Promise and Pitfalls of Hosting Rural Small Business Energy Efficiency Campaigns

Alexis Troschinetz
CERTs Behavior Change and Metrics Coordinator
University of Minnesota Extension
BECC Conference, October 20th, 2016 10:30 am – 12:00 pm
Leverage partners … but study new ones!

CERTs: Minnesotans Building a Clean Energy Future

**Mission:** We connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects.
Statewide Partnership & Collaboration

What Does CERTs Do?

- **LEARN**
  - Write blog posts & case studies
  - Create educational guides
  - Manage diverse web-based tools

- **CONNECT**
  - Host events, tours, and conferences
  - Help with community organizing
  - Connect people to technical resources

- **ACT**
  - Provide seed grant funding and more
  - Deliver research-based campaigns
  - Spur other statewide programs
**Campaigns**

- Shared information about poultry-specific lighting
- Guided farmers through numerous funding options
- Raised independent stations’ awareness of LED lighting
- Created lighting technical spec
- Listed 12 high quality lighting products
- Connected stations to utility rebates

**Sector Identification**

- LEDs: Energy Savings and Replicability in MN Livestock Facilities
- Improving Energy Efficiency in Convenience Stores
Basis of Design

Good Advice

Funding Technical Assistance

Muni

IOU

Co-op

CERTs

Station

SEO
Good Advice

- Lighting Consultant
- IOU
- Muni
- CERTs
- Co-op
- Station
- SEO

**LIGHT UP YOUR STATION & SAVE**

**Development**

**Evaluation**

**Implementation**

**A+**
### Strategy

**Make it easy!**

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#### Strategy

**Canopy Luminaire Qualifications:**

1. All luminaire manufacturers must:
   a. Be UL listed or equivalent by a National Recognized Testing Laboratory.
   b. Provide for the luminaire a published specification sheet (pdf) and performance file (pdf) tested by an independent laboratory.
   c. Provide a minimum 5-year Warranty that covers any defects in materials and workmanship, including LEDs and power supplies.
2. All outdoor and driver luminaires must comply with a minimum ingress protection of 65.
3. All luminaires must:
   a. Be recognized by the DesignLights Consortium Qualified Product List under the Fast Pump Canopy Luminaire category (which includes 1B and 3B, below).
   b. Have a Total Lumen (TLD) of 50,000-80,000.
   c. Meet a minimum 60,000 hours (80%) of rated life.
   d. Meet a minimum efficacy rating of 86 lumens per watt (LPA).
   e. Meet a Minimum Lumen Rating Index (LMR) of 79.
   f. Meet a minimum of 4000K (4000K) and maximum of 5000K (5000K) correlated color temperature (CCT).
   g. Meet a maximum air operating temperature of -20°F and a minimum high operating temperature of 85°F.
   h. Note whether they comply with Buy American Provisions.

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Outreach Flop

**MSSA**
*Minnesota Service Station & Convenience Store Association*

Outreach Redo

*LIGHT UP YOUR STATION & SAVE*
Funders Galore

- EQIP by USDA NRCS
- REAP by USDA RD
- Livestock Investment Grant by MDA
- PACE by SPPA & RMEB
- Utility Rebates

Image Credit: Tech Guru Daily

Light Up Your Station & Save

Development

Evaluation

Implementation
Key Outreach Partner

Development

Evaluation

Implementation

Authority

MINNESOTA TURKEY®
Strategy

Social Modeling

Strategy
Outreach Success

2014 Summer Conference

Want to save money in your turkey barns? Take a 2% energy use & cost savings by upgrading to LED lighting in your barns!

Why upgrade to LED lighting?
• $400/year savings on lighting energy
• $1,200/year savings on barn lighting

GET READY TO GOMBLE UP SAVINGS!

WingTips... Weekly eNews for MTGA & CEAM Members

Development Evaluation Implementation
Evaluation

Vendors
Utilities
Funders
Utility Partners

Evaluation

ANNUAL IMPACT:

- 15 FARMS
- 25 BARNs
- 4 brooder, 8 finish
- 13 egg laying
- 4,183 BULBS
- 167 per barn

$58,165 Saved
$2,327 per Barn
553,023 kWh Saved
22,121 kWh per Barn

ANNUAL IMPACT:

- 31 STATIONS
- 41 FIXTURES
- 15 other projects

$148,987 Saved
$4,626 per Station
1,354,433 kWh Saved
43,691 kWh per Station

LIGHT UP YOUR STATION & SAVE
Future Contact

Alexis Troschinetz, Behavior Change & Metrics Coordinator
atroschi@umn.edu  |  612-626-0455

www.mncerts.org