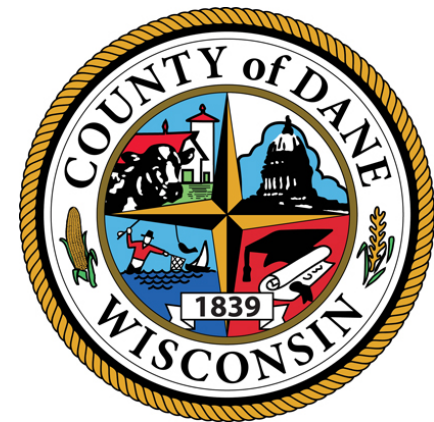


Dane County Council on Climate Change

Energy Efficiency Committee
Kathy Kuntz, Cool Choices
May 8, 2018



Energy Efficiency Committee

- Committee Members
 - More than 100 years: designing, implementing and evaluating EE efforts
 - Chair: Sara Conzemius, Founder, Illume Advising LLC
- Activities to Date
 - Assessment of landscape: opportunities, gaps, leverage points
 - Brainstormed strategies to increase activity, build on existing programs
 - Members wrote up proposals
 - Committee reviewed and refined
- Two Proposals Today
 - Community-Wide Efficiency Program
 - Air Source Heat Pump Pilot



A Lot of Opportunities in Dane County



City efforts

mpoweringmadison.com

Sustainable Monona

Utility programs



Middleton^{WI}
The Good Neighbor City



2016 Focus Residential Data

County: Dane

Participants: 10,089

Households: 203,750

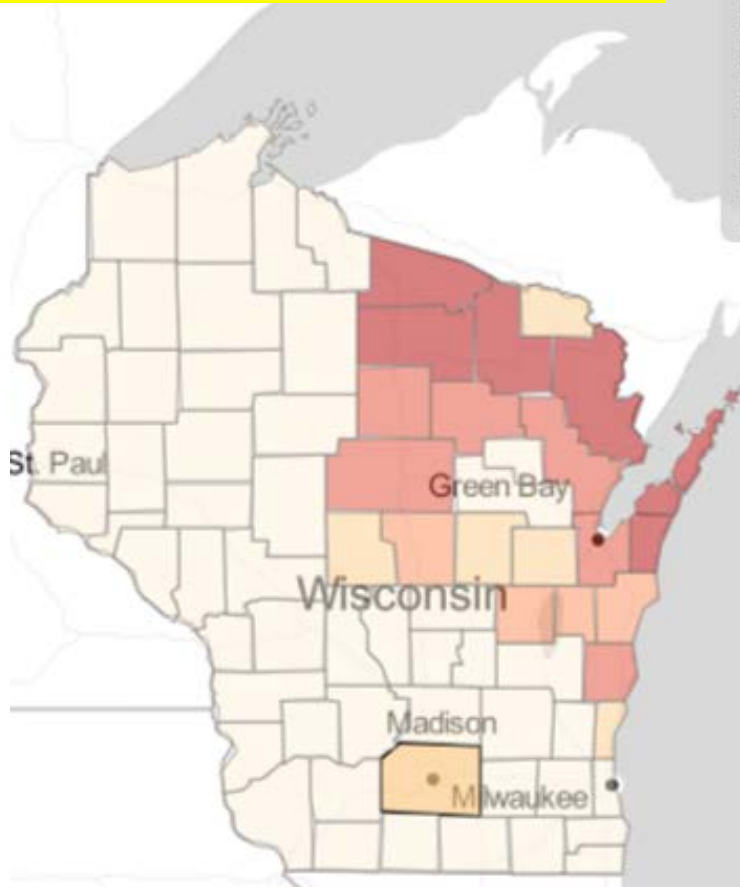
Participation Rate: 5.0%

Energy Bill Savings Per Participant: \$209.83

Incentive Dollars Per Participant: \$178.46

Energy Bill Savings Per Household: \$10.39

Incentive Dollars Per Household: \$8.84

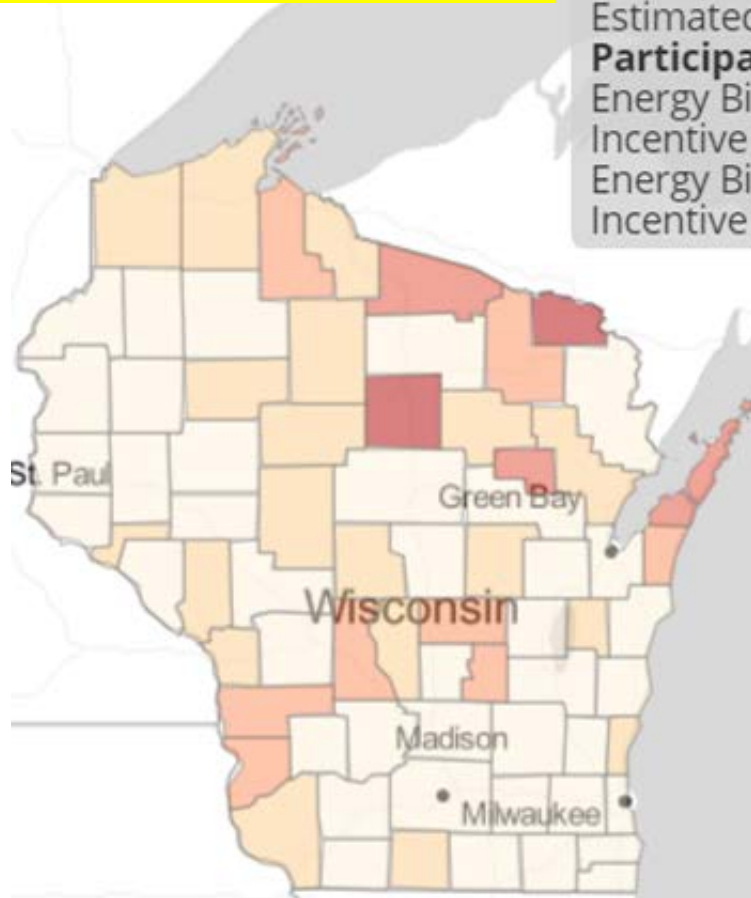


*Participation rate was 2%
in 2014 and 2015 –
Compared to 5% in 2016*



2016 Focus Commercial Data

County: Dane
Participants: 392
Estimated Commercial Businesses: 132,847
Participation Rate: 0.30%
Energy Bill Savings Per Participant: \$7,321.29
Incentive Dollars Per Participant: \$5,474.81
Energy Bill Savings Per Commercial Business: \$21.60
Incentive Dollars Per Commercial Business: \$16.15



*Participation rate was 3% in 2014
Both Commercial and Industrial less
than 0.5% 2015 and 2016.*

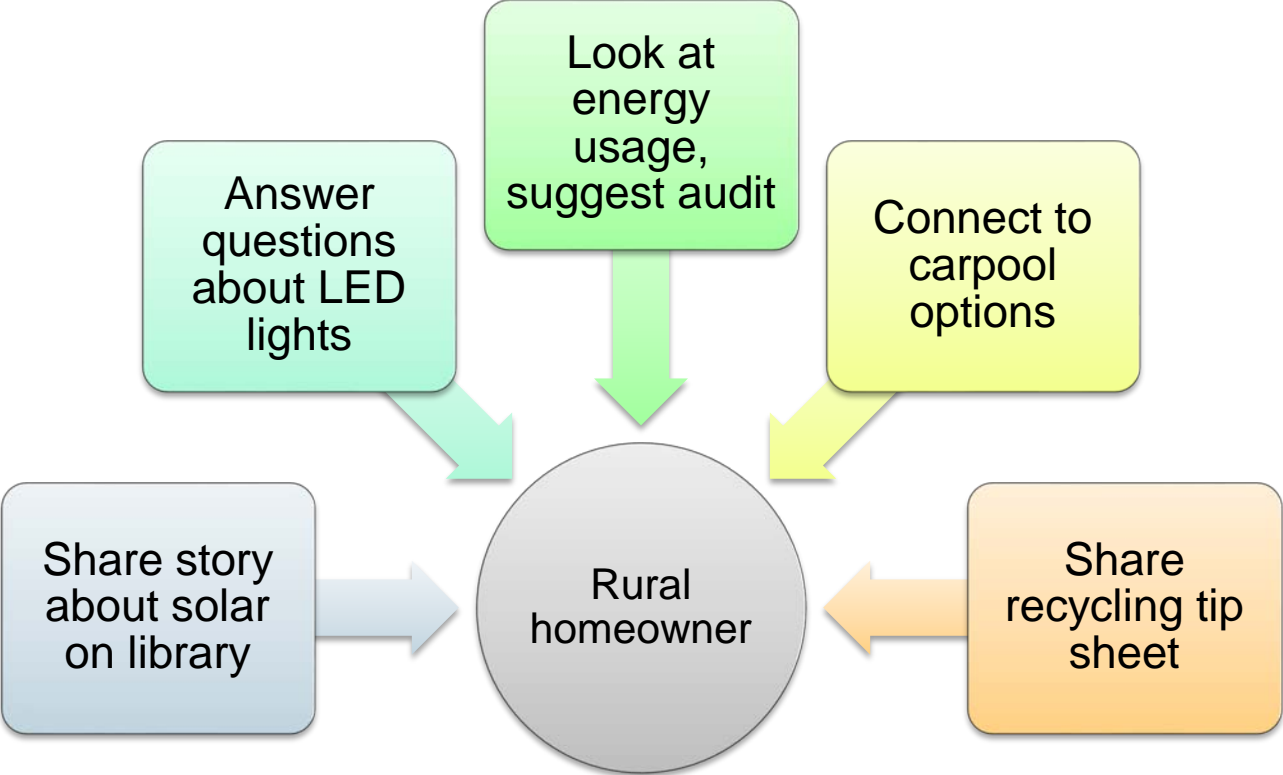


Goal: Inspire More Action on Efficiency

- Engage entities not currently taking action
 - Rural residents - homeowners & renters
 - Small businesses
 - Multi-family owners & residents
- Encourage comprehensive efforts
 - Equipment replacements but also behaviors
 - Energy efficiency but also transportation, water use
 - Address resilience



Customers – Not Programs – At the Center



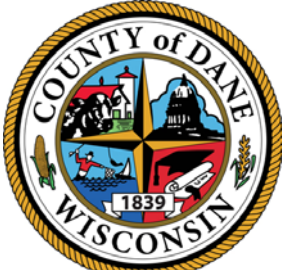
Guide, Concierge...Trusted Advisor, Coach

- Reliable and actionable information
 - Connect people to Focus on Energy resources & incentives
 - Tips on low/no cost strategies to reduce resource use
- Holistic customer-centric perspective
 - Credible local advisors with sector-specific expertise
 - Advice on fleet operations alongside lighting strategies
- Momentum building
 - Showcases successes to make action contagious



Specifically...

Audience	Access to Advisor	Tips	Events	Case Studies	Awards
Rural residents	X	X	X	X	X
Small businesses	X	X	X	X	X
Multifamily residents	X	X	X	X	X



For small businesses...

- Sector specific – dry cleaners vs restaurants
- Target minority-owned businesses
- Leverage existing outreach efforts
 - MG&E business advisors
 - Sustain Dane MPower workshops
- Empower action
 - Energy efficiency but also fleet operations, waste, etc.



In a Rural Community...

- Recruit local opinion leader to be local Guide
- Leverage existing outreach
 - Community events
 - Library and other public spaces
- Empower action
 - Refer to programs
 - Celebrate local success stories
 - Offer low and no-cost tips



Online Resources Too!

Website where people can find...

- Case studies
- Sign up forms
- Tip sheets
- Links to other programs
- Cumulative results

“This is who we are in Dane County”



Estimated Impacts and ROI

- Increase energy efficiency activity 10-25%
 - Focus participation
 - Behavior-related savings
- Plus...
 - Fleet-associated fuel savings
 - Water/waste water savings
 - More recycling, less landfill
- Impacts exceeding 3,000 – 5,000 MCO₂e
- Cost \$600 – 950k annually



Next Steps

- Integrate feedback and direction from Council
- Create detailed budget and scope of work
- Begin implementation



Air Source Heat Pumps

- Promising heating AND cooling technology
- Especially important for deep decarbonization
 - Electrify space and water heating
 - Generate electricity from clean sources
- New technology in our cold climate
 - Need to build local HVAC expertise
- *Need pilots to build industry expertise, demo value*



Low Income Furnace Replacements

- Target households heating with propane/fuel oil
 - Collaborate with Weatherization/LIHEAP
 - Cover incremental cost of ASHP vs high efficiency furnace that Weatherization/LIHEAP would install
- Monitor benefits
 - Financial: Lower operating cost than propane/fuel oil
 - Social: Less risk of fuel shortages/price spikes



Next Steps

- Integrate feedback from Council
- Meet with State Wx/LIHEAP staff
 - Finalize plan, including evaluation
- Look for other opps to nudge market
 - Electric-only subdivision?

