# CATALYZING EFFICIENCY

## Unlocking Energy Information and Value in Apartment Buildings

**Megan Houston, with assistance from Erin Beddingfield, Alissa Burger, Zachary Hart, and Leonard Kolstad**

IMT
INSTITUTE
FOR MARKET
TRANSFORMATION

# TABLE OF CONTENTS

# Executive Summary

Multifamily housing in the United States represents a significant portion of the residential sector, with 12 percent of the country—almost 18.5 million households and close to 38 million residents—renting housing in buildings with five or more units.[1] These figures only stand to grow with market demand now at record levels as millennials and empty nesters increasingly choose urban density over suburban homes. And yet, many multifamily buildings are inefficient, preventing owners and managers, governments, efficiency implementers, residents, and financiers from reaping a wide range of economic and environmental benefits.

High utility bills affect renters in both market-rate and affordable housing units, with research demonstrating that the cost of energy utilities can disproportionately burden lower-income multifamily residents. Cost-effective energy upgrades in multifamily buildings have been estimated to improve efficiency by 15–30 percent, resulting in savings of close to $3.4 billion annually for owners and residents.[2] In the past, the Institute for Market Transformation (IMT) found that a lack of available data about building energy performance prevented many multifamily building owners from implementing cost-effective energy efficiency improvements.[3] However, in the past few years building performance data for the multifamily sector has become more broadly available nationwide, and the multifamily sector is beginning to track water alongside energy performance.

So, are multifamily apartment stakeholders putting this increasingly available energy and water data to its full use? The short answer is no. The multifamily sector underuses building performance data. For example, owners and managers often comply with benchmarking and transparency policies but are not analyzing and acting upon the data to achieve greater efficiency. Residents lack access to performance data while apartment shopping and consequently do not factor performance in decision making, which is a missed opportunity to motivate owners to invest in efficiency. Investors and appraisers have limited access to performance data for comparable buildings, and without the valuation context, they often under-value in efficient buildings. Thus, the data is still in its infancy in catalyzing efficiency investments.

This report examines why the market underuses performance data and recommends, based on examples that show early promise, how governments and efficiency program implementers[4] can turn this

---

1 "Quick Facts: Resident Demographics," From Tables "U.S. Households- Renters & Owners" and "What Type of Structure Do Renter Households Live In?," *National Multifamily Housing Council*, accessed August 25, 2016, http://www.nmhc.org/Content.aspx?id=4708.

2 "The Multifamily Energy Savings Project," *American Council for an Energy-Efficient Economy*, accessed August 26, 2016, http://aceee.org/multifamily-project.

3 Andrea Krukowski and Andrew Burr, *Assessing Energy Benchmarking and Disclosure Policies* (Washington, DC: Institute for Market Transformation, 2012), http://www.imt.org/uploads/resources/files/Energy_Trans_MFSector_IMT_Final.pdf.

4 IMT defines "efficiency program implementers" as organizations, often utilities and often funded by rate-payers, that are tasked with increasing efficiency in a certain territory or jurisdiction through demand-side management, incentive programs, technical assistance, outreach, and other means of engagement. Examples include CLEAResult, Elevate Energy, the New York State Energy Research and Development Authority, and Pacific Gas & Electric.

Until all core private and public stakeholders work together to use and value building performance data effectively in consistent, transparent formats, huge energy and water efficiency opportunities will be left unrealized.

growing wealth of information into action and better engage stakeholders to unlock economic and environmental benefits.

## Turning Data into Action: Recommendations for Key Stakeholders

In an ideal multifamily market, stakeholders would routinely and fully factor a building's energy and water performance into investment, valuation, occupancy, operational, and leasing decisions and transactions, which would lead to greater efficiency investments. Governments and efficiency program implementers would set up conditions to access and distribute building performance data throughout the market, helping building owners and managers, as well as residents, lenders, and investors, use the data in their decision-making processes. Additionally, governments and efficiency program implementers would use the data to design and target their own efficiency programs and financing. Based on market feedback, this report recommends the following actions to better engage key stakeholders in widely adopting energy and water efficiency in the multifamily sector.

### Engaging Owners and Managers (Page 20)

*Governments and efficiency program implementers should play a leading role in helping owners and managers turn data into action and ensuring that benchmarking and transparency policies are working effectively through the following steps.*

- **Improve communications around benchmarking compliance.** Data access remains a problem. Governments and efficiency program implementers should help building owners and

managers better understand how to access their building performance data; pair benchmarking and utility access legislation together; and include utility data access options in their benchmarking and compliance communications with building owners and managers.

In addition, the market is confused over the purpose of benchmarking and how it is a foundational tool that leads to greater efficiency. Governments and efficiency program implementers should help building owners and managers understand how to deploy the data to spur and track efficiency improvements, save on operational costs, and attract and retain residents; tailor benchmarking scorecards for owners and managers; develop tools for interpreting and comparing scores; reference year-to-year building performance changes; and provide examples and resources for action.

- **Improve benchmarking data quality.** The data is only as useful as it is accurate, and it is critical that governments and efficiency program implementers assure benchmarking data credibility. Governments should establish data quality standards and use their enforcement powers to hold submitters accountable for accurate data. Governments and efficiency program implementers should hold education and training programs for building owners and managers to ensure data accuracy.

- **Create programs to drive action.** With more and more governments and efficiency program implementers finally having access to multifamily performance data through benchmarking and transparency programs, now is the time for them to design more effective programs for building owners and managers to encourage investment in energy and water efficiency. Specifically, they should use performance data to analyze their multifamily building stock to understand owner and manager capacities and needs, provide tools for multifamily buildings including specialized data analysis support and financing programs for efficiency upgrades, tailor programs to owners and managers, and help them identify and create efficiency projects and access financing especially around major financial events including refinancing. Finally, to the extent feasible, governments should consider implementing mandatory building performance standards.

### Engaging Residents (Page 33)

*Governments and efficiency program implementers should support the private sector, where appropriate, in strengthening resident demand for energy and water efficiency through the following steps.*

- **Help residents use benchmarking data while apartment shopping.** If residents factored building performance data into their apartment decision-making, building owners would be more motivated to invest in efficiency and maintain a competitive edge against their peers. Governments and efficiency program implementers should work with the private sector to build efficiency demand by providing current and prospective apartment residents with the resources to collect, analyze, and act upon energy and water performance data when deciding where to live. In areas with a large amount of multifamily rental units, programs can help residents understand where to get energy and water performance data and how that could impact occupancy costs.

- **Help promote high-performing market-rate apartments and establish resident demand.** The market perceives a lack of resident demand for efficiency. In the market-rate sector, governments and efficiency program implementers should work with the private sector, particularly building owners, to develop pilot programs that highlight the value proposition of high-performance buildings to residents and prove the demand. One example is for owners to offer renters efficiency packages that owners will install at the owner's cost and then charge

residents for the efficiency amenities services. Owners would track how residents value efficiency based on rent premiums, comfort, lease-ups, and turnover.

### Engaging Lenders and Investors (Page 37)

*Governments and efficiency program implementers should support innovative lenders and investors using energy and water performance data and encourage other lenders and investors to do the same through the following steps.*

- **Engage lenders and investors to use energy and water performance data.** Benchmarking data, including metrics such as ENERGY STAR scores, are effective tools for communicating a simple performance indicator for lenders and investors, yet only a few innovative leaders are incorporating this data into their standard business practices. Governments and efficiency program implementers should consider engaging local lenders and investors to encourage them to use benchmarking data in their underwriting and due diligence and help them integrate building performance data into their standard business practices.

- **Encourage lenders and investors to improve product offerings to incentivize efficiency.** Lenders and investors can use benchmarking data to encourage building owners and managers to monitor and address their energy and water consumption, which in turn can improve a building's financial performance, reduce default risk, and build demand for efficiency. To assist this, governments and efficiency program implementers should consider creating efficiency financing partnerships that use building performance data. In addition, when governments and implementers provide real estate financing, they should reward owners and developers who are actively managing their energy use and, where appropriate, require small and medium owners to benchmark as a financing condition.

Until all core private and public stakeholders work together to use and value building performance data effectively, in consistent, transparent formats, huge energy and water efficiency opportunities will be left unrealized.

IMT
INSTITUTE
FOR MARKET
TRANSFORMATION

1707 L St., NW
Suite 1050
Washington, DC 20036

**IMT.org**