Opportunities for Low-Income Energy Efficiency

Suzanne Stelmasek

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Who is Elevate Energy?

We promote smarter energy use for all.

We give people the resources they need to make informed energy choices.

We design and implement efficiency programs that lower costs, and protect the environment.

We ensure the benefits of energy efficiency reach those who need them most.
Energy Efficient Buildings

Multifamily buildings:

- More than 26,600 units retrofitted
- Over 6 million therms and 17 million kWh saved
- 49,600 metric tons of CO2 emissions saved
- Typical savings 15-30%
- Over $14 million in CIC loans
- Created more than 550 jobs
Illinois Low-Income Landscape

- **Defining “low-income”**
  - HUD relies on Area Median Income (AMI) for its housing programs
  - American Community Survey (U.S. Census) estimates household incomes
  - Examples:
    - **Example**: Federal Poverty Level:
      - 150% : $35,775
      - 200% : $47,700

<table>
<thead>
<tr>
<th>Area</th>
<th>Low-Income (&lt;80% AMI)</th>
<th>Moderate-Income (81-120% AMI)</th>
<th>High-Income (&gt;120% AMI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago-Joliet-Naperville, Metro Area</td>
<td>$57,920</td>
<td>$57,921 - $86,879</td>
<td>$86,880</td>
</tr>
<tr>
<td>Rockford, IL Metro Area</td>
<td>$44,720</td>
<td>$44,721 - $67,079</td>
<td>$67,080</td>
</tr>
</tbody>
</table>
Income Distribution in IL (2013)

IL Households
4.7 million

80% AMI
2.3 million / 48%

150% FPL
1.3 million / 28%
Income Distribution by Utility Area

High-Income Customers (>120% AMI)

Moderate-Income Customers (80-120% AMI)

Low-Income Customers (<=80% AMI)

Source: American Community Survey, 2013 5-Year Estimates
Affordable Housing

- Affordable housing defined as rent < 30% of the monthly income for low-income families
- Accounts for 40-50% of the housing stock
- Affordable housing includes:
  - Subsidized housing
    - Section 8; LIHTC, public housing, privately owned, etc
  - Unsubsidized housing Market-rate
    - Affordable, but not subsidized, aka “naturally occurring affordable”

<table>
<thead>
<tr>
<th>All Multifamily Housing</th>
<th>Market-Rate</th>
<th>Unsubsidized Affordable</th>
<th>Subsidized</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Chicago</td>
<td>49%</td>
<td>34%</td>
<td>17%</td>
</tr>
<tr>
<td>Illinois</td>
<td>50%</td>
<td>27%</td>
<td>23%</td>
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Evidence of the increasing energy burden

- 24% of IL families are severely rent-burdened
- Energy costs were 15-28% of income for a family in poverty
- Limited access to financial services:
  - 8% un-banked; 20% underbanked in the US
  - Noncitizens and Spanish-speaking-only more likely to be unbanked (22% and 37%)
- Cycle of utility shutoffs and fees
- Recent UC Berkeley study: only 10% of the $18 billion spent on federal clean energy tax credits went to the bottom 60% of incomes

Sources: Heartland Institute; Colton; CFPB; ACS 2013 5-year estimates; Vox
Energy use by Income and Housing Type

- Drivers of energy use
  - Building characteristics, occupancy, behavior, appliance/equipment efficiency, etc

- Energy use Single Family Homes:

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<tr>
<th></th>
<th>N</th>
<th>Median annual kWh</th>
<th>Median annual kWh/ft²</th>
<th>Median annual therms</th>
<th>Median annual therms/ft²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Homes in Higher-Income* Census Tract</td>
<td>371,401</td>
<td>8,783</td>
<td>6.37</td>
<td>1,309</td>
<td>0.975</td>
</tr>
<tr>
<td>Single Family Homes in Low-Income* Census Tract</td>
<td>58,756</td>
<td>8,165</td>
<td>7.12</td>
<td>1,461</td>
<td>1.29</td>
</tr>
</tbody>
</table>

Difference: -7.0%  11.8%  11.6%  32.3%

*Defined according to HUD 80% AMI Qualifications
Source: Elevate Energy program data, Cook County Single Family Homes, 2006-2008

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Barriers to Energy Efficiency

- Affordable housing has multiple barriers to wider uptake of energy efficiency:
  - Financing access
  - Deferred maintenance
  - Split incentive for landlords and tenants
  - Lower budgets and maintenance staff than larger portfolios
  - Lack of knowledge and ability to navigate multiple programs
Opportunities Exist, CEIP Can Help

- Targeting older, less efficient buildings creates opportunities for **deeper savings**.
- **Big sector**, lots of buildings in Illinois and the Midwest broadly
- **Organized** through landlord associations, affordable housing advocacy, and policy groups
- Critical services **need the help** and are key members of the community
- Benefits provide **impacts across multiple fronts**
Thank you!

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