Unlocking the Energy Efficiency Potential in Multifamily Low-Rise

Wade Morehead - CSG, for Ameren Illinois





Where Does Multifamily Fit?



Between the stars and through the clouds And over the fields we'd roam.

But no matter where we drifted...There's really no place like home!



Preview



- Program Overview
- Program Benefits
- Property Benefits
- Case Studies



Ameren Illinois

- Residential Energy Efficiency programs designed to assist Ameren Illinois residential customers in reducing their energy usage.
- Energy savings is measured in kilowatt hours (kWhs) of electricity and therms of natural gas.



Ameren Illinois Territory, also known as "Downstate Illinois"

Ameren Illinois delivers energy to 1.2 million electric and 813,000 natural gas customers in downstate Illinois, and our mission is to meet their energy needs in a safe, reliable, efficient and environmentally responsible manner. Our service area covers more than 1,200 communities and 43,700 square miles.



Program Overview

- Low Rise Only
 - 3 units or more
 - 3 stories or less
- Each unit must be rated independently
 - HERS Index
 - ENERGY STAR certification
- Incentives are paid to the builder, developer, or owner
 - Who is the decision maker?
 - Who is paying the bills?



Program Incentives

Multifamily Buildings

HERS Rating Only

- HERS 70 or less
 - \$300 for Ameren Gas Heat w/ other electric utility
 - \$500 for Ameren Gas Heat w/
 Ameren Electric
 - \$500 for Ameren Electric Heat

ENERGY STAR certified

- HERS 61-70
 - \$350 for Ameren Gas Heat w/ other electric utility
 - \$600 for Ameren Gas Heat w/
 Ameren Electric
 - \$600 for Ameren Electric Heat
- HERS 51-60 Double
- HERS 50 or less Triple

Up to \$1800 per unit!!!



Program Incentives

Single Family Homes & Duplexes

HERS Rating Only

- HERS 70 or less
 - \$500 for Ameren Gas Heat w/ other electric utility
 - \$800 for Ameren Gas Heat w/
 Ameren Electric
 - \$800 for Ameren Electric Heat

ENERGY STAR certified

- HERS 61-70
 - \$600 for Ameren Gas Heat w/ other electric utility
 - \$1000 for Ameren Gas Heat w/
 Ameren Electric
 - \$1000 for Ameren Electric Heat
- HERS 51-60 Double
- HERS 50 or less Triple

Up to \$3000 per unit!!!



H-QUITO Fee Assistance

- HVAC contractors must acquire an ENERGY STAR credential from an EPA-recognized H-QUITO
 - ACCA \$1100-1500 initial fees
 - Advanced Energy \$750-1000 initial fees
- ENERGY STAR New Homes Program will reimburse up to \$700 of the initial fees
 - Copy of Certificate
 - Proof of Payment
- Listed on ActOnEnergy website
 - Distributed to Builders and Raters



Program Benefits

- Large Numbers
 - 4000 units/year vs. 2000 SF homes
 - 10% market penetration; 400 units
 - \$400,000; 720 MWh; 16,000 therms
 - 30 % market penetration; 1200 units
 - \$1,200,000; 2160 MWh; 48,000 therms
 - \$100/MMBTU (program) vs. \$40/MMBTU (portfolio)
- Economies of Scale
 - One project < one builder
- Lower Baseline
 - Commercial code vs. Residential code



Property Benefits

- Energy Efficiency is a Selling Point
 - More comfortable Seniors
 - Less cost Students/young people
 - Healthier Families
- Better Tenants
 - More satisfied = Pride in home
 - More likely to pay rent in full and on time
 - Less turnover = less carrying costs
- Less Maintenance
 - More durable buildings
 - Moisture/water management



Gateway Apartments

- Madison & Venice, IL
- 78 townhomes; 3 phases
- 26 buildings, 3-units and 4-units

- HERS Index 62-70
- \$35,100; 74 MWh; 5,200therms
- Private/Public Partnership





Features

- R49 Insulation; R21 2x6 Walls; R10 Slab Perimeter
- ENERGY STAR furnace, AC, windows, water heater
- Ductwork inside conditioned space
- Not very tight 6.5-7.2 ACH50

By the Numbers

- Added cost = \$250,000; \$3200/unit; \$15,000/year financed
- \$300 annual energy savings per unit = \$23,400 more rent
- Consider all-electric next project \$100 more rent per unit



Ashland Place Townhomes

- Canton, IL
- 42 townhomes
- 8 buildings, 3-units and 4units

- HERS index 61-72
- \$48,600; 120 MWh
- Privately owned & managed





Features

- R49 Insulation; R23+5 2x6 Walls; R10 Slab perimeter & under
- 15 SEER 8.3 HSPF Air Source HP
- ENERGY STAR windows, appliances
- Ductwork inside conditioned space
- ENERGY STAR tight 3.5-3.8 ACH50

By the Numbers

- Added cost = \$160,000; \$3800/unit; \$10,000/year financed
- Reduce turnover by 5 points; saves \$24,000 in lost rent
- Less placement & advertising costs ~ \$5,000



Project Pipeline



- Hamilton On The Park, Urbana, IL
 - 36 apartments
 - Two 6-unit, 2-story buildings
 - HERS 70 w/ ASHP
 - \$18,000; 65 MWh



- 501 S Sixth St, Champaign, IL
 - 27 Apartments
 - One 3-story building
 - HERS 65 w/ ASHP
 - \$13,500; 50 MWh



Thank You!



Wade Morehead

Program Manager

wade.morehead@csgrp.com

O: 1.309.740.7044

M: 1.309.229.0263





