NW, SE, WC) will hire a (25% time) Regional Coordinator to conduct Implementation Campaigns. \$60,000/year total for the 5 organizers; 2 year positions. 100% toward salary.	\$ 120,000
Contracts: Web-designer to make minor upgrades to CERT site to add in a specific section for this project.	\$ 3,000
Equipment/Tools/Supplies: Printing of specific Action Kits to distribute at regional tourism meetings and statewide conferences to encourage adoption.	\$ 5,000
Travel: Travel (@ \$0.50/mile) for UM RSDP CERT Regional Coordinators (CEN, NE, NW, SE, WC) to meet directly with lodging owners and attend regional & statewide conferences. \$2000/region/year for 2 years.	\$ 20,000
Univ of MN Tourism Center	
Personnel: UM Tourism Center will employ an Extension Educator (50% time) to assist with Statewide Outreach to tourism association and at tourism events throughout the 2 years. (70% salary, 30% fringe)	\$ 46,000
Personnel: UM Tourism Center will hire a (100%) Graduate Research Assistant for two years. (50% salary, 50% fringe)	\$ 32,000
Travel: Travel (@ \$0.50/mile) for Extension Educator to travel to events and meeting with lodging facilities.	\$ 2,000
Contracts: Green Institute	
Contracts: Green Institute Regional Organizer = \$16,000/year for two years (to hire an organizer for the Metro region, 75% salary, 25% benefits).	\$ 32,000
Personnel: Green Institute (for CERTs) Technical Staff (5% time) will review estimated savings, set metrics and savings calculations, aid with technology research. (75% salary, 25% fringe)	\$ 13,000
Travel: Travel (@ \$0.50/mile) for Green Institute (Metro CERT Regional Coordinator) to meet directly with lodging owners and attend regional conferences. \$2000/year for 2 years.	\$ 4,000
Contracts: Southwest Regional Development Commission (SW RDC)	
Personnel: SW CERT Regional Organizer = \$12,500/year for 2 years (to hire an organizer for the SW region, 100% toward salary)	\$ 25,000
Travel: Travel (@ \$0.50/mile) for SW RDC (SW CERT Regional Organizer) to meet directly with lodging owners and attend regional tourism conferences.	\$ 5,000
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$ 470,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period	NA	NA
Other State \$ Being Applied to Project During Project Period: CERTs will apply for State Legislative (RDF) support next year to coincide with the FY 2012-2013 time period to cover core Staff who will also work on this project.	TBD	Pending
In-kind Services During Project Period: Tourism Industry partners will work with the project to assist with Communications and Outreach.	TBD	Pending
Remaining \$ from Current ENRTF Appropriation (if applicable)	NA	NA
Funding History: CERT partners currently (FY2010-FY2011) have dollars from both the State Legislature (RDF) and the Bush Foundation to pilot our concept of Action Guides and Education Campaigns and to document the level of savings we achieve via this targeted method.	TBD	Secured

Statewide Lodging Facilities: Energy & Water Conservation Expansion

An effort of the Clean Energy Resource Teams (CERTs) and University of Minnesota Tourism Center

Project Goal: 50% of Minnesota's 2,400 lodging facilities will adopt at least one new energy efficiency or water conservation best practice

Project Estimated Savings: 2.5 million kilowatt-hours, 4.5 million gallons of water, and 765,000 therms

Overview: The six technologies to be implemented in lodging facilities

LED Exit Lights

Replace existing signs with LEDs to reduce lighting energy used.

Location: All exits
Adoption Goal: 1,000 signs
Est. Savings: 375,000 kWh/yr



Smart Power Strips

Use with office & entertainment equipment to cut phantom load.

Location: Lobby, offices & rooms
Adoption Goal: 1,500 strips
Est. Savings: 375,000 kWh/yr



Occupancy Sensors

Install in low-occupancy areas to turn off lights when not needed.

Location: Low-traffic areas
Adoption Goal: 1,500 sensors
Est. Savings: 306,000 kWh/yr



VendingMisers

Install on beverage machines to shut down compressors & light.

Location: Vending area(s)
Adoption Goal: 700 units
Est. Savings: 1,175,300 kWh/yr



Low-Flow Showerheads & Faucets

Reduce water & heat usage.

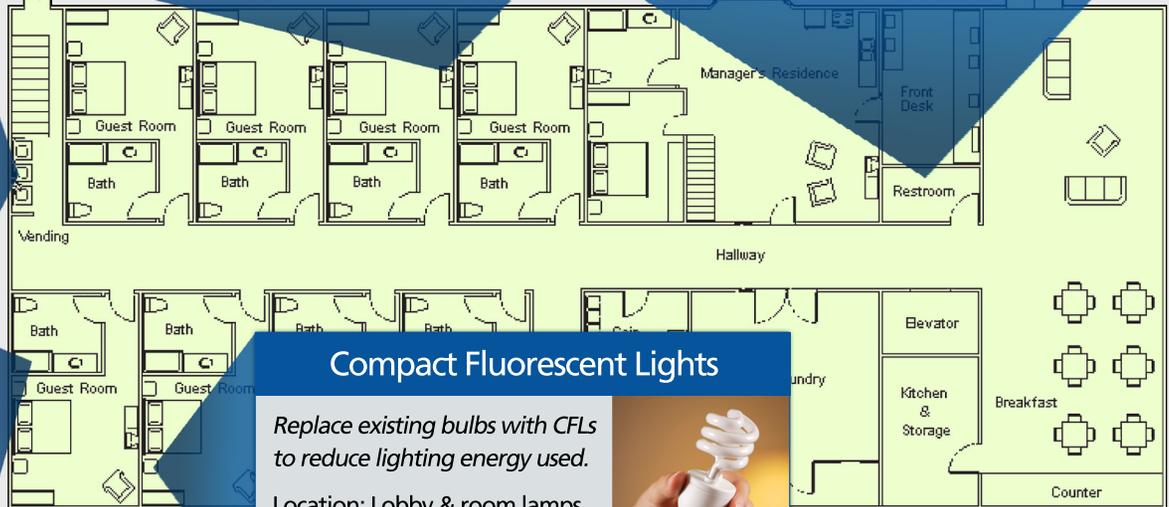
Location: All bathrooms
Adoption Goal: 1,500 units
Est. Savings: 4.5 million gal/yr & 765,000 therms/yr



Compact Fluorescent Lights

Replace existing bulbs with CFLs to reduce lighting energy used.

Location: Lobby & room lamps
Adoption Goal: 4,000 CFLs
Est. Savings: 360,000 kWh/yr



Project Activities:

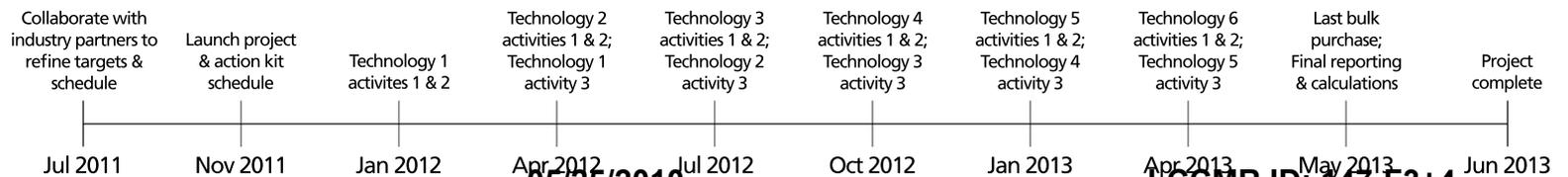
For each of six technologies.

Activity 1: Develop Action Kit

Activity 2: Implement Campaign

Activity 3: Calculate Savings

Full Timeline: This timeline covers planning, implementation of six technology campaigns, and reporting for the two-year project



Project Manager:

Melissa (Lissa) Pawlisch is the Clean Energy Resource Teams (CERTs) Coordinator for the University of Minnesota's Regional Sustainable Development Partnerships program. Lissa has spent over 12 years working on energy-related issues. In 2003, she joined the Regional Partnerships to help them launch CERTs. She has since worked with CERT program and community partners to form regional teams and steering committees, convene clean energy forums, and connect communities with technical and funding resources to implement their clean energy ideas. Lissa is an alumnus of Macalester College (B.A.) and of the Humphrey Institute of Public Affairs (M.S. – Science Technology and Environmental Policy).

Ms. Pawlisch has served as the Principal Investigator on all of University of Minnesota's CERT-related grants since 2004 and would continue to serve in that fashion should this project receive funding. Ms. Pawlisch serves as the CERT Statewide Coordinator, linking all of the CERT partners together and providing overall direction to CERTs.

Organizational Description:

The Clean Energy Resource Teams (CERTs) are a public-private partnership designed to connect Minnesotans with the resources they need to identify and implement community-scale energy efficiency and renewable energy projects. CERTs is currently staffed by the University of Minnesota's Regional Sustainable Development Partnerships, The Green Institute, Southwest Regional Development Commission, The Minnesota Project, with coordination from the Minnesota Department of Commerce's Office of Energy Security. CERTs is made of seven community-based teams around the State.

The University of Minnesota Tourism Center strives to be the leading source for tourism research & education. Our expected outcomes are the sustainable growth, development and return on investment (ROI) for tourism – a leading industry in MN and the world. The Center creates relevant & research based educational offerings to maximize ROI & consumer experiences. We contribute both theoretical and applied research to improve tourism and the multitude of decisions made around it. Our current repertoire includes 4 core educational products and a full suite of research capabilities, complemented by facilitation and seminar offerings. The Center team includes its staff, 18 member advisory committee, 21 University affiliates, and Extension's Community Vitality Capacity Area. Particularly important external partners include Carlson Companies, state government offices of Tourism and Transportation, as well as MN communities.