**Making Affordable Multifamily Properties Energy Efficient**

Upgrading affordable multifamily properties to be greener and more efficient has had the reputation of being costly. This high upfront cost combined with the problem of split incentives, where the owner makes the upgrades and the tenants receive the benefits, often leads multifamily property owners not even to consider energy efficiency upgrades. Despite these preexisting hurdles there are many cost effective ways to retrofit a multifamily property with green energy upgrades without emptying the cash reserves.

There are different paths for how to afford these retrofits depending on what type of affordable housing the property owner provides. Whether the properties are subsidized or unsubsidized can determine the options available. In either case retrofits will save money in the long run, and if the upfront costs can be managed returns can be seen as soon as two years.

**Subsidized Properties** are generally restricted by regulations that prohibit them from taking on debt. Subsidized affordable property owners have several off balance sheet options to help pay for the energy upgrades. Leasing companies are one option. However the more lucrative options can come in the form of an EPC (Energy Performance Contract), PPA (Power Purchase Agreement) or PACE (Property Assessed Clean Energy).

* **EPC’s** are provided by an ESCO (Energy Service Company) and use the savings of the energy efficient upgrades to pay for the cost of the upgrades themselves. The ESCO conducts a comprehensive energy audit for the property and identifies improvements to save energy. The ESCO then designs and constructs a project that meets the agency's needs and arranges the necessary financing. The ESCO guarantees that the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract. After the contract ends, all additional cost savings accrue to those who pay for the energy utilities (whether they be tenants or owners).
* A **PPA** is a contract between two parties, one who generates electricity for the purpose (the seller) and one who is looking to purchase electricity (the buyer). By entering into a PPA, buyers will pay no up-front cost to install the equipment (as the capital provided by the seller), and purchase power generated by the provider for an agreed-upon prices and time during the contract period. The provider will purchase, install, operate and maintain the power equipment sited on the buyer’s property. A key advantage here is that the price of energy will not fluctuate under the contract, and can help with planning for long term financials.
* **PACE** is a means of financing energy efficiency upgrades or renewable energy installations for buildings. PACE works through municipal governments offering specific bonds to investors and then loan the money to consumers and businesses to put towards an energy retrofit. The loans are repaid over the assigned term via an annual assessment on their property tax bill. PACE programs loans are interesting in that they are attached to the property rather than an individual. PACE can also be used to finance leases and PPA’s, wherein the lease payment or service fee is collected through the property tax assessment.

Along with these off balance sheet methods of financing green energy upgrades there are several incentives available to those multifamily properties that are subsidized affordable housing. Some of them come in the form of tax credits such as ITC, PTC and 179-D credits, there are grants and the MACRS (Modified Accelerated Cost Recovery System) system available.

* The **ITC** (Investment Tax Credit) is a tax incentive that allows a 10-30% (depending on type of equipment and retrofit) credit of green energy or energy efficient expenditures.
* The **PTC** allows companies that generate electricity from energy efficient and green sources a tax credit on their energy expenditures between 1.1 cents and 2.3-cent per kilowatt-hour (kWh).
* **179-D** is a tax credit for energy efficient buildings the maximum deduction being $1.80 per square foot; however, within this deduction there are three potential subsystem deductions: HVAC: $0.60 per square foot, Interior Lighting: $0.60 per square foot, Building envelope: $0.60 per square foot.
* There are **Grants** through HUD and USDA that can fund energy efficient retrofits to subsidized affordable housing.
* **MACRS** allows property owners to recover investments in certain property through depreciation deductions. A number of renewable energy technologies are classified under MARCS and energy efficient retrofits can often take advantage of these depreciation deductions.

**Unsubsidized** **Properties** have some of the same off balance sheet options as their subsidized counterparts such as PPA’s and leasing companies with the addition of being able to take on debt as an option. If these properties income qualify they might also be eligible for some of the incentives that subsidized properties enjoy. Some of the types of debt that can be used to finance energy efficient upgrades include: banks, credit unions, CDFI’s or agencies (HUD, FHA, State HFA’s) loans.

* **Banks and Credit Unions-** This option is generally at a market interest rate, however it requires first lien position. Due to the type of debt Banks and Credit Unions are often only used for large projects.
* **CDFI (Community Development Financial Institution) or Agency Green Rehab Loans** are often available at below market interest rates for projects of any size. These loans often require the properties to be income qualified as to serve their mission and can be used for green retrofits.