



Building Bridges to Net Zero



Con Edison Multifamily Efficiency Program

How Utilities Design Programs for the Energy Consumer

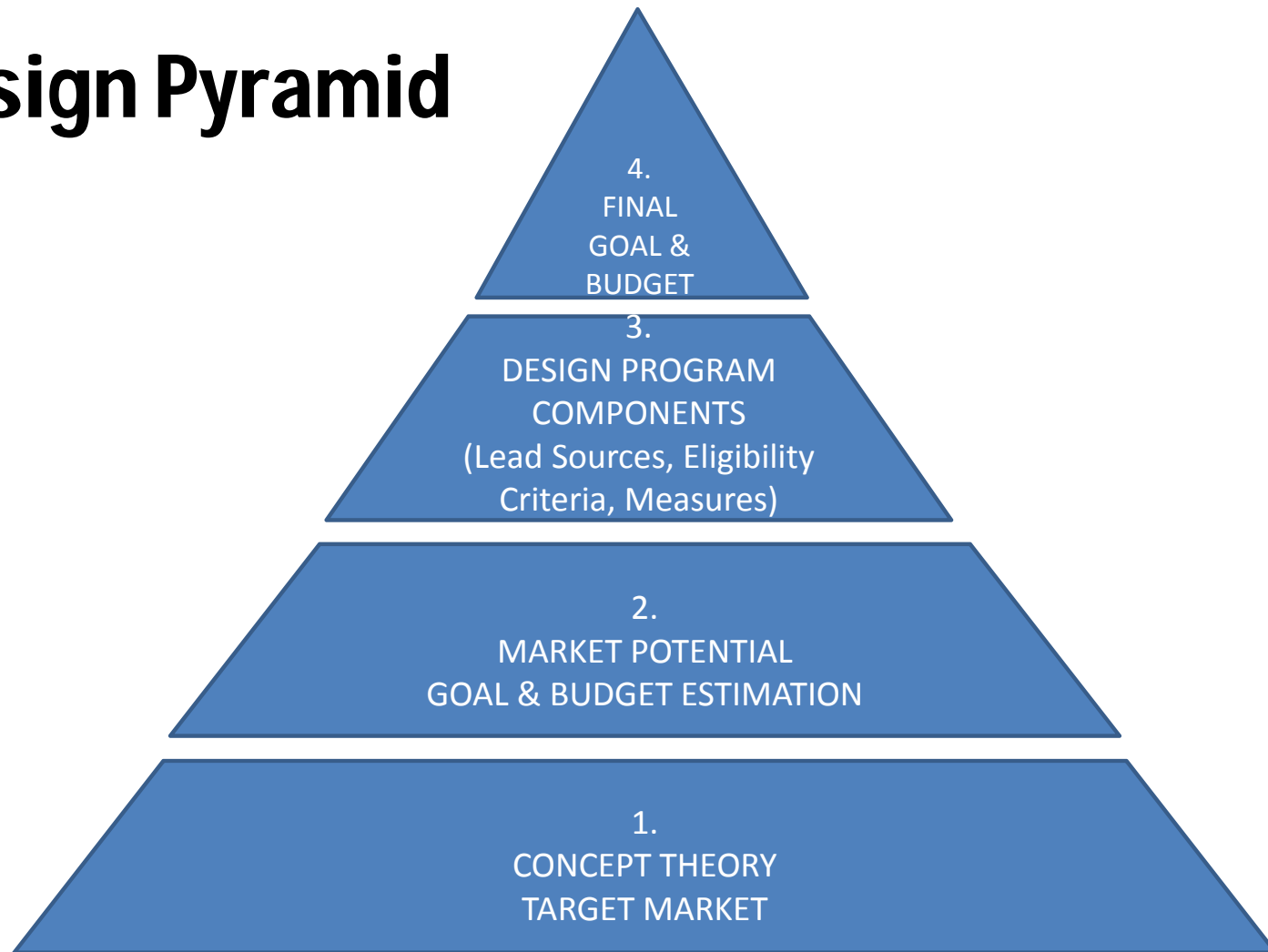
Presented by: Phil Madnick

Why Run Programs?

- NY State regulator requirement
- Defer capital expenditures
 - Major: Substations, Compressor Stations
 - Minor: transformers, feeders, regulators, etc.
- Customers become energy efficient
 - Equipment: better quality and longevity
 - Bills: lower monthly costs
 - Living Environment: improved health
- Encourage market transformation



The Design Pyramid



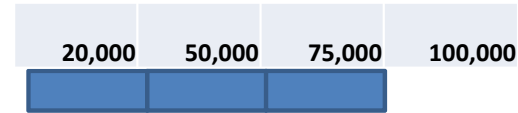
1. Concept

- What is the purpose of program?
- Define target market:
 - Upstream or Downstream
 - Residential or Commercial
 - Market Rate or Affordable
- Past Experience
- Similar Programs
 - National (research ACEEE)
 - Same territory (competitors)

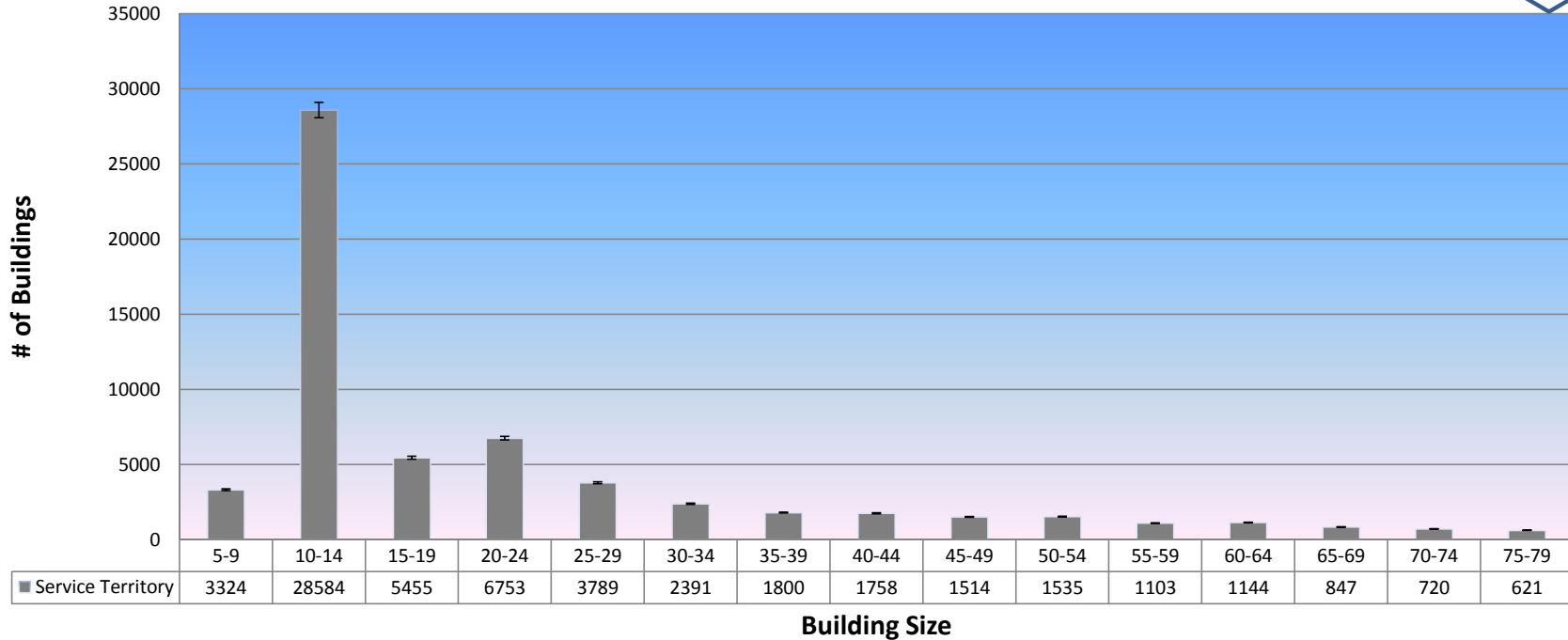


2. Market Potential

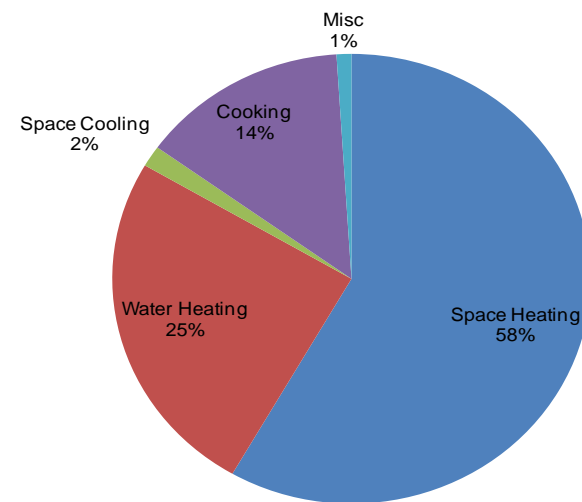
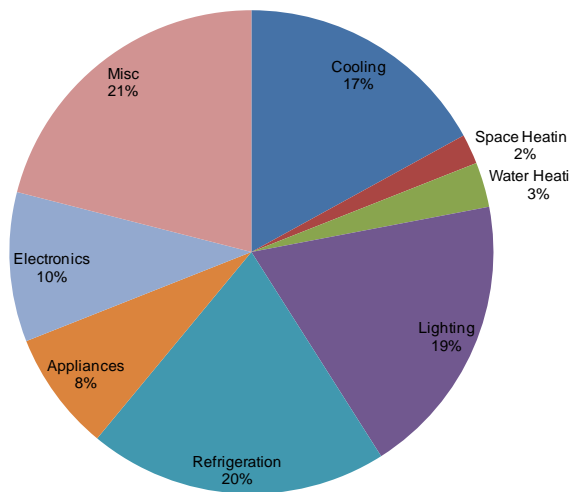
- # of multifamily buildings in NYC:



1.5 Million Units



- What are the income levels of multifamily customers?
 - Public and subsidized housing accounts for 20% of rental marketplace.
- What is the potential for energy efficiency savings?
 - Electric End Usage
 - Gas End Usage



- Goal and budget estimation



3. Program Components

- Lead sources:



- Generation ratio
- Generation cost

- Eligibility Criteria

- Account type
- Building construction
- Income qualification
- Past participants
- Conversion rates

- Measures

- Participation rate
- Annual energy savings
- Installation cost
- Rebate

FIXED	VARIABLE
FIXED	VARIABLE
FIXED	VARIABLE
FIXED	VARIABLE

- Cost Effectiveness



VS



- Incentive Options:

1. Direct Install

2. Prescriptive

3. Custom

	<u>PROS</u>	<u>CONS</u>
1. Direct Install	<ul style="list-style-type: none"> High Participation Split Incentive Avoided Simple to Forecast Low \$/kWh & \$/therm 	<ul style="list-style-type: none"> Low Cost / Pre-Qualified Items Only Contractual Agreement EH&S Requirements
2. Prescriptive	<ul style="list-style-type: none"> Easily Quantify Savings & \$ Low Level of Liability Promote Market Transformation 	<ul style="list-style-type: none"> Manage Qualified Trade-Allies Low Flexibility Monitor Customer Demand
3. Custom	<ul style="list-style-type: none"> Highly Flexibility Catch-All Tech & Apps Customer Satisfaction 	<ul style="list-style-type: none"> Low Participation Difficult to Forecast Engineering Review MV&E Requirements



Exercise

- Multifamily Gas Program
- Target: 1 million therms
- Budget: \$2M

Measure 1: Low Flow Showerheads

- Potential – up to 10,000 units
- Incentive Type – Direct Install
- Incentive - \$15
- Savings – 10 therms

Measure 2: Energy Management Systems (EMS)

- Potential – up to 200 units
- Incentive Type – Prescriptive
- Incentive - \$5,000
- Savings – 3,000 therms

Measure 3: Condensing Boilers

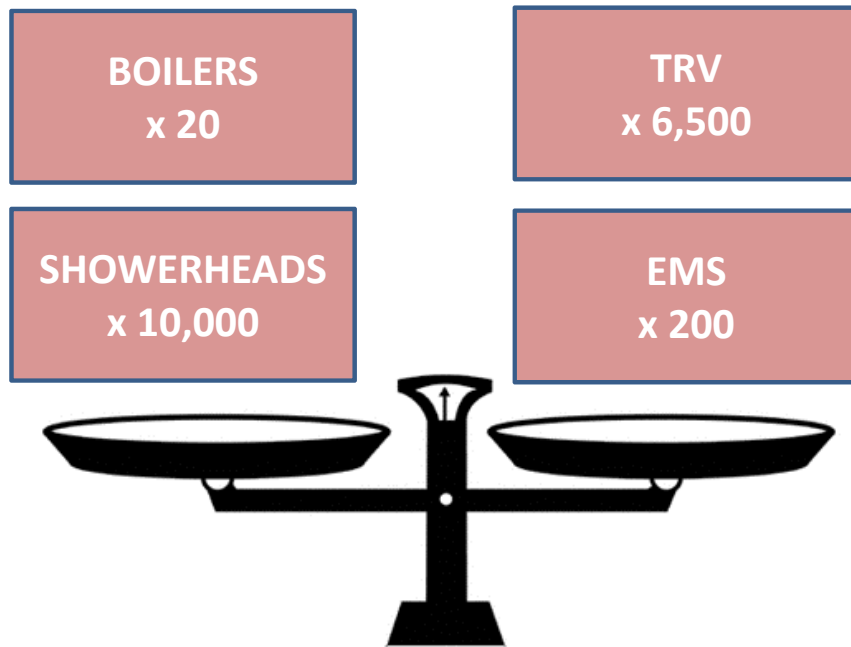
- Potential – 20 to 50 units
- Incentive Type – Prescriptive
- Incentive - \$10,000
- Savings – 3,000 therms

Measure 4: Thermostatic Radiator Valves (TRV)

- Potential – 1,000 to 10,000 units
- Incentive Type – Direct Install
- Incentive - \$100
- Savings – 40 therms



Solution



MEASURE	SAVINGS (therms)	COST
SHOWERHEADS	100,000	\$150,000
EMS	600,000	\$1,000,000
BOILERS	60,000	\$200,000
TRV	260,000	\$650,000
TOTAL	1,020,000	\$2,000,000



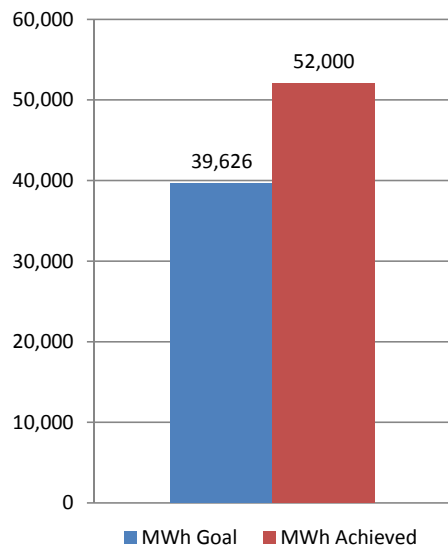
4. Goals & Budgets

- Savings and Incentives
- Other Overhead Expenses:
 1. Implementation Contractor (IC)
 2. Internal Administration
 3. Marketing
 4. Market Research & Analytics (MR&A)
 5. Evaluation Measurement & Verification (EM&V)

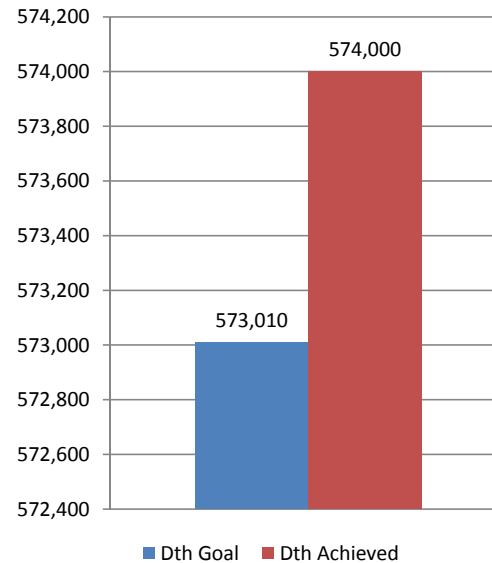


EEPS 2 Multifamily Programs Achievements

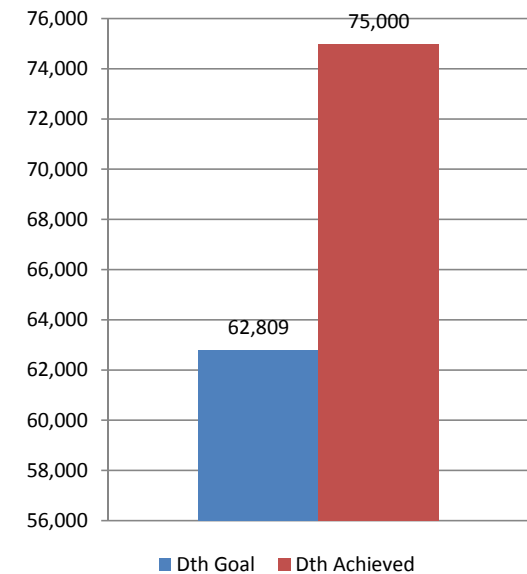
- Electric Program



- Gas Program



- Low Income Program



Customer Feedback



- Expand program to include buildings of all sizes
- All 'low-to-moderate income' buildings should qualify for affordable level incentives
- Allow for custom measure incentives
- Better detail within energy survey report
- Residents who have CFL bulbs should receive LED upgrades
- Incentivize the bulk purchase of Energy Star appliances

Questions?



THANK YOU!



conEdison



EVERYTHING
MATTERS

1-877-870-6118

conEd.com/energyefficiency

