



Partnering with your Utility to Get Whole-Building Data in Multi-Tenant Buildings

Moderator: Kevin Bush, HUD

Panelists: Brian Bieler, REACH CDC

Michael Bodaken, National Housing Trust

Kevin Bricknell, ComEd



U.S. Department of Energy Better Buildings Summit

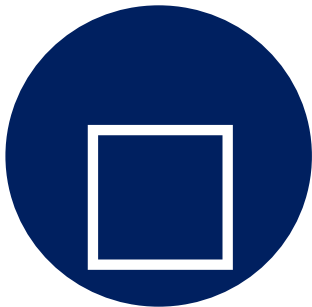
May 8-9 2014

Michael Bodaken
National Housing Trust



About the National Housing Trust

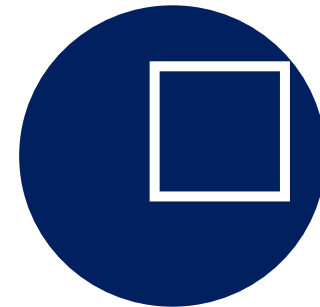
NHT **protects and improves** existing affordable rental homes so that low income individuals and families can live in quality neighborhoods with access to opportunities.



ADVOCACY



**REAL ESTATE
DEVELOPMENT**



LENDING

NHT/Enterprise is committed to increasing the energy efficiency of our existing and future properties

- Mountain View Tower—114 unit senior affordable housing owned by National Housing Trust/Enterprise
- **Efficiency improvements:** energy-efficient boiler for the central heating system, ENERGY STAR qualified residential light fixtures and appliances
- **Energy savings:**
 - Envelope: 25% more efficient
 - Interior Lighting: 30% more efficient
 - Exterior Lighting: 50% more efficient



Figure 1: Mountain View's green roof with vegetation and useable terrace space for residents.

Access to whole-building energy usage data in affordable multifamily housing is critical for good property management

- Perform detailed analysis of properties to prioritize energy and water efficiency upgrades.
- Assist residents in saving on their utility bills
- More accurately determine utility allowances
- Consider portfolio-wide opportunities
- Verify the results of upgrades
- Provide an underwriting basis for expected utility cost reduction achieved through energy efficiency and renewable energy programs

NHT and partners will target up to 12 states to deeply engage with utilities to advance efficiency programs for affordable multifamily.

Objectives:

1. Build an effective national network among efficiency and affordable housing champions
2. Facilitate stakeholder engagement to increase utility funding for affordable multifamily housing
3. Expand and improve utility efficiency programs to benefit low-income
4. Engage building owners to grow demand for enhanced utility programs



Target states:

- California
- New York
- Illinois
- Maryland
- Michigan
- Minnesota
- Pennsylvania
- Missouri
- Rhode Island



ELEVATE ENERGY
Smarter energy use for all



Access to energy usage data in affordable multifamily housing is critical for good utility program design

- Identify properties that benefit from energy efficiency upgrades
- Providing guidance for energy efficiency program development
- Prioritizing program resources to target the most energy inefficient buildings
- Verifying results of energy upgrades

Access to aggregate whole-building energy data provides useful information to owners and protects tenants' privacy.

- Obtaining and managing tenants' authorization is impractical for both owners and the utilities.
 - High turn-over rate, requiring new authorization
 - Tenants wary of providing access to their utility account information
- Access to aggregate whole-building data addresses utilities' and consumer rights advocates' concerns about compromising resident privacy.

NASUCA and NARUC support the use of aggregated data that protects consumer privacy.

- **National Association of Regulatory Commissioners (NARUC) resolution, adopted July 2011**
 - NARUC supports taking reasonable measures to facilitate convenient, electronic access to utility energy usage data including *aggregated* data that does not reveal customer-specific data to the extent provided for under State law and regulations.
- **National Association of State Utility Consumer Advocates (NASUCA) resolution, adopted November 2013**
 - NASUCA supports access to whole-building energy consumption data as long as, “all feasible measures to ensure the privacy of individual tenant data, including anonymized *aggregation* of the energy consumption data for any specific building, are adopted...”

Local jurisdictions and states have developed aggregation policies to make data accessible and protect tenant privacy.

- **Washington, D.C.**

- Pepco provides aggregate whole-building electricity information for residential buildings with 5 or more units, without requiring releases from tenants.

- **Oklahoma's Electric Usage Data Protection Act, 2011**

- Allows aggregate usage data to be disclosed without customer consent for purposes such as:
 - promoting energy assistance
 - conservation
 - environmental advocacy
 - research
 - measuring company performance

For more information:



Michael Bodaken
National Housing Trust

 **mbodaken@nhtinc.org**

 **(202) 333-8931 x111**

 **www.nhtinc.org**

 **@NatHsingTrust**



An Exelon Company



Energy Usage Data System

Kevin Bricknell
Energy Data Services
Program Manager

Better Buildings Summit

Washington, D.C.

May 9, 2014

ComEd:

- 3.8 Million Electric Customers in Chicago/Northern IL
- 350,000 Business Customers

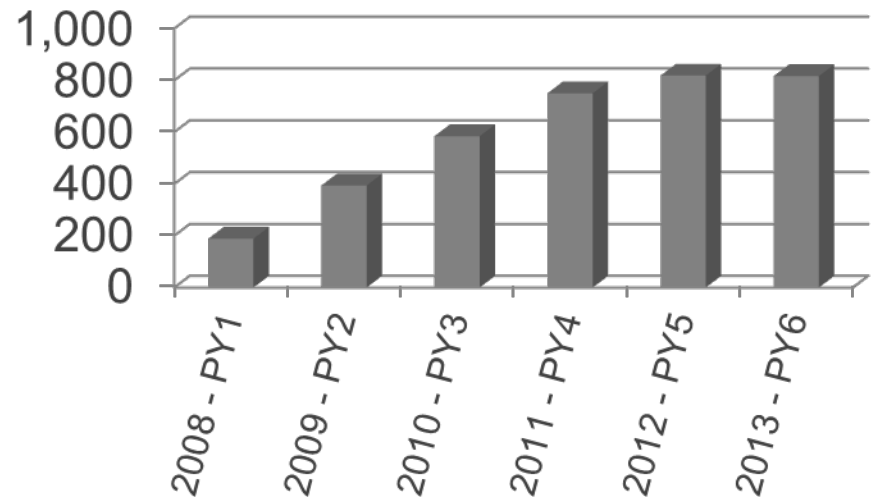
Energy Data Services:

- ✓ Energy Insights Online (EIO) - Web Based Energy Consumption Tracking
- ✓ Energy Usage Data System (EUDS)
- ✓ Enterprise Service Bus (ESB)

What is *Smart Ideas for Your Business*?

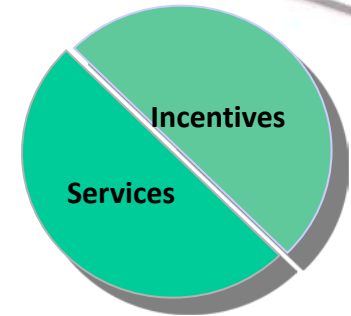
- **Provides incentives for energy efficiency upgrades and equipment**
- Part of Illinois energy legislation passed in 2007
- Program implemented by ComEd, Ameren Illinois and the Illinois Department of Commerce and Economic Opportunity
- Now in sixth year of program
- Ratepayer funded program

Smart Ideas Energy Efficiency Goals (MWh)



Smart Ideas Helps You Become More Energy Efficient

- ✓ *Smart Ideas* Opportunity Assessments
- ✓ Standard and Custom incentives
- ✓ New Construction
- ✓ Small Business Energy Savings
- ✓ Data Center
- ✓ Business Instant Lighting Discounts (BILD)
- ✓ Commercial Building Optimization
 - Retro-commissioning
 - Monitoring Based Retro-commissioning
- ✓ Industrial Systems Optimization
 - Compressed Air
 - Process Cooling
 - Refrigeration



Energy Usage Data System (EUDS)

- ✓ Enter your Portfolio of Commercial Buildings
- ✓ Automated End to End Data Retrieval and Reporting
- ✓ Export Usage Data for input into Portfolio Manager
- ✓ Secure System and Data Transmission

ENERGY USAGE DATA

User Authentication

Username

Password

Login

[Forgot Password?](#)

Functionality Overview

- ✓ One Time and Recurring Data Requests
- ✓ Tenant Verification
- ✓ Whole Building Data Usage Totals per Month (kWh)
- ✓ Automatically submit energy usage data to Portfolio Manager (ABS)

Admin Admin
Program Manager

My Profile

Data Portal Settings

Web Service

Username: XXXXXXXX
 Password: XXXXXXXX
 Poll Interval: XXXXXXXX

[Modify](#)

IMAP Server Settings

IMAP Server: webmail.ihost...
 Port Number: 993
 Username: energydatareq...
 Password: (not shown)
 Use SSL: true
 Poll Interval: 1 min(s)

[Modify](#)

Tenant Settings

Min Tenants: 4

[Modify](#)

Request Manager Settings

Status Update

Last Check-in Details

Date: Aug 21 2012
 Time: 13:32

Request Processing Time Settings

Maximum Waiting Time: 60 min(s)

[Modify](#)

Request processor

Current Mode: Request Manager

[Switch Over To FTPBatchProcessor](#)

Users Summary

Active Users:	657
Active Users Logged: (in the past 90 days)	173
Total Users:	657
Program Managers:	4
Program Analyst:	4
Account Managers:	91
Building Managers:	558

Request Summary

Requests Completed	
This Year:	2708
This Month:	205
Previous Month:	498
Requests Pending:	27
Requests Completed/Submitted:	5389

Building Summary

Active Buildings:	3176
New buildings this month:	45

Reports

- Status Report
- Buildings added / month
- Usage request / month
- Usage request months
- No. of requests / month
- Requests Sent To ENERGY STAR

Settings

Account Manager - Building Manager Mapping

Add Building:



Add New Building (Primary Address)

Building Name:	<input type="text" value="20 S Clark"/>
	No special characters other than [-] are allowed and the Building name cannot start with special characters.
Street Number:	<input type="text" value="20"/>
	Street number can have numbers separated by (-). E.g., 13 , 134-235
Street Name:	<input type="text" value="Clark"/>
	No special characters other than [-] are allowed and the street name cannot start with these special characters.
Street Direction:	<input type="text" value="South"/>
State:	<input type="text" value="Illinois"/>
City:	<input type="text" value="Chicago"/>
Zip:	<input type="text" value="60606"/>
	Zip code should be in 5 digits. E.g., 50571
<input type="button" value="Save"/> <input type="button" value="Save & Add Secondary Address"/> <input type="button" value="Clear"/> <input type="button" value="Cancel"/>	

Add Request:

Building Name:	20 S Clark
Starting Date:	01 Jan 2010 <input type="checkbox"/> Recurring
Start Date should be less than today's Date. Minimum 30 days gap should be there between today's date and end date.	
Ending Date:	31 Dec 2010
End Date Should be more than Start Date .Minimum 30 days gap should be there between today's date and end date. End Date should be less than today's Date	
Request for:	Monthly
Place Request:	<input checked="" type="radio"/> Now <input type="radio"/> Schedule Date
Please select Schedule Date Date should be greater than today's date.	
	<input type="checkbox"/> Auto Confirm
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>	

Verify Tenants:

Export to Excel

Tenant Verification

View per page Pages: 1

Status	Tenant Name	Tenant Address	Confirm/Deny	Category	Remarks
	ACCOUNTANTS INTERNATIONAL	20 S CLARK, UNIT 24WB, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	
	AFFILIATED NETWORK SERVICES	20 S CLARK, UNIT 1850, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	
	AGORA INS NETWKS SOLUTIONS	20 S CLARK, UNIT 800, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	
	AUDREY GAYNOR & ASSOC	20 S CLARK, UNIT 1620, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	
	BELONGIA SHAPIRO & FRANKLIN	20 S CLARK, UNIT 3E, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	
	BRANDWEIN & SMOLIN	20 S CLARK, UNIT 410, CHICAGO	<input type="radio"/> Confirm <input type="radio"/> Deny	Uncategorized	

- Active Tenant - Inactive Tenant

Please verify all the records in all the pages

Confirm All

Submit Tenant List

Data Returned -- Submit to ENERGY STAR

 Export to Excel

Usage Details

Month Year	Total Monthly Usage (kWh)
Jan 2010	1,082,966
Feb 2010	961,654
Mar 2010	657,748
Apr 2010	498,732
May 2010	557,258
Jun 2010	590,241
Jul 2010	652,061
Aug 2010	639,872
Sep 2010	710,775
Oct 2010	458,091
Nov 2010	678,545
Dec 2010	1,085,638
Total	8,573,581

 Submit to ENERGY STAR

Before

(Manual Process)

- Cost to Customer
- Cycle Time 10-12 Days
- Labor Intensive
- Limited Number of Requests
- Data Provided Quarterly and/or Annually
- Customer contacts ComEd to obtain data

After

(Automated Process)

- No Cost to Customer
- Cycle Time 1-2 Days
- Completely Automated
- Unlimited Number of Requests
- Monthly Data
- Customer empowered to obtain data whenever needed

Support for Energy Usage Data System:

- ✓ Technical Support
- ✓ Admin Support
- ✓ Online Mailbox
- ✓ Online Training
 - Job Aids
 - Webinars
- ✓ LCS Account Managers
- ✓ Ongoing joint training workshops supporting City of Chicago Benchmarking Ordinance

Questions?

Smart Ideas Program questions ...

New Number! (855) 433-2700

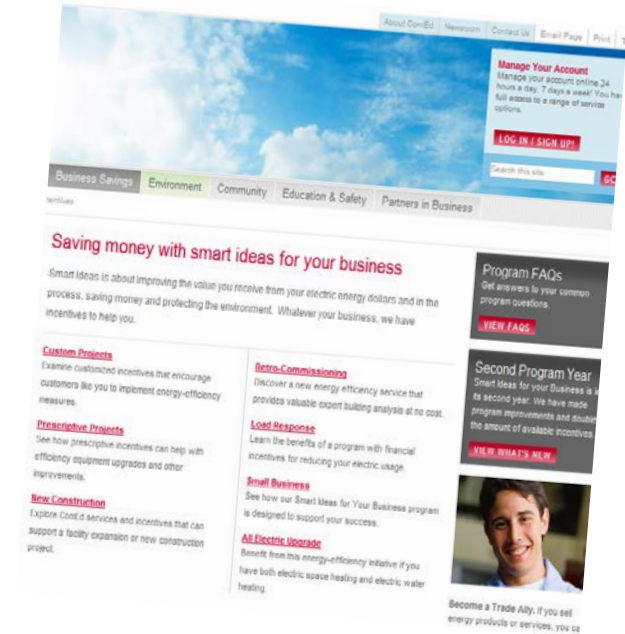
✓ www.ComEd.com/bizincentives

- Program information
- Application forms

Energy Data Services...

✓ www.ComEd.com/EnergyUsageData

- Enrollment information
- Training materials



Thank You!

Kevin Bricknell, EDS Program Manager
(630) 437-3118

kevin.bricknell@ComEd.com