CCC PIER Research Program:

“Building Commissioning: Strategies and Technologies for Energy Efficiency”

Program Advisory Committee (PAC) Meeting

October 22 2009, San Diego Airport Hilton
AGENDA

• General update from the Energy Commission
• Program refresher
• Project highlight: Project 2: Optimizing Integration of Energy Info into Commercial Real Estate Transactions
• Project highlight: Project 4: Improving Persistence of RCx Benefits
• Q&A
CALIFORNIA ENERGY COMMISSION UPDATE

• Budget Update
  – 09/10 Budget allocation
  – ARRA Budget

• Technology Innovations in Buildings and Communities (TIBC#2) solicitation update

• Building Energy Research Grant (BERG) update
Project 2: Energy Info + CRE Transactions
Principal Investigator: Eliot Crowe (PECI)
Project Manager: Eliot Crowe (PECI)
Subcontractors: PECI, HMG
Technical Advisory Group (TAG)

Project 3: RCx Tools
Principal Investigator: Asim Tahir (AEC)
Project Manager: Eliot Crowe (PECI)
Subcontractors: PECI, AEC, QuEST, EMC
Technical Advisory Group (TAG)

Project 4: RCx Persistence Guidelines
Principal Investigator: Hannah Friedman (PECI)
Project Manager: Eliot Crowe (PECI)
Subcontractors: PECI, Enovity
Technical Advisory Group (TAG)

Project 5: Verification of RCx Savings
Principal Investigator: David Jump (QuEST)
Project Manager: David Jump (QuEST)
Subcontractors: PECI, AEC, QuEST, 2 RCx Providers
Technical Advisory Group (TAG)

Project 6: Title 24 Requirements/Effectiveness
Principal Investigator: Jon McHugh (MEC)
Project Manager: Eliot Crowe (PECI)
Subcontractors: PECI, MEC
Technical Advisory Group (TAG)
Project Highlight: Project 2:
“Integrating Energy Information into Commercial Real Estate Transactions”

- Project 2: Energy Info + CRE Transactions
  - Principal Investigator: Eliot Crowe (PECI)
  - Project Manager: Eliot Crowe (PECI)
  - Subcontractors: PECI, HMG

- Project 3: RCx Tools

- Project 4: RCx Persistence Guidelines

- Project 5: Verification of RCx Savings

- Project 6: Title 24 Requirements/Effectiveness
Integrating Energy Info for CRE Transactions

• Property Condition Assessments (PCA)
  – Part of Due Diligence process when purchasing property
  – Buyer pays
  – Scope is determined by buyer, although ASTM 2018 provides voluntary guidelines
  – 1-4 day typical timeline
  – Focus on condition of interior, exterior, roof, foundations, electrical, plumbing, safety, HVAC equipment, etc
Integrating Energy Info for CRE Transactions

- **Context**
- **Project Overview**
  - Pilot RCx Screening / scoping approach as part of Property Condition Assessment (PCA), and also consider how to handle benchmarking (connection with AB 1103)
  - Develop optimized approach, and propose draft language/templates for ASTM standard update
  - Outreach – Owners, PCA firms, and California policy-makers
- **Timeline**
  - Pilot/optimization: June 2010
  - Outreach: Mid-2010 to mid-2011
Integrating Energy Info for CRE Transactions

• The Big Questions! (discussion)
  – Cost/time limitations – how deep can you go?
  – Benchmarking is a big deal for a lot of property owners, so RCx screening might be a stretch?
  – What are the technical capabilities of the ‘average’ Property Condition Assessment (PCA) firm?
  – Need to be careful in giving recommendations, if a multi-million dollar transaction is in the balance
Project Highlight: Project 4: “Improving Persistence of RCx Benefits”
Improving RCx Persistence

• Context

• Project Overview
  – Market research / develop 3 ‘Best Practices’ case studies
  – Characterize available tools
  – Establish key metrics
  – Develop Best Practices Guideline
  – Outreach

• Timeline
  – Market Research / Characterization: April 2010
  – Metrics: Jul 2010
  – Guideline: Dec 2010
  – Outreach: Mid-2010 to mid-2011
Improving RCx Persistence

• Tool Characterization Matrix (Enovity)
Improving RCx Persistence

• The Big Questions! (discussion)
  – With so much tool development in this area, how do we ensure the guideline isn’t obsolete in 6 months?
  – How do we reach the audience and inspire action?
  – How do we strike the right balance of comprehensiveness and brevity?
  – How do we ensure the guideline is relevant to both commercial office and institutional buildings?
PAC Co-Chairs

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ANY QUESTIONS?