



# Retro Commissioning in Connecticut

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# Background - Energy Efficiency In Connecticut

- Energy Efficiency = The cornerstone of Connecticut's energy policy
  - Creation of 1998 Energy Efficiency Fund (CEEF)
  - 2005 Energy Independence Act
  - 2007 Act Concerning Electricity and Energy Efficiency
  - State Building and Energy Codes

# Conservation & Load Management Program Objectives

- Advance the efficient use of energy
- Reduce air pollution, carbon emissions and negative environmental impacts
- Promote economic development and energy security



# Commercial & Industrial (C&I) Programs

- New Construction / Major Renovation
  - Energy Conscious Blueprint
- Existing Buildings/Retrofit
  - Energy Opportunities
- Small Business Retrofit
  - Small Business Energy Advantage
- Operations and Maintenance

# History of RCx in Connecticut

- RCx started as a pilot in late 2004 with 5 class A office buildings in Stamford, CT
- A process & impact evaluation was undertaken & completed in Oct 2006.
- Today, RCx is a fully funded program offering to customers in Connecticut



# What is Retro Commissioning (RCx) ?

- A Conservation & Load Management program designed for Connecticut Light & Power (CL&P) commercial and industrial customers who want to conduct an in-depth review of inefficiencies in their Building's management system (BMS)
- Operational & Non-Capital focus

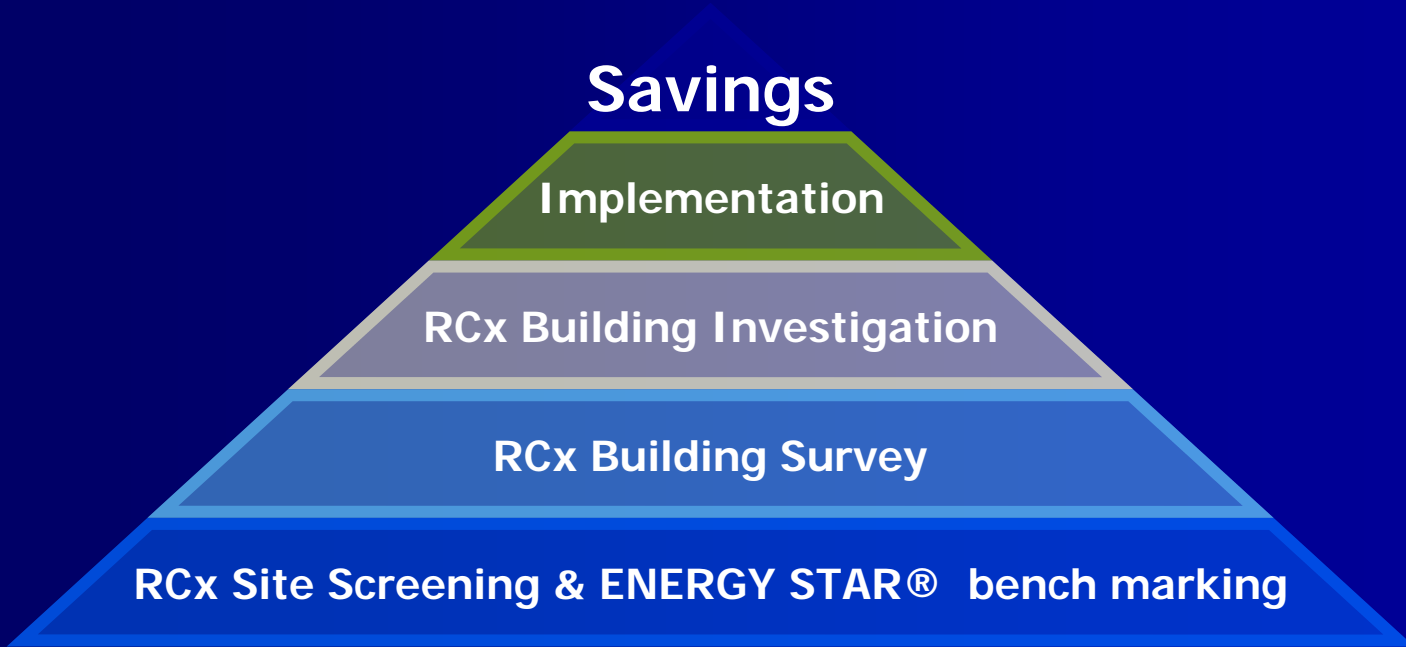
# Why ?

- The objective of the RCx program is to find low- or no-cost, low to no-capital energy-efficient measures that can be implemented effectively and quickly in a building or facility, primarily using the BMS

# Who ?....

- CT Eligibility guidelines require that C&I buildings are pre-screened by submitting an application, be over 100,000 square feet, be ENERGY STAR benchmarked and have a BMS with trending capability.

# Basic Steps of RCx

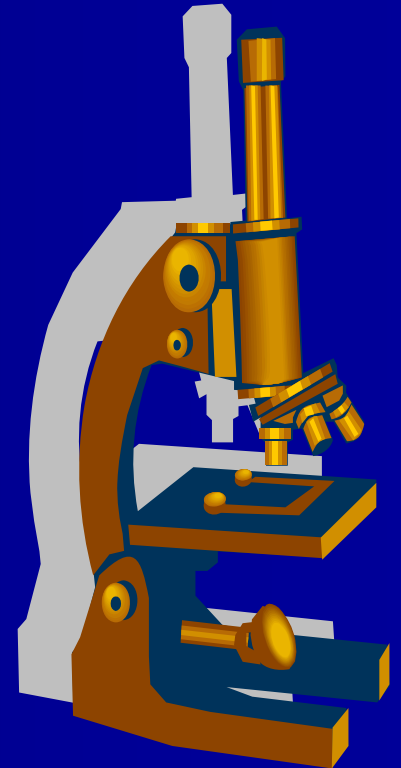


Protocol Pyramid

# Lessons Learned

Currently, 65% of the Connecticut RCx projects in are Municipal, State and Federal. (Paybacks run in months to a few years.)

The Connecticut Energy Efficiency Fund (CEEF) supports the RCx investigation costs for Municipal, State and Federal sites. Incentives are provided by the CEEF for implmentation.



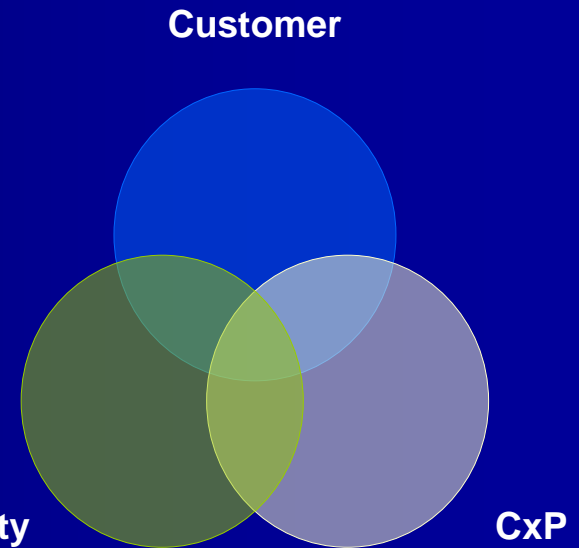
# Getting RCx to work in the public sector

- Think current assets
  - Do we have the internal infrastructure to deliver
  - Are there Engineers that are Pre Qualified RCx Commissioning Providers (CxP) to call on, (currently six are qualified in CT)
  - Are the engineers on the approved professional services list?
  - Less is more

# Who Can help?

## ■ Think Current talent Staff & Contractor

- Can the utility provide funding?
- What sole source options do I have ?
- Does the installation need to be bid?
- How do I handle professional services?



# Who's interested & why

- Cities & Towns
  - Budget constraints and the rapid rise in Electrical generation rates.
  - Value, no capital investment
- Universities
  - Mandate from CT Governor to lower energy use
  - No Capital investment
- Large multi building property owners
  - Value, Fits continuous improvement objectives

# Is RCx working?

- RCx is not a typical utility demand side management program offering.
- Takes more time to implement.
- Complicated to the outside observer.
- The interaction with & time spent with CxP educates customers on the operations side.
- Benefits the environment by using in-place capital to generate the savings.

Questions ?

Comments ?



# Thank you for your time

## CT RCx Program

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