



NASEO Annual Meeting 2015

Developing Emerging Technologies through
Conservation Applied Research and Development

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CARD History & Background

2007 Next Generation Energy Act established 1.5% savings requirement setting a statewide energy efficiency resource standard (EERS).

SPENDING



SAVING

History & Background

Conservation Applied Research & Development (CARD)

Purpose is to help 180+ utilities sustainably achieve the EERS by:

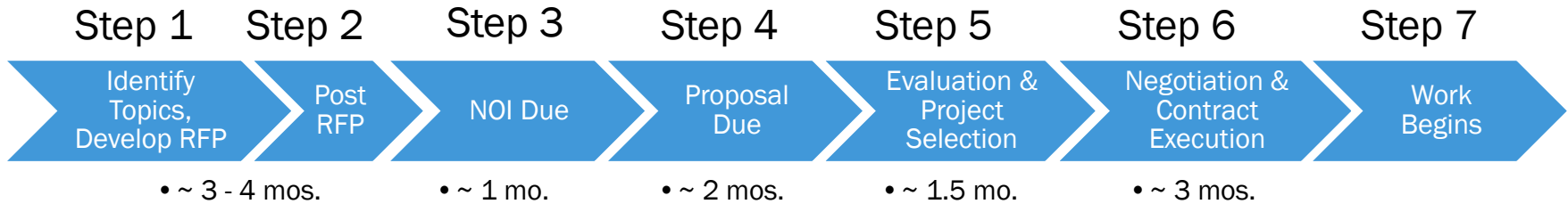
- *Identifying new technologies or strategies to maximize energy savings;*
- *Improving effectiveness of energy conservation and efficiency programs;*
- *Documenting CO₂ reductions from energy conservation programs.*

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

History & Background

- \$3.6 million for CARD, SB2030, and CERTs (funded through utility assessments)
 - Staff have reviewed over 300 proposals from 6 RFP cycles (currently in the 7th cycle)
 - Approximately 80 R&D projects funded
 - Outreach to and input from 180+ utilities (IOUs and COUs)
 - Coordination with State Energy Program Staff to identify other market delivery mechanisms
-

CARD Process



RFP Timeline – typically about 1 year

- 3 – 4 months to identify topics and post RFP
- 1 month – Notices of Intent (NOI) Due
- 2 months – Full Proposals Due
- 1.5 months – Evaluation & Project Selection
- 3 months – Negotiation & Contract Execution

Project Timeline – typically 1 to 3 years

CARD Screening & Evaluation

What Commerce is looking for:

- Team has working understanding of MN CIP
- Project Applicable in MN
- Collaborative efforts that leverage CARD funding
- Innovative technologies/technological approaches
- New program ideas & strategies

What Commerce is not looking for:

- Proprietary product development
- No or limited applicability to CIP
- Use of program as marketing vehicle



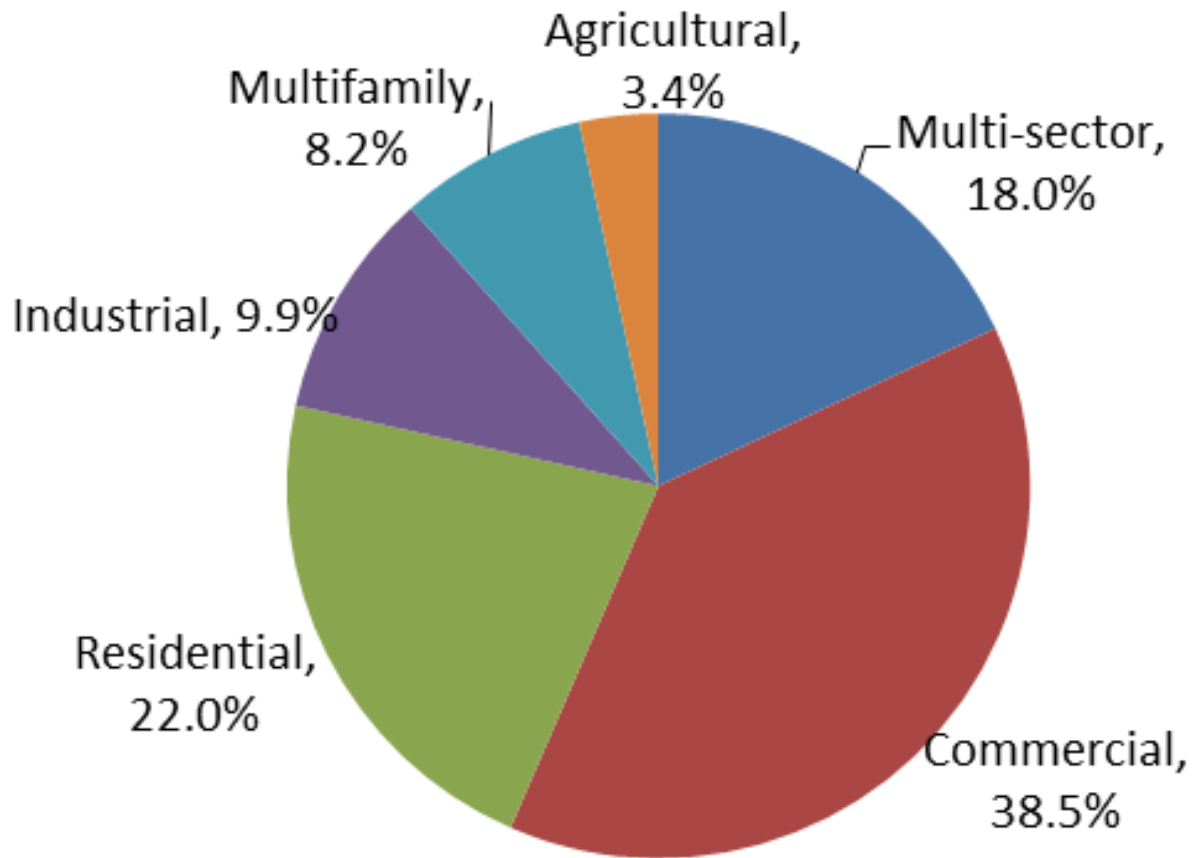
CARD Screening & Evaluation

Successful Projects Include:

- Leveraging of existing or new relationships and partnerships
- Preliminary assessments or lit. searches completed
- Inclusion of matching funds
- Review of evaluations from previous years
- Review of proposals from previous years

Recently Funded CARD Activity

R&D Spending by Sectors thru FY2014



Recently Funded CARD Activity

Grantees have included:

- Service Providers
- Program Implementers
- Non-profits
- Universities
- Research Institutes
- Consulting Firms
- Minnesota Utilities

Recently Completed CARD Activity

- Sample of Completed Projects Include:
 - Cx Automatic Daylighting Controls
 - Efficient Municipal Street Lighting
 - HP Water Heater Saving Potential
 - Potential in MN MF sector
 - Advanced RTU controls
 - CHP Potential
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Recently Funded CARD Activity

Field Studies and Market Characterization:

- Mfgr. Homes Characterization & Performance
- RTU Characterization & Performance
- Assessment of Cold-Climate ASHP
- Assessments of Plug-Load Control Devices

Program Pilots:

- Continuous Commissioning for Small Outpatient Medical Clinics
- Commercial Energy Code Compliance

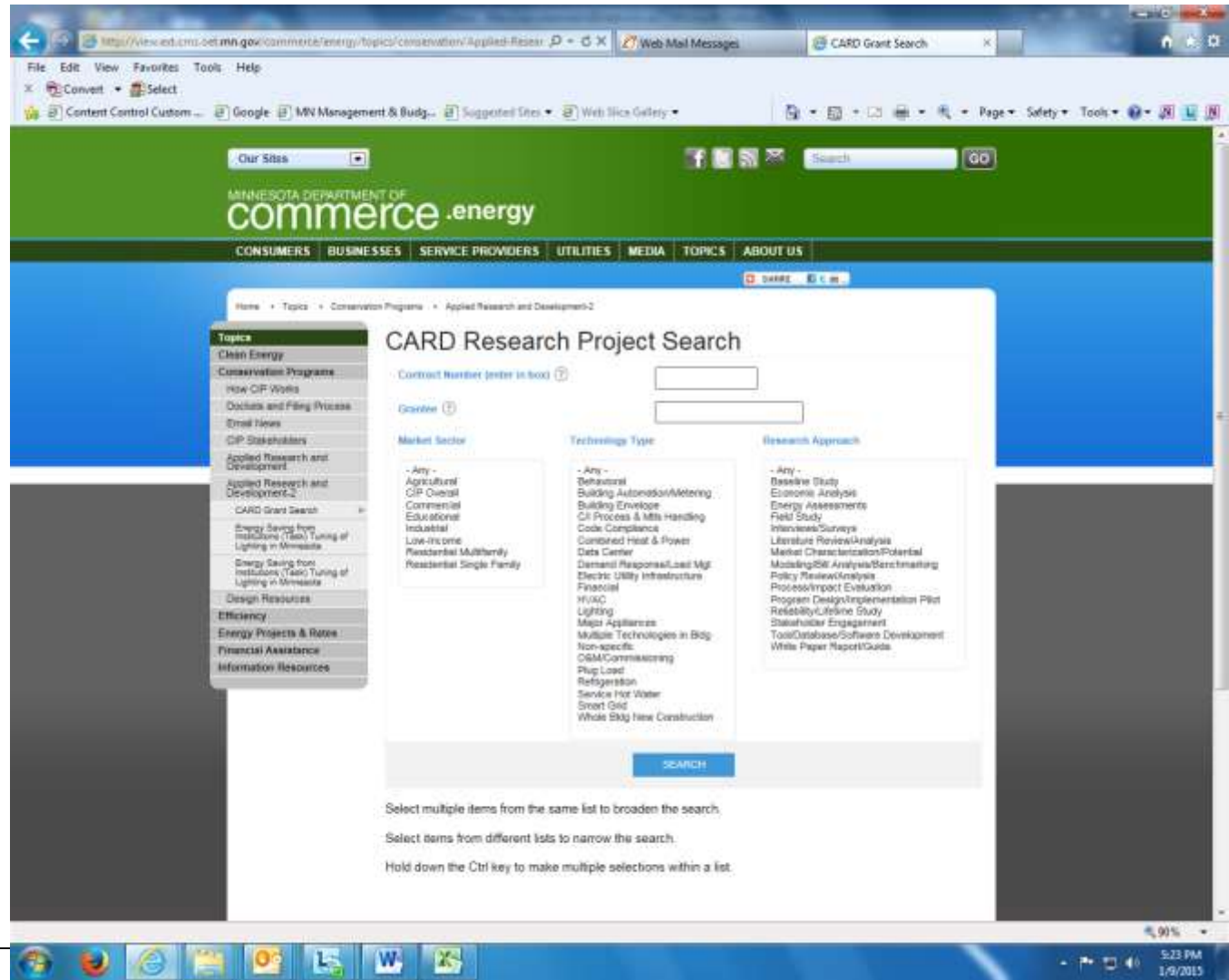
Other:

- Behavioral Programs Literature Review & Benchmarking Study, and Workshops
- Policy Analysis and Evaluation of Low-Income Programs in Minnesota CIP Portfolios

Access to CARD Information and Projects

Online Access:

- Search for projects or reports by market sector, technology type, or research approach.
- Access past proposals and evaluations.





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Conservation Improvement Program

Thank You!
