

Commercial Energy Services Network

COMNET:

Supporting Existing Commercial Building Energy Rating Systems

www.imt.org/COMNET

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The COMNET Team

- New Building Institute (NBI)
- Architectural Energy Corporation (AEC)
- Institute for Market Transformation (IMT)
- RESNET

Funders

- Energy Foundation
- Sea Change Foundation



Purpose of COMNET

Standardize the software and procedures for:

- Federal tax deductions
- Credit under Green Building Rating Systems
- Energy Labels



The Problem

- Several important energy policies to improve efficiency in commercial construction are thwarted by lack of a consensus methodology for consistently and affordably calculating
 - energy savings compared to code
 - total energy use
- For example, Commercial Buildings Tax Incentive, 2005 Energy Policy Act (EPAct 05)
 - \$1.80/sf Tax deduction for 50% savings over ASHRAE 90.1 2001
 - Demonstrating compliance often costs more than the value of the incentive!
 - Congress extended deduction through 2013

The Solution

- Technical standards for software that
 - automatically generates multiple reference buildings and compares energy use to reference building (to date, COMNET supports ASHRAE 90.1 2001 and 2007)
 - Generates more realistic and standardized total energy use (including unregulated energy)
- Certification and quality assurance for energy modelers and field inspectors
- Flexibility to serve multiple needs

Potential Applications

Document compliance to qualify for

- EPACT 2005 Commercial Buildings Tax Deduction (recently extended through 2013)
- USGBC's LEED™ program prerequisites and energy points
- Designed to Meet ENERGY STAR™ certification

Potential Applications (cont.)

- Producing EUI outputs specifically for ENERGY STAR's Target Finder™
- Integration into ASHRAE technical specs (COMNET is already referenced by ASHRAE Building EQ)

Other Possible Applications

- Performance-based energy code compliance
- Generating estimates of operating costs for commercial building appraisals
- Enabling comparison of “designed-performance” energy efficiency ratings among buildings
- Utility, State or Federal performance-based incentive programs

Accrediting Energy Rating Professionals

- Develop and field test an initial framework for accrediting commercial building rating professionals
- Make maximum use of existing training and accreditation organizations, systems and credentials, including:
 - AEE, ASHRAE, BCA, GBI, BPI, etc.
- Develop processes to provide quality assurance and accountability for energy rating professionals

What are the Benefits?

- Allow designer to perform one energy calculation that is recognized by multiple rating systems
- Save time of energy modelers & evaluators
- Reduce energy modeling errors
- Increase predictability in energy ratings
- Streamline building evaluation, including LEED certification
- Apples-to-apples comparisons between the requirements of different programs

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