

Light Bulb Fund Raiser Leverages Community Groups in Energy Efficiency and Peak Shaving Initiative

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ABSTRACT

“Energy efficiency improvements don’t cost - they pay.”

This is the award-winning message that Delta-Montrose Electric Association (DMEA) used to develop an innovative campaign that combined energy efficiency and demand side management goals with community outreach. This campaign reaped both environmental and economic benefits by promoting the purchase of high-quality, energy-efficient compact fluorescent light bulbs (CFLs) at the full retail sales price. It also was the first rural electric utility cooperative to be honored by ENERGY STAR® for excellent in energy efficiency outreach.

Through DMEA’s support community groups in the co-op’s service territory earned a \$2 donation for each bulb sold. This campaign coincided with EPA’s “*Change a Light, Change the World*” marketing campaign. Participating non-profit groups raised \$6,000 by selling 3,000 bulbs during a two-week time period. The CFLs will yield an estimated annual savings of 219,000 kWh, as well as a lifetime reduction of nearly 700 metric tons of greenhouse gas emissions.

This paper teaches explains how energy organizations can promote energy efficiency improvements, such as CFLs, *without subsidies*. This program demonstrates that customers value energy efficiency, especially when the savings can be tied directly to environmental and community benefits. The paper will include examples of the program advertising and marketing materials, such as sales training, promotional materials, and evaluation strategies.

This light bulb fundraiser demonstrates that customers will pay the full retail cost when the energy efficiency message is conveyed in a *meaningful* way. This type of program benefits everyone- including energy organizations, communities, and customers.

Introduction

Based on the findings from the 2004 study of Efficient Lighting, DMEA became convinced that installing CFLs in a home’s most-used lighting fixtures is among the best ways for its members to save money on monthly electricity bill. This also helps DMEA reduce the price it pays for wholesale power. By “test marketing” this fund raising campaign approach in 2005, DMEA hoped the campaign would encourage DMEA members to purchase a few bulbs from local community groups as a fund raiser, and then motivate DMEA members to buy a full range of high-quality CFL products from local retailers.

The key findings of the 2004 DMEA Efficient Lighting were:

- Incandescent bulbs are in 85% of lighting fixtures
- Residential lighting is about 13% of overall electric use
- Average home has 41 lighting sockets in 21 fixtures
- Frequency of use is important because 20%–30% of sockets account for 70% - 80% of use
- Significant barriers remain to installing CFLs
- Customers rely on energy organizations for information
- Utilities can achieve significant load reductions in peaking hours by promoting CFLs and fixtures.

The study recommended that DMEA:

- Promote efficient lighting as an effective peak shaving strategy
- Target high use areas where bulbs on at least three hours per day
- Partner with a lighting manufacturer that offers a comprehensive line
- Consider third-party agreements with vendors and/or program administrators

Developing the Light Bulb Fundraiser Program

DMEA contracted with its subsidiary, Intermountain Energy, to design, implement, and evaluate its The 2005 Efficient Lighting Pilot Program tested the best market delivery mechanism identified in the 2004 study, and prepared DMEA for a full program launch in 2006. A key driver of DMEA's Program Goals in 2005 was to develop and implement will be a successful pilot program and a 2006 "Go to Market" Plan that achieves the following:

- Demonstrate the identified "go to market" strategies for energy efficient lighting technologies
- Develop working relationships with TCP as a lighting product supplier and Intermountain Energy as a program implementation provider
- Create a sustainable way to facilitate/motivate DMEA members to help reduce DMEA's reduce peak demand power purchases while creating a program that is suitable for "export" to other cooperatives nationwide.

The goal of this pilot program was to encourage the sale and installation of energy efficient light bulbs. The key message of the program was to encourage DMEA members to replace the five most frequently used light bulbs with equivalent energy efficient light bulbs. This message was presented in all sales and training materials.

Community organizations were recruited during the summer months. The light bulbs were sold from October 1 to 14 to coincide with the Environmental Protection Agency's (EPA) national ENERGY STAR Campaign: "*Change A Light, Change the World.*"

The Compact Fluorescent Lamps selected for use in the program are a high-quality product manufactured by TCP, a leading manufacturer, in 60 watt, 75 watt and 100 watt equivalent sizes to fit in any standard lighting fixture that is not connected to a dimmer switch. All lamps have a 9-year manufacturer’s warranty. The lamps were available packaged individually or in packs of four. The retail sales price established was \$4.50, \$5.00 and \$5.50 per lamp, if purchased individually, or \$18.00, \$20.00, and \$22.00 for a package of 4 lamps.

DMEA aggressively promoted the value of replacing standard light bulbs with compact fluorescent bulbs (CFLs). DMEA ads appeared in several publications in September and October. Plus, DMEA dedicated the front page of its September bill insert newsletter to the topic. All promotions clearly recognized the ENERGY STAR “Change a Light, Change the World” campaign which is a national challenge to encourage every American to help change the world, one light - one step - at a time. The campaign culminated in the fall around ENERGY STAR Change a Light, Change the World Day on October 5th, with promotions running locally and nationally beginning October 1. Details are at

http://energystar.gov/index.cfm?c=change_light.join_changealight

Intermountain Energy created a variety of promotional materials including newspaper inserts, four-color flyers, and advertisements which promoted the light bulb fund raiser in September. The materials included pictures of the light bulbs, prices, and Wattage equivalencies. Intermountain Energy also coordinated with DMEA to include a bill stuffer message in the September electric bills mailed out to members.

Timeline and Sales Training

In order to be successful, the CFL Fund Raiser required coordination with the sponsoring organization, DMEA, the program implementation team, Intermountain Energy, and the participating community organizations. The following figure summarizes the major milestones in this process.

Major Contest Milestones										
Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Draft Program Outline			Recruit Prospective Groups			Distribute Promotional Plan Outline	Conduct Promotional Campaign		Distribute Bulbs to Group	Summary Report
Conduct Roundtable with Staff/Allies			Prepare Promotional Materials			Conduct Pre-Launch Sales Training	Launch Sales Campaign		Coordinators	
Finalize Promotional Plans			Distribute insert in area newspapers			Place flyers, and group listings	Collect Bulb Orders from		Distribute Movie Incentive Passes	
Identify Participating Groups						Front page article in newsletter	Group Coordinators		Conduct Program Evaluation	
Draft Promotional Materials										

Figure 1: Light Bulb Fund Raiser Time Line

Since the community groups recruited for this program were not “energy experts,” it was also critical to provide proper sales training and support. The following text box summarizes the sales process used to help make these community groups successful in this fund raiser.

CFL Fund Raiser Sales Process

Step 1 - Recruit Local Non-Profit Groups

Intermountain Energy identified prospective fund-raising groups and invited them to attend an Orientation Meeting. At the meeting, groups received promotional materials and forms.

Step 2 – Group Coordinator Trains Members to Sell Bulbs

Participating Group Coordinators received sales/educational materials, including suggested scripts and answers to frequently-asked questions.

Step 3 – Group Members Take Orders

The Fund Raising Campaign lasted from October 1-14 in coordination with a publicity campaign. At this time, the group member took orders for CFLs and collected payment at time of ordering.

Step 4 – Group Coordinator Collects Order Forms and Places Group Order

Within 1 week after the sales campaign's conclusion, the Group Coordinator placed bulb lamp order with Intermountain Energy

Step 5 - Intermountain Energy Place Orders With Supplier

Intermountain Energy placed the bulb order with Service Concepts, a TCP Distributor.

Step 6 – Intermountain Energy Receives Bulbs

Upon receipt of lamps by Intermountain Energy, the orders were organized by group and the Group Coordinator was notified to pick up their bulbs at Intermountain Energy headquarters.

Step 7 – Group Coordinator Picks-up and Pays for Bulbs

Payment for the bulbs by the group was due at time of pick-up. When the Coordinators picked up their bulb orders they were provided with printed material that:

- Explained the ENERGY STAR lighting program overall
- Urged buyers to begin saving energy and money immediately by install these new bulbs now BEFORE their old bulbs burn out

Step 8 – Groups Deliver Bulbs

It was also necessary to provide these groups with the promotional materials necessary to support them in their fund raising activities. The following text box summarizes the types of promotional materials that were developed and delivered to participating community groups.

Sample Briefing and Promotional Materials

- Ad Hoc Committee Agenda and Presentations
- Media Advisory and Press Releases
- DMEA newsletter articles
- Trade press and general public media articles
- Sales/Education Flyers
- Sales/Education Posters
- Suggested Sales Script (to customize and copy for each of your sales people)
- Suggested Group Coordinator Script (to customize and present to your group)
- Frequently Asked Questions and Answers
- Individual Order Form Envelope
- Group Coordinator Order Form
- Local lighting retailer outreach memo
- Group Coordinator correspondence and updates

Fund Raiser Results

A critical component to the pilot program was also completing a process and impact evaluation to measure the overall effects of the Fund Raiser and identify areas for improvement. By any account, the Light Bulb Fund Raiser Program exceeded all expectations among the participants, community groups, and DMEA staff.

Fifteen community groups sold a total of 3,044 light bulbs throughout DMEA's service territory during the first two weeks in October, 2005. Among the immediate, measurable program achievements are:

- Over 3,000 energy efficient light bulbs sold and installed in DMEA's service territory
- Nearly \$6,000 raised by 15 organizations for their charitable causes
- Over \$5,400 in net power purchase savings for DMEA project for the first year alone
- Over 219,000 kilowatt hours saved annually by DMEA members
- Over 2,200 Kilowatts saved by DMEA (in avoided power demand charges)
- 139 metric tons of carbon emissions reductions

The community organizations and customers purchasing the energy efficient light bulbs also viewed this fund raiser as a success. They were completely satisfied with nearly all aspects of this program, especially the promotional materials, training, product quality, and price. The community organizations liked selling these light bulbs, because they were a unique and high-margin product. The customers liked buying the energy efficient light bulbs from the community organizations. It was a winning strategy that benefited DMEA, the community organizations, and the customers.

Tables 1 and 2 illustrate the satisfaction ratings this fund raiser received from both community groups and customers, gathered during the process evaluation interviews.

Table 1: Community Organization Satisfaction Ratings

Program Components	Average Satisfaction Rating
Fundraiser Requirements	7.00
Amt of Training & Support	7.00
Promotional/Marketing Materials	7.00
Ease of use of Order Forms	6.75
Length of Sales Period	6.75
Timeliness of Order Processing	7.00
Responsiveness of Program Staff	7.00
Quality of Energy Efficient Light Bulbs	7.00
Price vs. Value Received	7.00
Effectiveness as a Fundraising Tool	7.00

Table 2: Average Customer Satisfaction Ratings for Program Components

Satisfaction with	Average Satisfaction Rating
Courtesy of community organization member	7.00
Timeliness with receiving light bulbs	6.44
Quality of the light bulbs	6.78
Price paid for the light bulbs	6.10

All the community organizations interviewed indicated that the level of effort required to participate in the fund raiser was worth the return they received. Furthermore, 75 percent of the community organizations interviewed believed that the light bulb sales enhanced their organizations' image, while the remainder felt it "had no effect."

All the community organizations interviewed indicated a strong willingness to participate in future light bulb fund raisers. They also said they would recommend this activity to other community organizations.

The respondents were very happy with the light bulbs they purchased from the community organizations. Several participants indicated that the light bulbs offered by DMEA were superior in quality to those available in other local stores. They also indicated high satisfaction with the community group representatives, with several praising their knowledge and understanding of the energy efficiency benefits.

Retailer Reaction

An informal survey of local retailers revealed that the light bulb fund raiser did increase awareness levels of energy efficient light bulbs throughout DMEA’s service territory. Several local vendors reported an increase in customer interest about energy efficient lights. One local lighting vendor reported a small “run” on energy efficient lights immediately following the DMEA Home Energy Efficiency Workshop. This vendor reported selling \$250.00 in energy efficient lights in one day.

However, based on this evaluation, the increase in customer interest for energy efficient light bulbs is attributed to more than just the two-week light bulb fund raiser. It more directly attributable to the ongoing energy education activities that DMEA provides, including its workshops, advertisements, and informational displays.

Program Impacts

The program impacts were calculated using a proprietary lighting calculator that estimated savings to DMEA based on its current rates, time of its lighting peaks, and energy and demand charges. This calculator provided estimates of first year savings in terms of net revenues to DMEA (Table 3) and the annual kilowatt (kW) and kilowatt hour (kWh) savings (Table 4).

Table 3: Net First Year Savings to DMEA

Number of Light Bulbs Installed	1,365	780	857	3,002
Wattage Installed	14 W	20 W	23 W	Total
“Lost” Revenue	(\$6,758.85)	(\$4,617.85)	(\$7,103.20)	(\$18,479.90)
Avoided kWh Cost	\$1,649.20	\$1,126.79	\$1,733.23	\$4,509.22
Avoided MCP Coincident Peak Demand Charge	\$1,333.66	\$911.20	\$1,401.61	\$3,646.46
Avoided TCP Coincident Peak Demand Charge	\$5,766.63	\$3,939.94	\$6,060.43	\$15,767.00
Net First Year Savings to DMEA	\$1,990.65	\$1,360.07	\$2,092.07	\$5,442.78

The DMEA Light Bulb Fund Raiser also resulted in a substantial energy and demand savings, both the DMEA and its members. As Table 3 shows, this pilot will save DMEA members more than 200,000 kilowatt hours (kWh) annually. It will also save an estimated 2,231.53 kilowatts (kW) based on reductions in both the MCP and TCP peaks.

Table 4: Estimated Annual kW and kWh Savings from the DMEA Light Bulb Fund Raiser

Number of Light Bulbs	1,365	780	857	3,002
Installed Wattage	14 W	20 W	23 W	Total
Annual kWh Savings to members	80,214	54,805	84,301	219,320
Avoided MCP KW to DMEA	376.74	257.40	395.93	1,030.07
Avoided TCP KW to DMEA	439.53	300.30	461.92	1,201.75

A final estimate of program impacts was to determine the reduction in carbon dioxide or greenhouse gas emissions based on the reduction in energy usage. The DMEA Light Bulb Fund Raiser is projected to save more than 219,000 kilowatt hours annually. This information was used to estimate the carbon emissions reductions that would result from this pilot program.

Using a calculator tool recommended by the EPA and developed by US Climate Technology Cooperation Gateway¹, the kilowatt hour savings were converted into carbon dioxide reductions. The estimated energy savings from using 219,000 kilowatt hours less annually is equivalent to reducing 139 metric tons of carbon dioxide.

This analysis illustrates the dramatic and lasting savings that will result from the DMEA Light Bulb Fund Raiser. These savings are especially relevant given the volatile energy market and concern over rising fuel prices.

Lessons Learned

The Light Bulb Fund Raiser Pilot Program was successful based on the incorporating the following “Best Practices.” These are areas that must be addressed by any organization interested in creating their own light bulb fund raiser program.

- 1. Use a quality product:** Not all CFLs are created equal. As a program sponsor, it is important to select a high quality lighting product that will reflect favorably on the organization’s image. Also, the light bulbs offered by TCP were of higher quality than typically found in the local retail outlets, and therefore not perceived as a direct threat by local retailers.
- 2. Recruit a diverse group of non profits:** Rather than focusing youth groups, this fund raiser succeeded by recruiting organizations that represented the larger community as a whole. In many cases, these organizations did not have any other fund raising opportunities, and therefore were dedicated to promoting the light bulbs as a way to generate revenues for their group. This also allowed the utility to reach out to all demographic groups within its community, especially those that may be overlooked such as senior citizens.

¹ <http://www.usctgateway.net/tool/>

3. **Incorporated successful fund raiser models into the program design:** Before developing this program, the program designers “went to school” on professional fund raising organizations. The designers identified the best practices used by other fund raisers, such as group incentives, sales training, and product demonstrations, and adapted these strategies to the Light Bulb Fund Raiser’s product offerings.
4. **Used a third-party program administrator:** DMEA hired a third-party to design, implement, and evaluate this fund raiser because it did not have the internal resources, experience, or flexibility to administer this program on its own. DMEA provided the dollar support to the third-party administrator, who in turn, provided the hands on support, training, and feedback necessary to ensure success.
5. **Built in evaluation metrics into program design:** Evaluation was built into the DNA of this program. Therefore, critical program evaluation components, like customer contact information, types of bulbs sold, and other crucial data were captured in the initial order form and tracked in the program database. This simplified the evaluation process and made it easier to track program results and make improvements.
6. **Focused sales campaign leveraging ENERGY STAR:** The timing of the Light Bulb Fund Raiser was designed to coordinate with the regional and national press that would be generated during the “*Change the Light, Change the World*” campaign. By tying this activity into a larger national event, DMEA was able to generate additional press and awareness within the local community.
7. **Engaged retailers in planning:** The local retailers who sold energy efficient light bulbs were included in this process. They were notified about the fund raising program, kept apprised of the results, and benefited from increased awareness among the utility customers. Because they were invited to the table with the utility, they were supportive allies who realized that the utility had created a market for their unsold inventory!
8. **Created a replicable program:** The Light Bulb Fund Raiser Program was designed to be an intensive, two-week campaign that generated sales and awareness, and then *went away*. The short-duration, intense focus, and program model are designed to be replicated by energy organizations of any size in any type of community.

For more information about developing a Light Bulb Fund Raiser or for program updates go to www.lightbulbraiser.com or www.marketdevelop.com .