U.S. DEPARTMENT OF ENERGY

Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

City of Seattle:
"Building Tune-Up Accelerator"

City of Seattle

Nicole Ballinger, Building Tune-Up Accelerator Program Manager

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City of Seattle INTRODUCTION

Award from 2016 CBI FOA: *Improve the Energy Efficiency of U.S. Small and Medium Commercial Buildings*

Key program performance goals for CBI:

- **Proving Solutions via Market Partnerships in Existing Buildings**: Prove with market leaders that, by 202, it is possible to cost-effectively reduce average commercial building energy use by at least 25% relative to 2010 levels.

- **Accelerating Energy Efficiency by Addressing Market Barriers**: Develop, Demonstrate, and deploy a full suite of tools and strategies that enable market leaders to achieve a 30% reduction in existing commercial buildings and a 50% reduction in new commercial buildings by 2020.

Objectives from Peer Review:

- Project is half-way toward the end of the performance period.
    - How impactful are the accomplishments to date on the overall goal of the FOA?
    - Are there key areas that need improvement?
    - If Seattle is successful, how can this success be shared so that other cities employ this approach to improve the skills of their local building workforce and increase energy savings?

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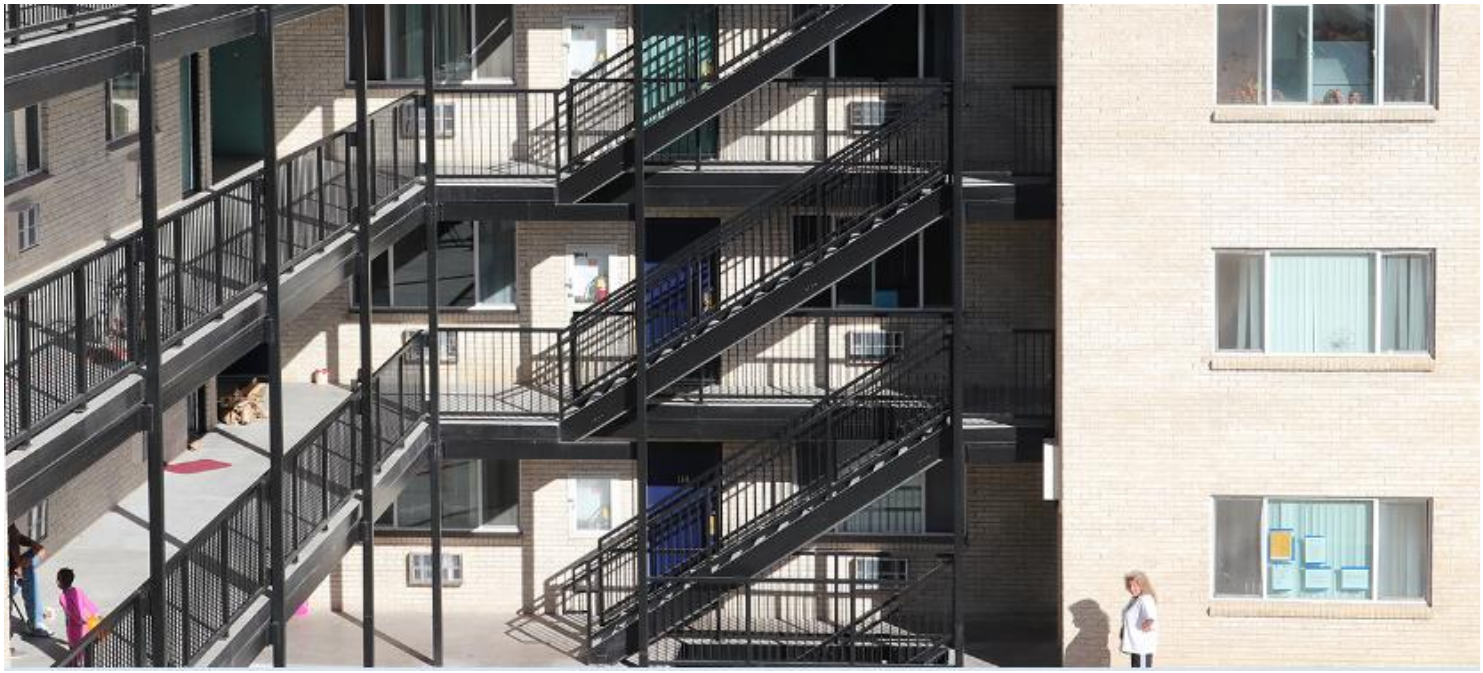
International Center for Appropriate & Sustainable Technology (ICAST):

"Scaling Energy Efficiency Retrofits for Small Commercial Apartment Buildings"



ICAST

Ravi Malhotra, Founder & President

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ICAST INTRODUCTION

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Objectives from Peer Review:

- Project is half-way toward the end of the performance period.
    - How impactful are the accomplishments to date on the overall goal of the FOA?
    - How can current success be amplified and replicated?
    - Are there key areas that need improvement?
    - What existing resources or partnerships should the awardee pursue to be more successful, if any?

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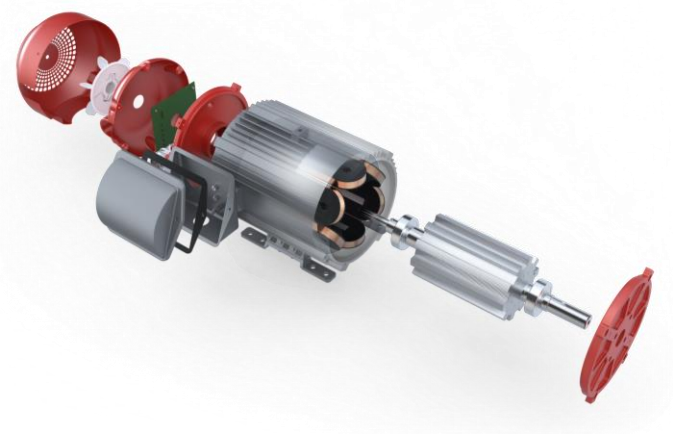
NREL – Systems Technology Research and Development Support



Software Motor Company
High-efficiency smart motors

Dynamic Water Technologies
Chemical free water treatment

Meazon
Low-cost wireless submeter

National Renewable Energy Laboratory
Michael Deru, Senior Engineer
303-384-7503 michael.deru@nrel.gov

Project Background

- HIT catalyst and Wireless Metering Challenge
- Joint RFI through DOE and GSA Proving Ground
- CBI Goals: "The High Impact Technology (HIT) Catalyst is designed to help identify and prioritize cost-effective, underutilized, energy-efficient technologies"

High Impact Technology Catalyst

DOE issued a Challenge to industry to develop a wireless metering system with these attributes:

•Low cost meter with a target equipment cost of under $100
•Electrical energy measurement with easy-to-understand reporting
•Reliable wireless data transmission to an onsite collection point
•Operation independent from existing building Internet and intranet networks as well as the cloud