

COMMERCIAL ENERGY CODE ASSISTANCE PILOT PROGRAM

This pilot project will document the energy savings and cost-effectiveness produced by providing building designers and code officials with tools and services that focus on ensuring that key elements of the state energy code are successfully incorporated into construction and renovation projects.

WHY THIS RESEARCH IS NEEDED

While utility sponsored energy code compliance enhancement programs have been undertaken in a number of other states, program viability and cost-effectiveness have not been tested in Minnesota. Recent research in multiple states indicates important opportunities to improve energy code compliance. Additional energy savings can likely be achieved by programs promoting enhanced energy code compliance that goes beyond traditional code training. Nonetheless, the lack of a local precedent makes utility program designers uncertain about the potential energy impact, cost-effectiveness, and policymaker approval.

PROJECT PROCESS AND EXPECTED OUTCOMES

This pilot project will measure energy savings from two program approaches within three partner cities to address specific energy code issues in commercial buildings. The two novel program approaches will target high-impact energy code requirements that are more likely to go unnoticed. This targeting will provide significant energy impacts at low cost.

Program 1 Approach: Design Team Support for Specific Small Building Project Types

Focused tools and services will be provided to design teams for three specific building project types (e.g. build-out of leased office space).

Program 2 Approach: Plan Reviewer Support for Large, Complex Buildings

The large building pilot will assist cities with the review of projects that use sophisticated building energy simulation software to show “performance based” energy code compliance.

We expect that these two program approaches will achieve significant energy savings compared to “control” buildings with cost-effectiveness that will be viable to investor owned utilities.



PROJECT SUMMARY



Objectives

Set a precedent for a viable energy code compliance enhancement program in MN.

Test two program approaches that are focused in scope to maximize cost-effectiveness.

Utility Implementation

The successful portions of this pilot could be transferred to utility funded programs.

The program could be expanded to additional building types and measures.

Scope

Deliver the programs to 40+ buildings across three pilot cities.

Recipients of service: Architects and engineers, city officials, building developers and contractors.

Timeline

January 2015 to December 2017

Non Energy Impacts

Reduce city staff time required to review energy code issues.

Reduce design and development teams' costs for late-stage changes.

This project supported in part by a grant from the Minnesota Department of Commerce, Division of Energy Resources through the Conservation Applied Research and Development (CARD) program.

Contact • Russ Landry
612-335-5863
rlandry@mncee.org

Project Partners: City of Blaine, City of Minnetonka, and City of St. Louis Park

cee
Center for Energy and Environment