



## **EXECUTIVE SUMMARY**

Rising utility rates threaten the long term financial stability of our affordable multifamily housing stock, its owners, and the low income residents who live in the projects. Lowering utility costs through efficiency measures will not only strengthen the affordable housing sector and the solvency of low-income households, but it will also benefit our environment and provide employment opportunities in our communities.

Access to financing is the most significant barrier to investment in energy efficiency and water conservation retrofits in affordable multifamily housing. The current paradigm of asset-backed, real estate financing is not up to the task. A new financing approach is needed to unlock the efficiency potential embodied in our aging and inefficient affordable housing stock.

MPower is a multi-stakeholder, collaborative effort in Oregon that has embraced a strong partnership between funders, utilities, building owners, workforce, and other stakeholders to pilot an innovative model for energy and water efficiency financing. This document outlines the challenges inherent in existing approaches to financing efficiency in this sector and highlights the features of MPower that make it unique and viable for delivering on the promise of efficiency investment.

## **BARRIERS TO INVESTMENT**

Due to a complex regulatory framework, owners of affordable housing are typically unable to access “add-on” financing for efficiency upgrades. These constraints arise from the typical financing structure of affordable housing projects where lenders and third party tax credit investors prohibit the addition of new debt that could strain project cash flows. Equally problematic are traditional long term financing structures which severely limit opportunities for project recapitalization, an opportunity when efficiency measures could be addressed.

When operating affordable housing projects, owners must prioritize essential expenses and payments for resident services over capital expenses and often lack the cash flow to support additional expenditures. To finance efficiency, they must either secure grant funds or borrow unsecured debt, which can be extremely difficult to obtain. Even if a loan could be secured, lenders remain reluctant to lend to projects given the lack of proven efficiency cost savings and available real estate collateral.

Even when financing is available, a “split incentive” further discourages owner investment. This “split” occurs in rental properties when the costs for property investment needed to save energy and water are borne by the building’s owner, and the tenant, who pays utility bills, is the primary beneficiary from the increases in efficiency.

## **THE MPOWER MODEL**

No existing programs comprehensively address the building owner's inability to take on new debt or the split incentives between landlords and tenants. MPower is a new model that does. MPower provides building owners the financing to make light-touch energy and water savings improvements and provides on-going services to help ensure that energy and water savings are maintained.

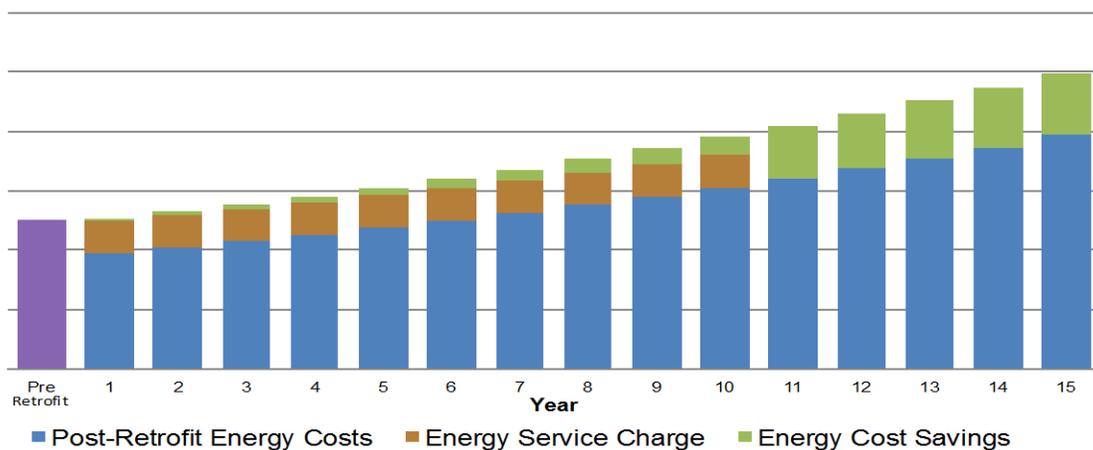
MPOWER pays the entire up-front cost of energy and water efficiency improvements which, in turn, reduce owner and tenant utility bills. Part of the savings created by these improvements goes directly to owners and tenants, whoever pays the utility bill, and the remainder of the savings is captured for the fund through a tariff on the utility meters serving the building.

This approach is unique because it fully funds building improvements for building owners. It does not require a lien on the property or a stake in building assets as collateral. Instead, it provides security to investors through a utility tariff which survives changes in tenant occupancy and building ownership. Because the cost savings from the installed efficiency measures exceed the amount of the tariff, the tenants and owners experience a net reduction in their utility bills. Equally important, this tariff is considered by accounting standards as a service charge for the efficiency produced rather than a loan for new building assets. Because of this, MPOWER does not impact the owner's balance sheet or the security position of existing real estate lenders.

Participating property owners must agree to place an energy efficiency tariff on building utility meters for a 10-year period. The program will size and prorate the tariff to provide owners and tenants a net reduction in their utility bill payments on a projected basis. When calculating anticipated energy savings, occupant behavior remains the most difficult variable to predict in a multifamily setting. In order to ensure the persistence of the energy savings, building owners, together with MPOWER, will implement ongoing energy-usage monitoring, enhanced property management, and resident engagement and education as a condition of their participation in the MPOWER pilot program.

For example: In an individual unit, the fund invests \$3,105 in efficiency upgrades which produce \$284 a year in annual cost savings from energy and water efficiency. The tenants and owners, whoever pays the bill, reduce their utility bills and save \$14 per year, or \$1.17 per month. The remaining cost savings of \$270 per year, or \$22.50 per month, are captured by the fund through the energy efficiency charge on the utility bill and used to pay the fund's debt service and operating costs. A building of 100 units requires an investment of \$310,500 producing \$28,400 per year in annual cost savings, \$1,400 of which are passed to tenants and owners and \$27,000 of which are captured for the fund by the on-meter efficiency service charge.

The following chart demonstrates the increasing cost savings (green) provided by MPOWER:



## **ANTICIPATED MPOWER EFFICIENCY MEASURES**

MPOWER will use "light touch" measures on its projects, where "light-touch" means measures that are minimally invasive resulting in only minor construction activity. This approach minimizes impact on residents and lowers the cost of installation while providing meaningful reductions in consumption. Examples of energy and water efficiency measures include:

### **Energy Efficiency Measures:**

- HVAC controls and improvements
- Energy management systems
- Lighting
- Appliances
- Domestic hot water
- Boiler upgrade / conversion
- Envelope air sealing
- Window weatherization and sealing

### **Water Efficiency Measures:**

- Dual flush and low flow toilets
- Low flow showerheads
- Low flow faucets and aerators
- High efficiency clothes washer
- High efficiency dishwasher
- Efficient irrigation

## **KEY MPOWER STAKEHOLDERS**

The MPOWER pilot program is made possible by an ongoing collaboration among owners of affordable multifamily housing in Oregon, the Network for Oregon Affordable Housing (NOAH), Enterprise Community Partners, Energy Trust of Oregon, Green For All, and Blue Tree Strategies.

## **MPOWER OUTCOMES**

Residents of affordable housing benefit from reduced utility bills and a more comfortable home. Owners benefit from more financially stable buildings and satisfied tenants. Funders benefit from an opportunity to invest in energy efficiency, protect existing investments in affordable housing, and the generation of energy efficiency data. Overall, communities benefit from reductions in energy and water use, the creation of high quality green-jobs, increased longevity of our social housing infrastructure, and improved economic resiliency for our most vulnerable citizens.