



2016 Energy Design Conference

Opportunities for Improving the Efficiency and
Operation of Building Ventilation:
Applied Research and Development

Mark Garofano, Conservation Improvement Program

History & Background

Conservation Applied Research & Development

CARD purpose to help MN utilities achieve the annual 1.5 % savings goal by:

- *Identifying new technologies or strategies to maximize energy savings;*
- *Improving effectiveness of energy conservation programs;*
- *Documenting CO₂ reductions from energy conservation programs.*

Minnesota Statutes §216B.241, Subd. 1e.

Current Activities

- Develop and post annual RFPs for general and specific topics
 - Managing a portfolio of over 80 R&D projects
 - Updating web site to access information
 - Outreach to utilities and other stakeholders through meetings, conferences and webinars
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Today's CARD Projects

- **Grantee:** Center for Energy and Environment
 - **Investigator:** Josh Quinnell
 - **Project:** Energy Recovery in Minnesota Commercial and Institutional Buildings
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Today's CARD Projects

- **Grantee:** Sustainable Engineering Group
 - **Investigator:** Amalia Hicks
 - **Project:** Energy Conservation Potential of Displacement Ventilation in Minnesota Climate Conditions
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Today's CARD Projects

- Grantee: Seventhwave
 - Investigator: Scott Hackel
 - Project: Demand Control Ventilation:
Maximize Savings with Practical Approaches
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