MULTI-FAMILY RETROFIT
MULTI-FAMILY INITIATIVES BY BUILDING TYPE (in general)

- **Home Energy Services**
  - 1-4 unit buildings

- **Residential Multi-family Retrofit**
  - 5+ units per site or building,
    - Residential meters

- **Residential Multi-family Retrofit**
  - Residential meters

- **C&I Retrofit**
  - Commercial meters
# RESIDENTIAL MULTI-FAMILY INITIATIVES

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Measures</th>
<th>Program Design and Delivery</th>
<th>% of Sector Savings (elec + gas)</th>
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</thead>
</table>
| Home Energy Services        | ▪ In-unit direct install instant savings measures (CFL/LED’s bulbs, power strips, t-stats)  
                              ▪ In-unit air sealing (no-cost)  
                              ▪ In-unit insulation (75% rebate up to $2000)  | Serves 1-4 unit buildings including nonregulated fuels. Delivered through residential vendors who provide energy assessments, in-unit direct install measures, and qualified contractor network installs insulation. | Residential Sector  
                              21% annual  
                              33% lifetime |
| Residential Multi-Family Retrofit | ▪ Same in-unit services as HES  
                                   ▪ Some common area and exterior lighting | Residential vendors provide energy assessments, in-unit direct install measures, and qualified contractor network installs insulation. Res vendors may also spec lighting retrofits that accrue to C&I. | Residential Sector  
                              5% annual  
                              6% lifetime |
| C&I Retrofit                | ▪ Prescriptive and custom equipment upgrades including, HVAC, DHW, motors, pumps, lighting systems | Delivered through commercial contractor network, referred from MMI or customer seeking upgrades for specific equipment. Prescriptive and custom incentives available for improvements impacting common spaces and the whole building. | Commercial Sector  
                              Unknown |
| Low Income Multi-family     | ▪ Lighting  
                              ▪ Refrigerators  
                              ▪ Air sealing  
                              ▪ Insulation  
                              ▪ HVAC  
                              ▪ DHW | Free service for buildings where >50% of the residents are at <60% of state median income. Delivered through low income network of vendors providing whole building energy assessments and whole-building improvement projects. | Low Income Sector  
                              58% annual  
                              58% lifetime |
DISTRIBUTION BY END USE FOR MULTI-FAMILY RETROFITS

(lifetime gas + electric site savings)

Residential Multi-family Retrofit
- Direct install in-unit instant savings measures
- No cost in-unit air sealing
- 75% insulation rebate
- Common area savings counted under C&I (not included here)

Low Income Multi-family Retrofit
- Whole building improvements at no cost to customer
- Use benchmarking to pre-screen customers
POTENTIAL MULTI-FAMILY SAVINGS

2013 Lifetime Savings per Participant (MMBtu), all Fuels

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Participants</th>
<th>Avg. Savings per Participant</th>
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<tbody>
<tr>
<td>LI Multi-family</td>
<td>30,551</td>
<td>99 MMBtu</td>
</tr>
<tr>
<td>Res Multifamily</td>
<td>38,881</td>
<td>41 MMBtu</td>
</tr>
</tbody>
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OPPORTUNITIES
CUSTOMER EXPERIENCE AND PROCESS ENHANCEMENTS

► Comprehensiveness
  - Include more flexible measure options including customization and customer cost-shared upgrades
  - Utilize existing vendor skills to encourage deeper savings
  - Implement tactics to overcome owner/renter split-incentive issue

► Incentives and Measure Eligibility
  - Balance incentives so one sector doesn’t appear significantly more attractive than the other
  - Include similar sets of costs and benefits in BCR calculations for both sectors
  - Implement “stackable” or performance-based incentives designed to encourage whole-building solutions
REDUCE CUSTOMER EXPOSURE TO PA’S “BACK OF HOUSE” PROGRAM SILOS

► Deploy a customer-level and/or project-level single point of contact implementation model
► Design record-keeping and accounting systems for costs and savings to function regardless of implementation strategies, not to drive them
► Design goals to encourage better integrated projects so one sector isn’t competing with the other for “credit”
IMPLEMENT BENCHMARKING

► Deploy a benchmarking initiative for all market-rate multi-family retrofit participants

► Use benchmarking to promote energy saving retrofits and assist customers in satisfying disclosure requirements (where applicable)

► Use benchmarking to triage deployment of program resources and customize customer solutions
SERVE BUILDINGS WITH UNREGULATED FUELS

► Adoption of proposed RCS regulations will:
  - Expand weatherization eligibility to multifamily buildings using unregulated fuels
  - Improve equity in the market
  - Increase savings opportunities

► Potential impacts will extend to program goals, costs, savings (especially other resource savings), and participation rates
  - The relative impact of this will vary by PA and region and should be included in the 2016-2018 planning
KEY QUESTIONS
1. What approaches and reporting should be used to further integrate the Res/C&I programs for multi-family customers including special attention to potentially under-served market segments (e.g. condominiums, renters, moderate income, etc.)?
CREATING A COMPREHENSIVE, INTEGRATED APPROACH FOR MULTI-FAMILY CUSTOMERS

1. What program delivery modifications could be implemented (single point of contact, customer oriented approaches, custom projects, etc.) to further promote more comprehensive projects?

2. What program incentive structures could be used to increase flexibility in measure offerings while being easy to understand and effectively balancing the needs and interests of building owners and tenants?
BENCHMARKING

1. What value can statewide benchmarking (and disclosure?) offer in multi-family housing and how can benchmarking be introduced in the most effective, efficient way?
1. In a fuel blind multi-family program, what implications should be considered in terms of budgets, goals, customer service, and deployment of vendors and contractors?