

Environment and Natural Resources Trust Fund 2009 Phase 2 Request for Proposals (RFP)

LCCMR ID: 103-D2

Project Title: Toolkits and Methods for Energy Efficient Communities

Total Project Budget: \$ \$194,000

Proposed Project Time Period for the Funding Requested: July 2009 to June 2011 (2 years)

Other Non-State Funds: \$ \$0.00

Priority: D2. Residential Energy Conservation

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Last Name: Manning

Sponsoring Organization: Cooperative Energy Futures

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City / Township:

Metro

Hennepin, Ramsey

Summary: Cooperative Energy Futures will help neighborhood associations and community leaders coordinate bulk-buying and group contracting efficiency projects by designing, assessing, and refining a toolkit and researching financing and feedback support.

Main Proposal: 1008-2-038-proposal-2009_main_proposal_template CEF.doc

Project Budget: 1008-2-038-budget-RFP_2009_Project Budget CEF.xls

Qualifications: 1008-2-038-qualifications-Project Manager Qualifications and Organization D

Map:

Letter of Resolution:

Toolkits and Methods for Efficient Communities

MAIN PROPOSAL

PROJECT TITLE: Toolkits and Methods for Efficient Communities

I. PROJECT STATEMENT

As Minnesota residents struggle with rising home energy costs, utilities face increasingly difficult challenges providing reliable electricity and heating fuel while increasing energy conservation and controlling carbon. We know that energy efficiency can be the profitable bedrock of a sustainable energy economy that provides local economic opportunity while protecting consumers from price volatility; yet it is almost untapped at the residential level. Cooperative Energy Futures aims to provide communities easy access to residential energy efficiency by empowering local leaders with the tools to engage their neighbors and support in bulk buying and group-contracting of services – harnessing cooperative entrepreneurship to help communities save money, energy, and carbon emissions. We will further review the effectiveness of our techniques to create an effective toolkit that can be easily shared and disseminated as we work to train and empower local organizers.

II. DESCRIPTION OF PROJECT RESULTS

Result 1: Develop toolkit for community-based bulk efficiency projects **Budget: \$ 144,000**

We will work with neighborhood associations, block leaders and other existing groups in 3 Twin Cities neighborhoods to implement a community-driven, community-based energy efficiency program. From an initial small-scale pilot project (efficiency kits and bulk contracting) in Merriam Park, St. Paul, we have put together a set of best practices, guidelines and draft materials. During the grant phase we will assess our materials and procedures and refine them based on systematic observations as we implement our approaches in more communities. The pilot communities will be selected based on adequate density of approximately 20 or more homes within a half-mile by half-mile area, identifiable community leadership, and level of interest and need within the community. We will provide information and guidance to selected communities as individual homeowners identify energy efficiency needs for bulk purchase, receive energy audits, and negotiate as a group to arrange bulk contracting of insulation and weatherization services. The aggregation of materials and contracting creates discounts and community finance opportunities, which will eventually allow us to expand access to lower-income communities and effectively harness the cooperative model.

Deliverable

Completion Date

- | | |
|---|------------------------------------|
| 1. Comprehensive toolkit for interested communities | Refined throughout, delivered 6/11 |
| Will include: A. Step-by-step process for engaging community members, B. sample meeting guidelines, phone protocols, and emails, C. Clear information and communication support on the importance of energy efficiency, D. locally customizable Cooperative Energy Futures fliers, E. protocol for working with contractors, F. Documentation on rebate and other incentive programs, G. Documentation on local auditing services, H. List of existing financing opportunities. | |

Result 2: Exploratory research on energy savings from energy-use feedback **Budget: \$27,000**

We will examine energy savings in homes with The Energy Detective (TED), an in-home feedback device. A small group of homes will be randomly selected to receive a TED. These homeowners will be interviewed about their interactions with the TED and their responses to the feedback. In addition, their electricity usage will be analyzed separately, comparing it to their own use before the TED as well to electricity usage in other non-TED homes also participating in the project.

Deliverable

Completion Date

- | | |
|----------------------------|---------------------------------|
| 1. Summary of observations | Analyzed monthly, reported 4/11 |
|----------------------------|---------------------------------|

Toolkits and Methods for Efficient Communities

Result 3. Explore Innovative Savings-Based Finance Opportunities

Budget: \$23,000

We will meet and consult with community leaders, local financial institutions like University Bank, and utilities to begin small-scale testing of innovative finance tools that we have already identified through our research. Our goal is to carry out several small demonstration projects in order to provide strategic recommendations for broader roll-out of innovative tools for residential energy efficiency finance. We will pursue mechanisms including 1. on-bill payment loan financing (loan through a utility bill), 2. third-party bill management (finance and bill-payment by a third-party), and 3. community financing through a cooperative capital pool.

Deliverable

Completion Date

1. Recommendations of Strategic Approaches to Residential Efficiency Finance Reported 6/11

III. PROJECT STRATEGY AND TIMELINE

A. Project Partners

Cooperative Energy Futures is a start-up cooperative formed through a partnership of community leaders, youth innovators, and researchers. Christie Manning, a social psychology professor at Macalester College, Kristen Eide-Tollefson, a community energy advocate and small business owner, and Timothy DenHerder-Thomas, a student organizer and innovator around climate solutions, work with a team of 8 core leaders and a broader group of volunteers supported by a Steering Committee of non-profit and small business leaders in related fields. The Minnesota Project is working with CEF to catalyze partnerships with existing local community initiatives around energy efficiency and clean energy and help establish new models for community energy solutions. In general, we work through collaborations with organizations, utilities, home efficiency contractors, and informal community groups like Unity Unitarian Church and neighbors in Merriam Park. We have strong connections and draw both expertise and volunteers from Macalester College.

B. Project Impact

We will provide home efficiency services to metro area residential communities (primarily owner-occupied, though we are seeking ways to include rental properties) from a range of socioeconomic backgrounds. As a cooperative entity, we further aim to frame energy efficiency as an economic and community asset that can allow communities to create real tangible gains. We anticipate creating energy savings in the range of 10-50% (depending on existing home condition and behavior and the technical and behavioral improvements we create) in the homes we work with, which has an impact on statewide demand management and energy supply.

C. Time

By July 2009, we will have an initial pilot project and a series of support materials, and will be incorporated as a cooperative. At that point, we will be ideally suited to start testing our model in a broader range of communities, and with more extensive support and coverage of each neighborhood. The two-year time-frame of the grant will allow us to track effectiveness over many seasons and assess and refine our toolkit over time – an ideal period for us to demonstrate scale.

D. Long-Term Strategy (if applicable)

Our long-term role will be as a self-sustaining community efficiency and sustainability cooperative. As we identify the most effective ways to engage communities in harnessing the efficiency assets of their own homes and communities, we intend to generate revenue through bulk-purchasing, group-contracting, savings-based financing, and community sustainability consulting for our members and the general public. LCCMR funding will allow us to refine these approaches while generating the base of participation needed to sustain this business model over the long-term and spreading our ideas to areas we cannot serve. As social entrepreneurs, we see the next few years as the incubation phase of a new community-based industry based around residential energy efficiency as the key initial resource in the creation of a sustainable economy.

Project Budget

IV. TOTAL PROJECT REQUEST BUDGET

<u>BUDGET ITEM</u>	<u>AMOUNT</u>	<u>% FTE</u>
Personnel: Project Coordinator	\$ 40,000	50%
Field Coordinator	\$ 60,000	100%
8 Team Member Stipends (\$2500/year x 2 years)	\$ 40,000	10%
Equipment/Tools: Office space, communications, web and database support, printing and postage, laptop, database software	\$ 35,000	
The Energy Detective (20 x \$150)	\$ 3,000	
Other: Insurance and bonding to facilitate bulk residential contracting	\$ 4,000	
Development and publishing costs for toolkit materials, and travel to train local organizers in other areas.	\$ 12,000	
TOTAL PROJECT BUDGET REQUEST TO LCCMR	\$ 194,000	

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Leveraged During Project Period: We are in the process of identifying further funding opportunities for our broader work - specific grants not identified to date.	\$ -	<i>Secured or Pending</i>
In-kind Services During Project Period: Volunteer support from students and community members engaged in the process. Valued at \$12/hr with an estimated 3000 volunteer hrs/year (conservative estimate based on current participation) for 2 years	\$ 72,000	expected to grow or be sustained.
Past Spending: In-kind volunteer work - students and community members, in-kind legal support from Dorsey and Whitney, in-kind research from Hubert H. Humphrey graduate students, travel costs to conferences, flyer printing, energy efficiency kits, and incorporation fees. Actual cash = \$2700	\$ 79,200	

Management Team Qualifications and Organization Description

Dr. Christie Manning has a Bachelor's degree in Human Factors Engineering from Tufts University and a Ph.D. in Cognitive and Biological Psychology from the University of Minnesota. She is a Visiting Assistant Professor of Environmental Studies at Macalester College in St. Paul, Minnesota. Dr. Manning has conducted numerous research projects to examine the cognitive and other psychological factors that influence environmentally-responsible behavior. She has been awarded several grants, most recently a 2007-2008 Environmental Assistance grant from the Minnesota Pollution Control Agency to create a handbook for environmental professionals that describes psychological research on sustainability in practical, useful terms. Together with her colleagues she has completed several projects for government agencies as well as environmental non-profits to reduce the barriers to sustainable behavior.

Timothy DenHerder-Thomas will be a senior at Macalester College in 2009. His research in residential energy efficiency was the driving force behind forming Cooperative Energy Futures, and he has facilitated the formation and operations of the cooperative, its volunteers, and a variety of different strategic directions throughout 2008. Timothy was a founder and initial Board Member of the Clean Energy Revolving Fund, which supports self-financing sustainability projects at Macalester College. Timothy serves on the Steering Committee of the national Energy Action Coalition and on the Executive Committee of the Sierra Student coalition, among various other roles leading youth innovation in climate and energy solutions at the campus, state, and national level. Timothy is a Young People For Fellow, a Morris K. Udall Scholar, a Goldman Sachs Global Leader, and a recent recipient of the 2008 Brower Youth Award.

Kristen Eide-Tollefson has been an energy advocate and organizer for over a decade. She has served on agency and legislative stakeholder and advisory groups in the areas of environment and energy policy. She is involved in local government planning and holds a Master's degree in Public Engagement in Energy Policy Planning and Infrastructure Development from the Humphrey Institute, University of Minnesota. In 2007, she helped to put together the collaboration between NGO's, CURA (UMN), and state initiative foundations that became the statewide "Local Energy Initiatives" meetings, co-sponsored by the Department of Commerce. She has a special interest in local economies and the potential of community based energy and energy efficiency.

Organization Description

Cooperative Energy Futures is a dynamic team of young innovators and experienced professionals that links cutting edge approaches with program expertise from a wide range of fields. We are in the process of incorporating as a 308B Cooperative, and will be incorporated by the beginning of 2009 before the start of the LCCMR grant cycle. Formed in December 2008, the Cooperative Energy Futures team has spent a year defining and testing its models for community-based sustainability entrepreneurship, using energy efficiency at the neighborhood level as a key starting point. Starting as a volunteer team advised by a Steering Committee, we have attracted pro-bono legal support from Dorsey and Whitney to help us incorporate as a 308B co-op, research support from a team of students at the Hubert H. Humphrey Institute, and a partnership with the Minnesota Project. The Cooperative Energy Futures team focuses on cost-effective approaches to sustainability that provide community-based economic opportunity, building off the success of its student leaders in establishing and running the \$100,000 Clean Energy Revolving Fund at Macalester College and spreading the campus revolving fund model nationwide. We combine expertise in approaches to sustainability through behavioral psychology, a key ingredient in socially-motivated sustainability action, as well as research into community-based finance and smart-grid approaches that allow efficient collaborative demand management, efficiency financing, and distributed generation. We seek to act as a catalyst for a cooperative energy future, one that links energy-users, utilities, regulators, and local innovators in a framework of mutual support and shared incentives to create a reliable, community-supported, and post-carbon energy infrastructure to under-write a sustainable economy.