Overview

New Horizons Apartment Homes is a 58-unit apartment complex that incorporates a 52.2-kW rooftop solar installation as part of a larger renovation project that included energy and water efficiency upgrades. Orlando's municipal utility, Orlando Utilities Commission – “The Reliable One” – (OUC) worked with The Hope Church, a non-profit organization that owns the New Horizons apartment complex, and the City of Orlando to turn 58 previously vacant apartment homes into affordable, sustainable and supportive housing for homeless families, with an emphasis on veterans and low-income families. The system was energized in 2018.

OUC had been retaining a balance of rebates from its energy efficiency upgrades program with the City of Orlando of approximately $60,000. The mechanism of using previous savings from rebates allowed OUC to work with the City of Orlando to contribute these funds towards the solar project for low-income families. OUC financing was matched by the City of Orlando dollar for dollar, so the overall costs of the solar rooftop project could be added to the larger renovation of the New Horizons apartment upgrades.

The project was designed to demonstrate sustainability in a low-income housing
complex, and included a community garden, waste recycling, and energy efficiency measures, along with clean energy.

OUC wanted to participate in the project that would directly yield benefits to LMI households. Being part of a larger sustainability project involving the City and using previous energy efficiency rebate funds made sense for OUC because of the longer-term sustainability goals of the utility. The financing structure and the ability to provide multi-family customers with their own net-metered solar were novel approaches piloted by OUC to increase solar adoption in LMI communities.

**Innovative Approaches**

- **Overall sustainability goal.** Energy efficiency played an important role from the start because it provided rebate revenue for OUC, and the overall energy efficiency upgrades also led the way for the New Horizons Apartment complex owners to be comfortable with rooftop solar. It was important to OUC’s sustainability strategy to provide lower utility costs to residents, by providing access to LED lighting, efficient appliances, HVAC, and high-efficiency water heaters.

- **Net metering.** The New Horizons project was unique because OUC was able to ensure that the solar benefits went directly to each customer through net metering. This means each unit had its own meter and OUC was able to interconnect all the meters using micro inverters without much efficiency loss. This highly unique setting of physically net-metered customers allows each customer to be identified, metered, and the solar power delivered individually. This also means OUC is able to credit customers on a pro rata share when the solar panels provide energy.

- **Rollover of billing credits at retail prices.** The system of direct billing also required OUC to manage their customer information and billing system to make sure there was the correct capacity for each customer. Any surplus credits are banked and shown on the bills. OUC allows rollover of the credits to the future bills to LMI households. (The usual utility approach is to have remaining credits bought back by the utility at a wholesale price).
Lessons Learned

- Innovative ownership was necessary since OUC does not normally directly finance and develop multi-family rooftop solar installations, and even though the system is individually net metered, the tenants are not considered owners of their systems. So in this case, the owner of the building (The Hope Church) played an important role and became the owner of the solar installation.

- OUC and the apartment owner are non-profit entities so therefore neither could take advantage of tax credits. Still, the project prevailed even though it was not able to monetize the Solar Investment Tax Credit (ITC) due in part to the City of Orlando matching OUC energy efficiency rebate dollars made the project feasible. This matching “grant-like” structure was a key financial cornerstone to this project.

- Strong community partnerships were a key to success. The project development did not take long given the commitments of the partners — city, church, and municipality — to find an innovative solution. Considerations included planning for the net metering system, developing the cost-sharing agreement with all parties, and selection of the installers. program.

This case study is a part of the LIFT Toolkit initiative. To explore more case studies and best practices visit LIFT.Groundswell.org research@groundswell.org