

Non-energy Benefits in Multifamily Housing

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ELEVATE ENERGY
Smarter energy use for all

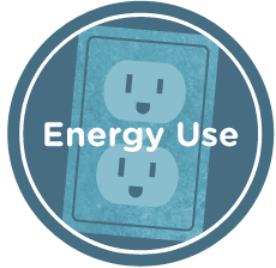


Elevate Energy - Our Mission

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.



Elevate Energy – Our Areas of Focus

- Smart grid benefits and dynamic electricity pricing in **homes**
- Energy efficient **buildings**
- **Community**-level programs
- Research, policy and innovation





Elevate Energy – Our Impact

kWh Saved



15,422,550

That's enough to run 2,428 refrigerators for one year!

Units Retrofitted



23727

Jobs Created



523

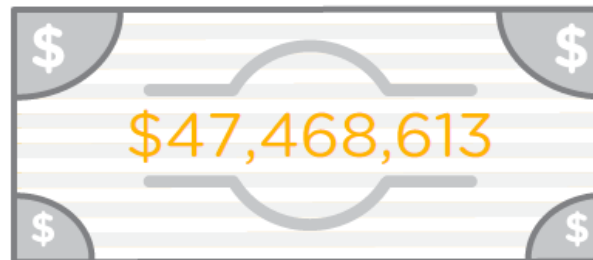
Gas Therms Saved



5,694,480

That's enough to heat 7,118 average apartment units for one year!

Total Investments in Energy Efficiency



Metric Tons CO2 Saved

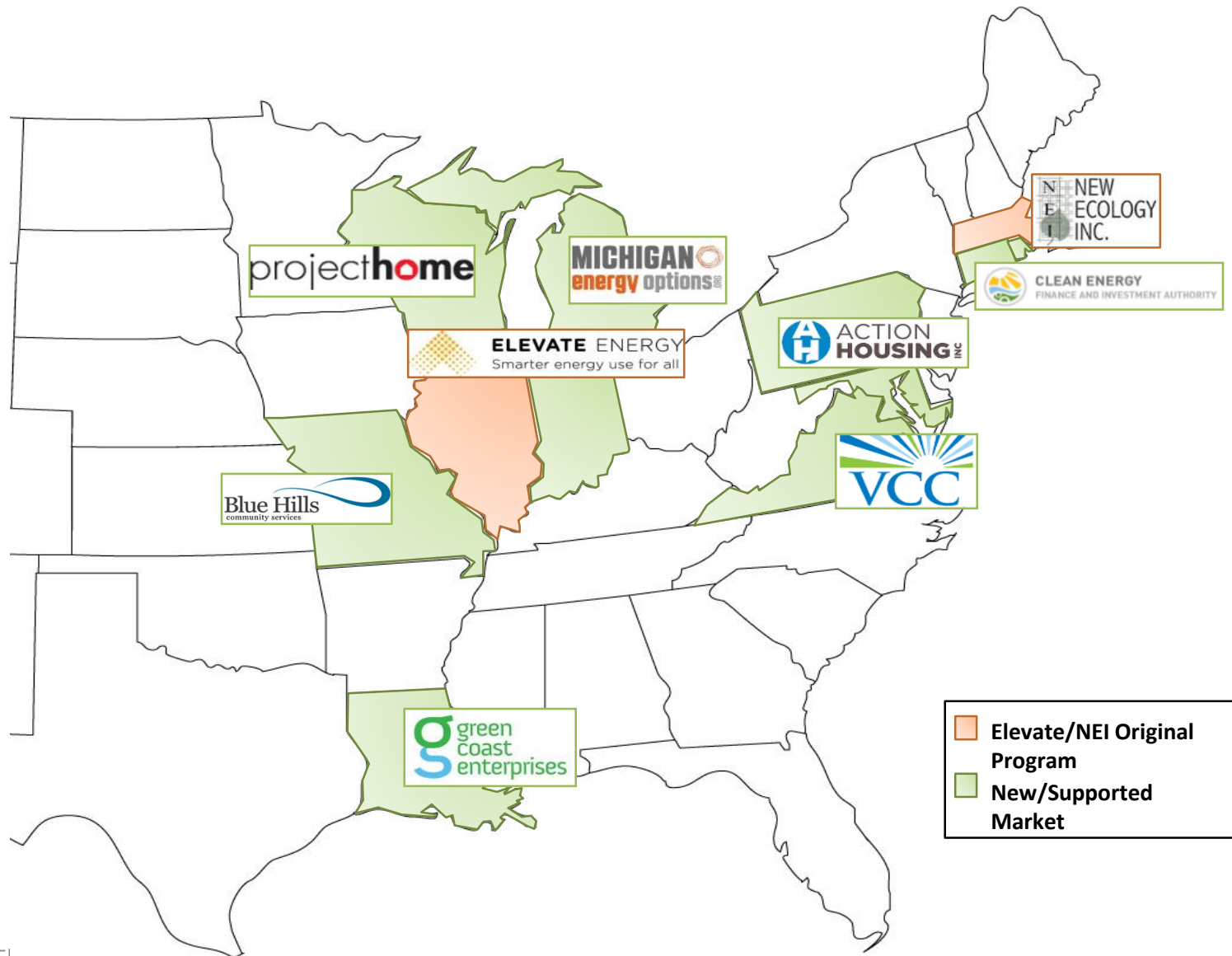


44,215

That's the same greenhouse gas emissions released from 9,306 average passenger vehicles every year.



Elevate Energy – Our Partner Programs





Benefits of Energy Efficiency

Participants

- Cost Savings
- Comfort
- Health
- Property Value
- Tenant Retention



Utility

- Stronger infrastructure
- Grid



Society

- Job creation
- Air pollution





Efficiency Benefits for Residents

Lower energy costs help low-income families avoid:

Unstable
Housing



For a very low-income family, the average savings due to energy upgrades is 3% of their income – helping to reduce housing costs and the impact of rising energy costs.¹

Food
Insecurity



When families spend less of their income on housing and utility costs, they can spend more on food, healthcare, child enrichment,² and other household needs.

Health
Problems



When the burden of utility bills is reduced, infants and toddlers are 23% less likely to be at nutritional risk for growth problems³ and adults experience an 18% decrease in hypertension rates.⁴

1. U.S. Bureau of Labor Statistics, Consumer Expenditure Report

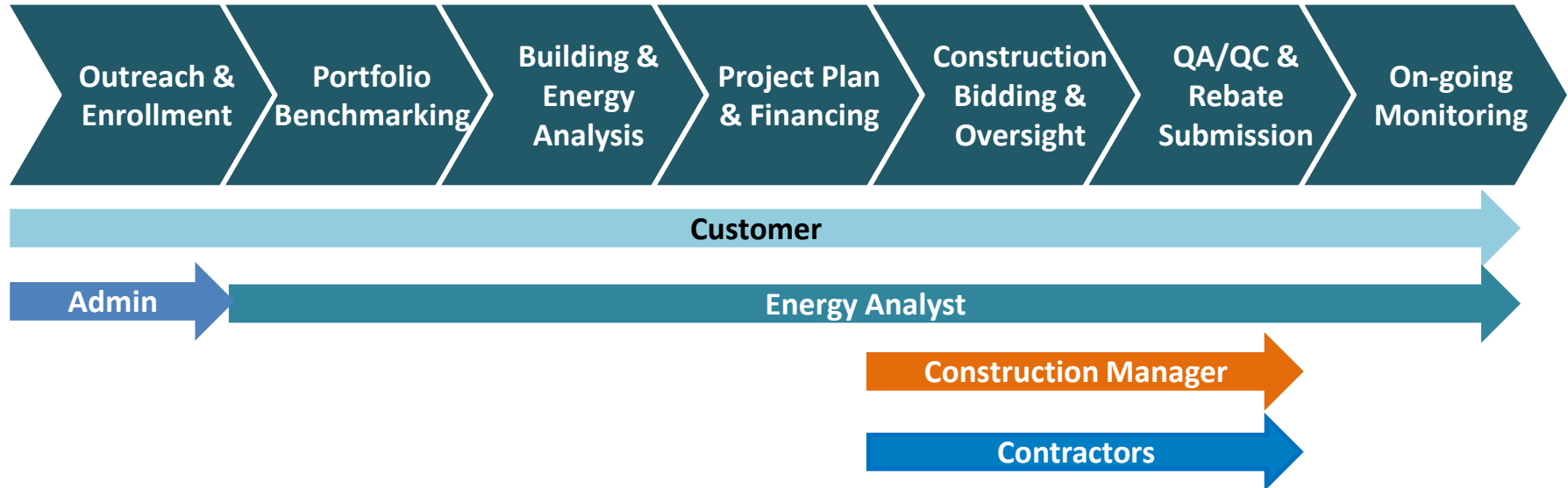
2. Newman, S. and Holupka, C.S. Housing Affordability and Child Well-Being. Housing Policy Debate, 2014.

3. Frank, et al. "Heat or Eat," *Pediatrics* 2006. Meyers, et al. "Subsidized Housing and LIHEAP: Improved Outcomes in Children of Color" Presentation at Annual Conference of the American Public Health Association 2007.

4. [Wilson](#), et al. Watts-to-Wellbeing: does residential energy conservation improve health? [Energy Efficiency](#), February 2014, Volume 7, [Issue 1](#), pp 151-160.



One Stop Shop: Flexible, Streamlined Process Grounded in Actual Data



- **Robust data** to baseline energy use, estimate savings and monitor post-retrofit results
- High quality customer service through a **single point of contact**
- Strong construction management with **100% QA** of jobs



Links between program design and NEBs

- Comprehensive programs typically -
 - Result in deeper retrofits that include more of the building operating systems (e.g. HVAC, building envelope, outdoor areas) → jobs, comfort, safety
 - Address operation and maintenance issues → comfort, safety
 - Include improvement that are visible to tenants → tenant retention, environmental stewardship

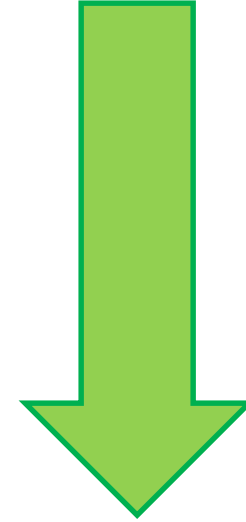
Resulting in a greater percentage of non energy benefits that can be attributed to the program.



Highlights from Watts to Wellbeing

Post-retrofit (Adults):

- Decrease in self-rated:
 - Fair/poor general health (11%)
 - Sinusitis (5%)



- Uncomfortable temperature in winter 55% → 39%
- Uncomfortable temperature in summer 64% → 45%
- Water leak or dampness 52% → 42%



Case Study: Boulevard Apartments

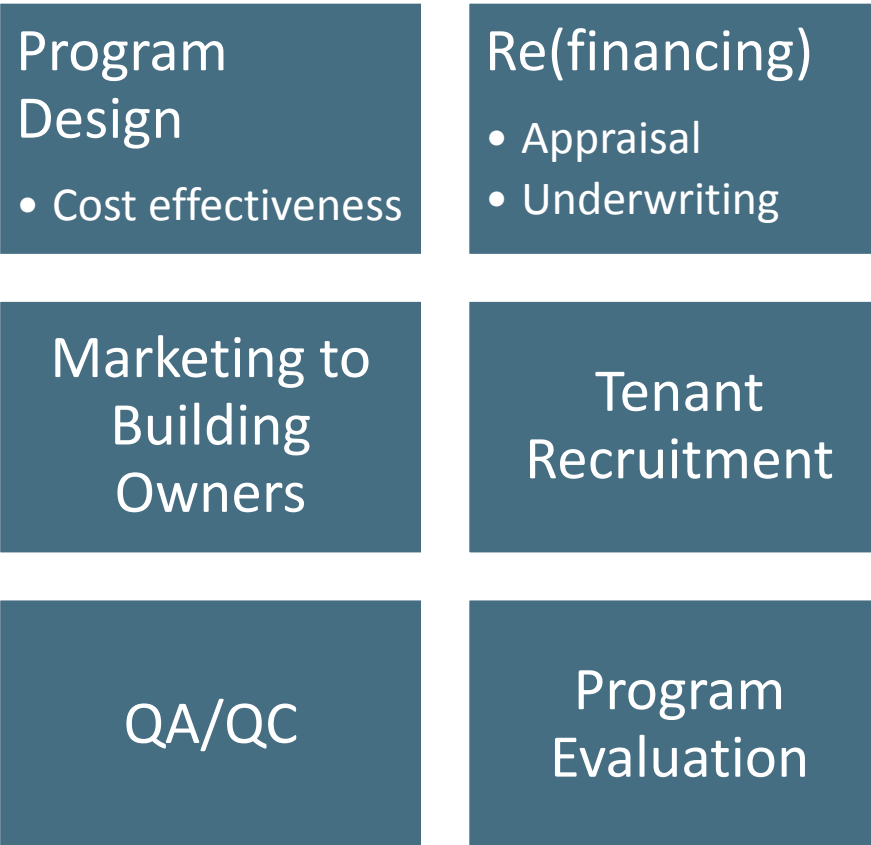
- 70 Units across 3 buildings
- Gut rehabbed in 1991
- Tenant paid gas and electricity

- 19% gas cost savings
- 17% reduction maintenance costs

- 89% of tenants said they would ask about efficiency
- 30% of tenants more confident and less stress



When should you consider NEBs?





Conclusions

- You can't measure the benefits for work you don't do
 - Design smart holistic programs
- Maximize the mileage in a dollar
 - Spend it on low-income
- Leverage cross-industry benefits for funding
 - Energy
 - Housing
 - Health
 - Water



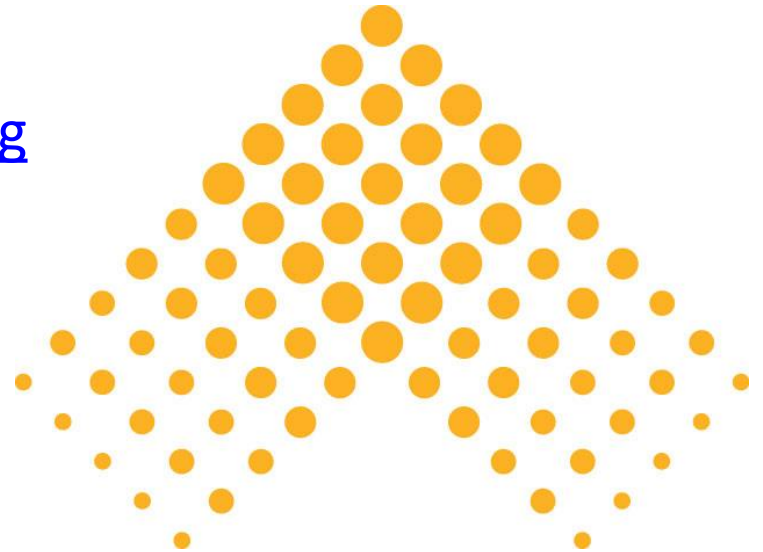
Questions? -- Stay in Touch

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