

Better Buildings Residential Network Multifamily & Low-Income Peer Exchange Call: Strategies to Overcome Split Incentive Tenant/Landlord Issues September 25, 2014 Call Slides and Discussion Summary



Agenda

- Call Logistics, Announcements, and Introductions
- Opening Poll
- Residential Network and Peer Exchange Call Overview
- Featured Speakers
 - Kenley Farmer, Project Manager, Stewards for Affordable Housing for the Future, and Casey Murphy, Senior Technical Specialist, ICF International
 - Meghan Shaw, Community Outreach Director, Cambridge Energy Alliance

Discussion

- Share some of the challenges (and any frustrations!) your program has encountered related to split incentives issues with tenants and landlords.
- What successes has your program achieved in getting past split incentive issues to conduct energy efficiency assessments and upgrades in multifamily and low-income housing?
- Have you tried any strategies that did not work well? What lessons did your program learn from those efforts?
- What questions do you have for others who have tried to overcome the split incentive issue?
- What do you plan to do in the future to help increase energy efficiency upgrades in multifamily housing?
- Future Call Topics Poll





Call Participants

- American Council for an Energy-Efficient Economy
- Arlington County, VA
- Build It Green
- CalCERTS, Inc.
- California Housing Partnership
- City of Bellevue
- City of Bellingham, WA
- City of Cambridge, MA
- City of Charlottesville, VA
- City of Kansas City, MO
- Civic Works, Inc.
- CMC Energy Services
- Corvallis Environmental Center (OR)
- Energy Coordinating Agency (EnergyWorks, PA)
- Ecolibrium3
- Economic Opportunity Studies
- Efficiency Nova Scotia
- Elevate Energy
- Energy Wise Alliance
- Florida Housing Finance Corporation

- International Center for Appropriate and Sustainable Technology
- Institute for Market Transformation
- Interfaith Human Services, Inc.
- Midwest Energy Efficiency Alliance
- Monroe County Energy Challenge
- MPower Oregon
- National Housing Trust
- Oberlin Project
- PA Interfaith Power & Light
- PECI (Richland, WA)
- Richmond Region Energy Alliance (VA Regional Energy Alliance)
- Snohomish County PUD
- Stewards of Affordable Housing for the Future
- Sustainable Connections
- Town of Blacksburg (VA Regional Energy Alliance)
- TRC
- Wisconsin Energy Conservation Corporation (WE²)
- Woodard Properties





General Announcements

 Funding is available for innovative urban solutions from Bloomberg Philanthropies' Innovation Delivery Grants

- Innovation teams use idea-generation techniques and a structured, data-driven approach to deliver results on a variety of topics
- 3-year grants are available, \$250K-\$1 million each, to cities with populations of at least 100,000
- Application Deadline: October 6, 2014
- Learn more at: <u>http://www.bloomberg.org/program/government-innovation/innovation-delivery-teams/</u>





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Opening Poll Results

- What experience does your organization have with split incentive landlord/tenant issues? (Choose all that apply)
 - Have never encountered any split incentive issues: 13%
 - Have encountered challenges and tried unsuccessful tactics to overcome them: 23%
 - We have been successful in our efforts to overcome split incentive issues: 10%
 - Mix of success/frustration in attempting to overcome split incentive issues: 35%
 - Other?: **19%**





Better Buildings Residential Network

- <u>Better Buildings Residential Network</u>: Connects energy efficiency programs and partners to share best practices to increase the number of American homes that are energy efficient.
 - <u>Membership</u>: Open to organizations committed to accelerating the pace of existing residential upgrades. Commit to providing DOE with annual number of residential upgrades, and information about benefits associated with them.
 - Benefits:
 - Peer Exchange Calls
 - Tools, templates, & resources
 - Newsletter updates on trends
- Recognition: Media, materials
- Optional benchmarking
- Residential Solution Center

For more information & to join, email <u>bbresidentialnetwork@ee.doe.gov</u>.

- Better Buildings Residential Network Group on Home Energy Pros Join to access:
 - Peer exchange call summaries and calendar
 - Discussion threads with energy efficiency programs and partners
 - Resources and documents for energy efficiency programs and partners

http://homeenergypros.lbl.gov/group/better-buildings-residential-network





Better Buildings Residential Network Group on Home Energy Pros Website







Peer Exchange Call Series

- There are currently 6 Peer Exchange call series:
 - Data & Evaluation
 - Financing & Revenue
 - Marketing & Outreach

- Multifamily/ Low Income Housing
- Program Sustainability
- Workforce/ Business Partners
- Calls are 2nd & 4th Thursday of each month at 12:30 & 3 PM ET
- Upcoming calls:
 - Oct. 9, 12:30 PM ET: Program Sustainability: Incorporating Energy Efficiency into Disaster Recovery Efforts
 - Oct. 9, 3 PM ET: Data & Evaluation: Making Evaluations Work for Your Program: Tips for Success
 - Oct. 23, 12:30 PM ET: Financing & Revenue: Crowd Funding: Enabling Small Investors to Help Fund Business Loans for E3 Upgrades
 - Oct. 23, 3 PM ET: Voluntary Initiative on Partnerships: Toolkit Training Webinar
- Send call topic ideas, or requests to be added to email distribution lists to <u>peerexchange@rossstrategic.com</u>



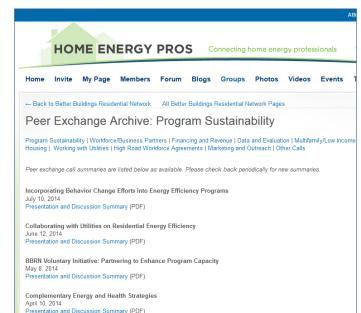


Peer Exchange Call Summaries

Discussion: Challenges and Solutions Overcoming Challenges - Solutions: Access trusted, local messengers Engage your satisfied customers as champions to turn them into "lifetime customers" Invite people to make a pledge with a few simple EE activities they can take Connect with the right local partners (Connecticut) conducted "community asset mapping") Directly involve the homeowner through DIY work or as energy efficiency demonstration homes to help them feel engaged (San Diego demonstration homes) Minimize paperwork to make it easier to participate Better ENERGY Poll Results

Participant Poll: Which of the following best describes your program's experience with energy efficiency behavior change efforts?

- Currently implementing: 31%
- Planning to implement: 31%
- Thinking about it: 19%
- Haven't thought about it: 0%
- Not applicable: 19%



Mastermind: Jim Mikel, Spirit Foundation March 13, 2014 Presentation and Discussion Summary (PDF)

How do you eat an elephant? One bite at a time. A slight shift in perspective goes a long way.

Understanding how EE can solve a financial, public relation, or customer service problem for the utility is the right place to start.





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EZ Retrofit: Strategies to Overcome Split Incentive Tenant/Landlord Issues Kenley Farmer Stewards for Affordable Housing for the Future Casey Murphy ICF International





EZ Retrofit:

Strategies to Overcome Split Incentive Tenant/Landlord Issues

Agenda:

- 1. Challenge
- 2. Model
- 3. Implementation
- 4. Process
- 5. Workflow
- 6. Case Study
- 7. Summary



Retrofitting Multifamily Properties

- Challenge -

- Reduce energy and water consumption for small multifamily housing
- Address the barriers faced by properties that are too small for the ESCO model and too complex for the single-family programs
- Give property owners the ability to evaluate the opportunities in their buildings with access to estimates of both Owner and Tenant savings

- Model -

- Create the EZ Retrofit tool: an easy-to-use, free, nonproprietary software tool that is an alternative to an expensive energy audit
- Provide owners with a list of measures that are specific to their building
- Give owners the ability to see savings broken out by Owner and Tenant
- Provide owner with estimates of cost, payback, and utility savings to allow an owner to more readily engage a contractor

- Implementation-

- Tool has been utilized at 10 SAHF properties – both master-metered and tenant-metered
- "The EZ Retrofit tool lays out a clear picture of the opportunities available at this property" – Asset Manager for Volunteers of America, SAHF member
- Version 1.02 of the Tool is available on the SAHF website



Property Owner and Manager Decision-making Process One Key Barrier *Awareness* Initiating Confirming Confirming Scoping Performing Validating of Due Relevance Work Performance Work Work **Opportunity** Diligence What specific Energy Benchmarking: **Obtaining cost** Looking at Identifying any opportunities efficiency Is my building(s) and package utility bills change orders do I have? can be an more or less prices and associated post-retrofit Confirming effective efficient than a impacts What does the final costs and investment typical building? initial package measures and payback look like?



Work Flow



- In order to simplify the user experience, the EZ Retrofit tool makes certain assumptions based on user inputs.
- For example, a user can enter the age of an appliance and the tool assumes:
 - the estimated energy usage of the appliance
 - the efficiency of an upgrade appliance (e.g., ENERGY STAR)
 - the cost to upgrade the appliance (including materials and labor)

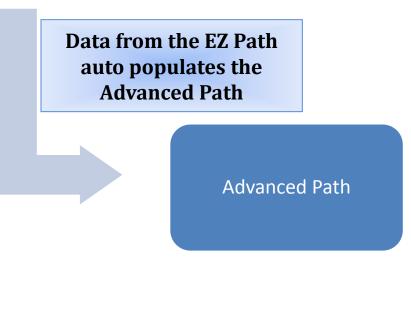
- To allow for additional accuracy, all building systems and appliance information can be changed.
- Specific example provided in a few slides.



Work Flow

| users |
|-------|
| |

- User inputs data into pop-up screens for each of 10 building measure categories (see p. 6)
- Uses key assumptions that cannot be overridden by user until transitioning to Advanced Path



EZ Path

- Best for users who are familiar with the EZ Retrofit Tool and/or want to enter their own assumptions, costs, and other information Users can enter additional information into the Advanced Path once they have completed the EZ Path OR can begin with the Advanced Path
- Editable Excel spreadsheet



EZ Path – General Characteristics Screen:

| General Characteristics | | × |
|---|---------------------------------------|-------------------------------|
| Did You Know? | | Save |
| How Do I Do It? Exit Withou | t Saving | Save and Exit |
| Property Name | Floors Above Ground | |
| Building Name | Floors Below Ground | |
| Building Address | Square Footage of Conditioned Area | |
| State | Total Square Footage | |
| Nearest Airport | Average Ceiling Height | |
| Zip | Number of Apartment Units | |
| | Year Building was Built | |
| Note: Airports have weather data that the tool uses to determine heating and cooling loads. If you don't | Primary Space Heating Fuel Type | • |
| know the closest airport, you can select one that is fairly close that you recognize. | Primary Water Heating Fuel Type | _ |
| Previous Screen - Welcome Screen | | Next Screen - Benchmarking |



EZ Path – Utility Bill Calibration & Benchmarking

| Bill Type | |
|--|----------|
| Please select bill type: C Electricity C Gas | Electric |
| ○ Oil | |
| Benchmarking Next Note: You can enter four types of utilities in the EZ Path: electricity, natural gas, oil, and water. For each of these | |
| utilities, you can enter both owner-paid and tenant-paid usage separately. If you have a master-metered building, input all data as owner-paid data. For tenant-metered buildings, calculate or estimate the total tenant usage before entering the amount into the tool. | |
| Additional guidance can be found under the 'How Do I Do It?' button on the "Benchmarking" Screen. | |

| Electric Bill Data | | | | | | | |
|---------------------|------|--|--|--|--|--|--|
| Who pays this bill? | | | | | | | |
| C Tenant | | | | | | | |
| C Owner | | | | | | | |
| Previous | Next | | | | | | |



EZ Path – Owner/Tenant System Inputs:

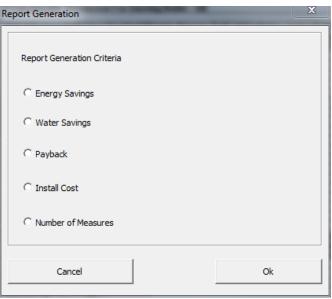
| Lighting | | | | X |
|--|---------------|-------------------------------------|------|--------------|
| Did You Know? | | Save | | R |
| How Do I Do It? | | Save and Ex | tit | |
| Who pays the utility bills? | | Owner | • | * |
| Location | | Owner Tenant | | • |
| Lighting Category | T-12 w/Ballas | t | • | 7 |
| Lighting System | 2-40W Lamp | w/EEMag Ballast | • | 11 |
| Quantity of Lighting | [| 30 | | \bigcirc |
| Do these lighting fixtures hav occupancy control sensors? | ve | No | • | Ó |
| Heating System | Your Predon | ninant Heating Sys | te 💌 | \mathbf{D} |
| Cooling System | Common Are | ea AHU | • | |
| Previous Lighting System | | Add Another Lighti System | ng | U U |
| Previous Measure Category - Kitchen Appliances | | Next Measure Cate Motors & Contr | | |

Heating and Cooling Domestic Hot Water Clothes Washers Kitchen Appliances Lighting Motors and Controls Duct Sealing Water Fixtures Toilets



EZ Path – Results and Reports

- The 'Results All Measures' option allows you to see all of the measures the tool has identified as significant energy and water savings opportunities in your building based on your inputs. The results tables can be organized either as a single list of all results or categorized by measure.
- The 'Report' option allows you to see a short list of measures for which the package of measures meets a criterion that you specify.



| Tatal | 0 | Tanant |
|-------|-------------------|---|
| Total | Owner | Tenant |
| 54% | 54% | - |
| 23% | 23% | - |
| N/A | - | - |
| 39% | 39% | 0% |
| 9% | 9% | - |
| 39% | 39% | - |
| | 23% N/A 39% | 54% 54% 23% 23% N/A - 39% 39% 9% 9% |



EZ Retrofit - Advanced Path:

| | Ē | | | | | | | | | | | |
|----|--------------|----------------------------|--------------------|---|----------|--------------------------------------|---|--------------|----------|--|---|----------------------------|
| | Ħ | Tool Overview | | | Clot | thes Washers | | | | | | |
| 1 | ٩ | General Characteristics | > | | Н | Help / User Manual | | | | | | |
| ı | -11 | Benchmarking | | | Existi | ing Clothes Washers | | | | | | |
| 1 | | Envelope | 5 | | \geq | Minimum Amount of Data Additional Da | ata to Increase Accurac | y | | | | |
| / | ۲ | Heating & Cooling | \geq | 2 | No. | Location Notes | Who Pays the Utility Bills For This Location? ↓ | Space Type ↓ | Quantity | Clothes Washer Type / Age \downarrow | Water Heater System Serving the Clothes Washers ↓ | Type of Dryer \downarrow |
| ļ | <u>1</u> | Domestic Hot Water | > | | 1 2 | | Owner | Common Area | 4 | NON-ENERGY STAR / 1986 - 1995 | Domestic Hot Water | Electric |
| | . | | $\langle \rangle$ | | 3 | | | | | | | |
| ÷. | Q) | Clothes Washer | | | 5 6 | | | | | | | |
| | <u>in</u> | | | | 7 | | | | | | | |
| ~ | 1 | Kitchen Appliances | | | 9 10 | | | | | | | |
| | | It-bate - | | | 11 | | | | | | | |
| ~ | | Lighting | | | 12 13 | | | | | | | |
| 1 | 22 | | | | 14 15 | | | | | | | |
| ¢ | 0 | Motors & Controls | | | 16 | | | | | | | |
| 0 | | | | | 17 18 | | | | | | | |
| ¢ | \mathbf{r} | Air Sealing | | | 19 20 | | | | | | | |
| 1 | ٩ | Duct Sealing | > | | 20 | | | | | | | |
| I | 1 | Water Fixtures | $\mathbf{\hat{z}}$ | | Prelim | ninary Savings & Proposed systems | | | | | | |
| 1 | | Water Conservation | 5 | | - | reliminary Savings - Clothes Washers | | | | | | |
| | 2 | Results - All Measures | | | • | | | | | | | |
| | | Report | > | | Usi | ing clothes washers as a | | ole, the | tool a | isks six questi | ons: | |
| | Clothes | s Washer - User Input | s | | | 1. Who pays the utility bi | ills? | | | | | |

- 2. Where is the appliance located?
- 3. How many do you have?
- 4. How old are they?
- 5. Which water heater is connected to the clothes washer?
- 6. What type of dryer do you use?



EZ Retrofit - Advanced Path:

- By design, the tool attempts to simplify the data collection process while providing helpful information about potential opportunities.
- Behind the scenes:
 - Tool assumes a baseline efficiency level based on vintage
 - Tool assumes a "typical" usage for clothes washers, these assumptions change if the clothes washer is located in a unit vs. a common area
 - Tool assumes a "typical" upgrade (e.g., ENERGY STAR qualified)
 - Tool assumes the costs to purchase and install upgrade
- Advanced Path allows a user to override these assumptions:
 - Users can enter more specific information about the baseline condition
 - For example, a user can enter the Modified Energy Factor, Water Factor, and Average Number of Loads per Week
 - Users can enter actual performance characteristics of a replacement unit
 - User can enter in total costs inclusive of equipment, labor, and rebates
 - User can run reports based on this new information to increase the level of accuracy



Summary

- Tool is designed for non-technical users, but has several powerful features:
 - Considers interactive effects of ECMs
 - Calibrates results based on utility bills
 - Associates savings to owners and tenants
 - Allows users to override assumptions
- Has User Guide embedded into tool
- Has paper checklist so users can collect data in the field and more readily enter data into the tool
- Is open source and available at no charge





Thank You!

Kenley Farmer www.sahfnet.org

Casey Murphy <u>www.icfi.com</u> Cambridge Energy Alliance: Strategies to Overcome Split Incentive Tenant/Landlord Issues

Meghan Shaw Community Outreach Director Cambridge Energy Alliance



GREEN YOUR LEASE



By: Meghan Shaw

What is a Green Lease?

- Incorporation of green language into a rental agreement
- Cost-sharing framework for efficiency improvements
- Solution to "split incentive problem" because it aligns landlord and tenants interests



Energy Efficiency Investments

- Benefits: save money, reduce pollution, increase comfort, improve property value, reduce maintenance costs. . . BUT
- Landlords are often reluctant to invest in energy efficiency improvements because
 - Any improvements are not "visible" to tenants
 - Improvements can be complicated (high transaction cost)
 - Capital improvements could increase property taxes



Green Lease Challenges

- Lack of trust between landlords and tenants and low transparency on energy bills
- In tight rental markets, no need to change lease/distinguish property from other rentals
- Differing rate of turnover mean two different leases
- Lack of information
 - Landlords don't realize they're not using energy efficiently



Implementation Strategy and Challenges

- Strategy: Contact top landlords and set up sessions to inform them of the opportunities for efficiency; hopefully smaller landlords will follow
- Challenges: Landlords hard to reach; many tax bills go to LLC's not people; landlords live far outside the city; too many landlords (extreme market fragmentation)



Implementation Strategy and Challenges

Strategy: Information/Outreach Efforts

- Contact MA Greater Boston Real Estate Board and MA Rental Housing Association; submit a draft green lease and see if they will approve a standardized, official green lease document or sustainability clause to keep on file and offer to landlords interested in green leasing
- Challenges: Industry is hard to move in a single city as they are often associated with National groups; fear that green leases simply make the rent higher and therefore unattractive to renters, which hurts business



Previous Implementation Ideas

Create a Green Lease Website

- Consolidate location of information available on green leasing initiative
- Provide links to other sources of information on green leasing BOMA, etc.
- Post free sample green lease
- Share stories and experiences of others who have already employed green leases
- Not Implemented due to sense that the time invested in this strategy would not yield results due to local industry hesitation and lack of interest by landlords during outreach.
- National Resources focused around Commercial green leases
 - □ Institute for Market Transformation
 - Greenleaselibrary.com



Lessons Learned

- Green leases save energy and save money, but it's hard to prove this to tenants and landlords and therefore just becomes viewed as higher rent
- Rental market conditions must support the green lease
- Small landlords do not have the capacity to rewrite leases since they often use a standard format and often lack capital to put toward improvements.
- Real Estate Associations tough to move on updating lease templates for small landlords
- Green leases primarily work best in commercial buildings with long-term tenants and transparent energy bills.



Discussion Questions

- Share some of the challenges (and any frustrations!) your program has encountered related to split incentives issues with tenants and landlords.
- What successes has your program achieved in getting past split incentive issues to conduct energy efficiency assessments and upgrades in multifamily and low-income housing?
- Have you tried any strategies that did not work well? What lessons did your program learn from those efforts?
- What questions do you have for others who have tried to overcome the split incentive issue?
- What do you plan to do in the future to help increase energy efficiency upgrades in multifamily housing?





EZ Retrofit Tools Features and Tips

- EZ Retrofit Tool lays out a clear picture of the energy efficiency opportunities available at a property.
- Powerful EZ Retrofit Tool features:
 - Allocates savings of measure packages to either owners or tenants.
 - Asks straight-forward questions that both building owners and tenants can answer, and is specifically designed for nontechnical users.
 - Two possible paths: the Easy Path makes assumptions about the building, and the Advanced Path allows users to override the assumptions for a more accurate description of existing conditions.
- EZ Retrofit Tool is open-source, available free of charge: <u>www.sahfnet.org/easyretrofit</u>
 - Please reach out if you need assistance with the tool!



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Challenges with Green Leases

- There are many barriers to Green Leases:
 - Competitive rental market/low vacancy rate isn't conducive to special offers by Landlord; renter needs to have power.
 - High rental turnover (e.g. in university towns) doesn't allow the long-term utility bill savings to be realized by the renter.
 - Dichotomy in marketing to landlords: large, disconnected landlord companies and small, single-property landlords have different needs/values, making marketing difficult.
 - Most landlords don't think of energy efficiency as an issue, because they don't see many utility bills.
 - Small landlords don't have the capital to rewrite leases.
- Green Leases are challenging to implement, but a regulatory push by the local government could help overcome the barriers.
- Green leasing *is* happening more in commercial units, e.g. Green Lease Library: <u>http://www.greenleaselibrary.com/</u>



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Discussion Highlights

- A possible method of gathering baseline energy data on rental properties: include a utility release form in the lease agreement packet OR collect Landlord's approval for the whole building's consumption (depending on metering).
- Property Management Associations acted as a buffer rather than a silver bullet to Green Leases in Cambridge.
- Incorporating energy efficiency into Section 8 housing: resident payments are calculated and controlled so there isn't much flexibility on raising tenant prices. However, because residents receive subsidized utility allowances there is opportunity for energy efficiency improvements in Section 8 housing to offset utility costs to the housing authority.
- Water saving measures are effective in rental units due to easy installation and minimal tenant disruption.
- A strategy to promote energy efficiency would be to require disclosure of energy data to tenants before the lease is signed, e.g. average bill in previous year.





Future Call Topics Poll Results

- Which topics would interest you for future Multifamily & Low-Income peer exchange calls?
 - Measures that landlords find valuable and that benefit the renters: 87%
 - Air quality and safety in MF upgrades: **35%**
 - Green certification of MF projects: 57%
 - Working with state housing agencies to make upgrades affordable: 57%
 - Other?: **0%**

If you would like to share your experiences on a call or have other ideas for a call topic, contact <u>peerexchange@rossstrategic.com</u>





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