

# Innovative Approaches to Combine Solar, Storage, and Electrification on Affordable Multifamily Housing in Wisconsin

August 10, 2023

#### Agenda

- Introduction to Elevate
- What kinds of work are we doing in WI, and why?
- Project Highlights
  - Leland Drive
  - Villa West Apartments
  - Lakeview Village
  - Southridge Apartments
- Barriers
- Solutions

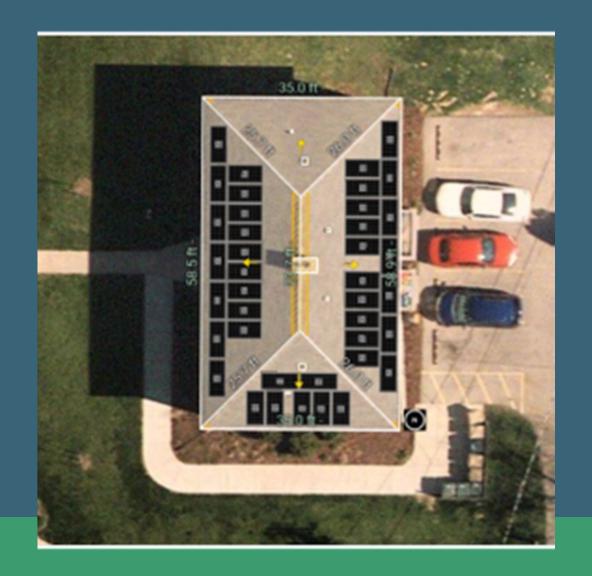


# **OUR MISSION**

We design and implement programs that reduce costs, protect people and the environment, and ensure the benefits of clean and efficient energy use reach those who need them most.



# Leland Dr, Madison

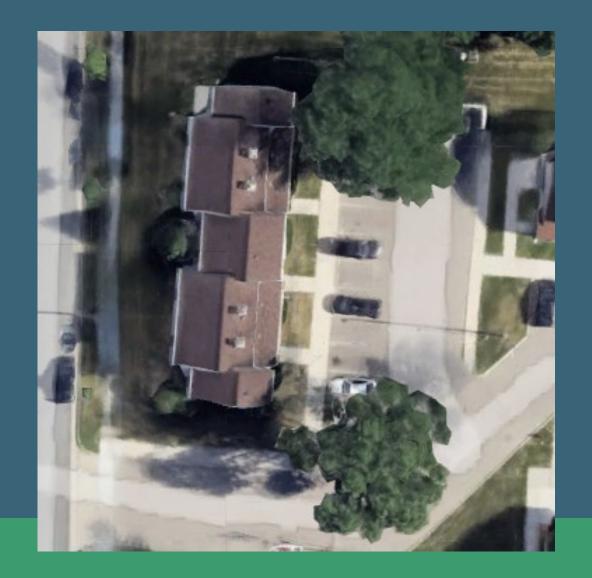


- Presenting unique approach to Madison Gas & Electric (MG&E)
  - Tenant heating/cooling typically not allowed on common meter
    - Exception for centralized systems

- High electrical costs
  - Panel upgrades, meter relocations, and service upgrade



# Southridge Village, Madison

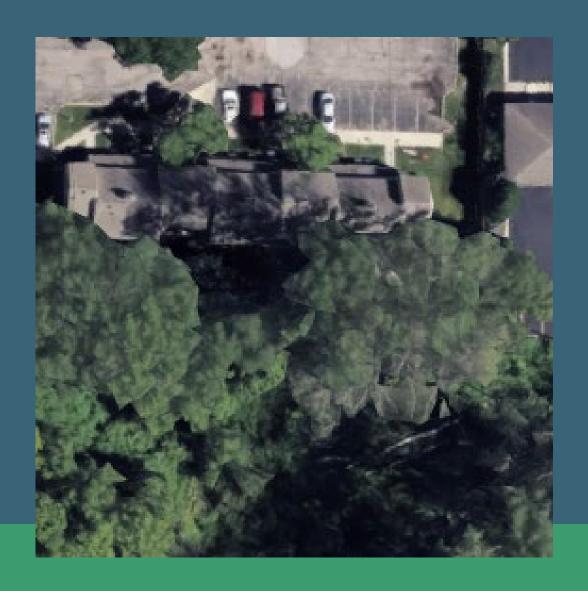


- High cost of individual wiring
  - Pivot to new technology
- Piloting new solar tech
  - Need buy-in from city and utility
  - Find and train vendor willing to experiment

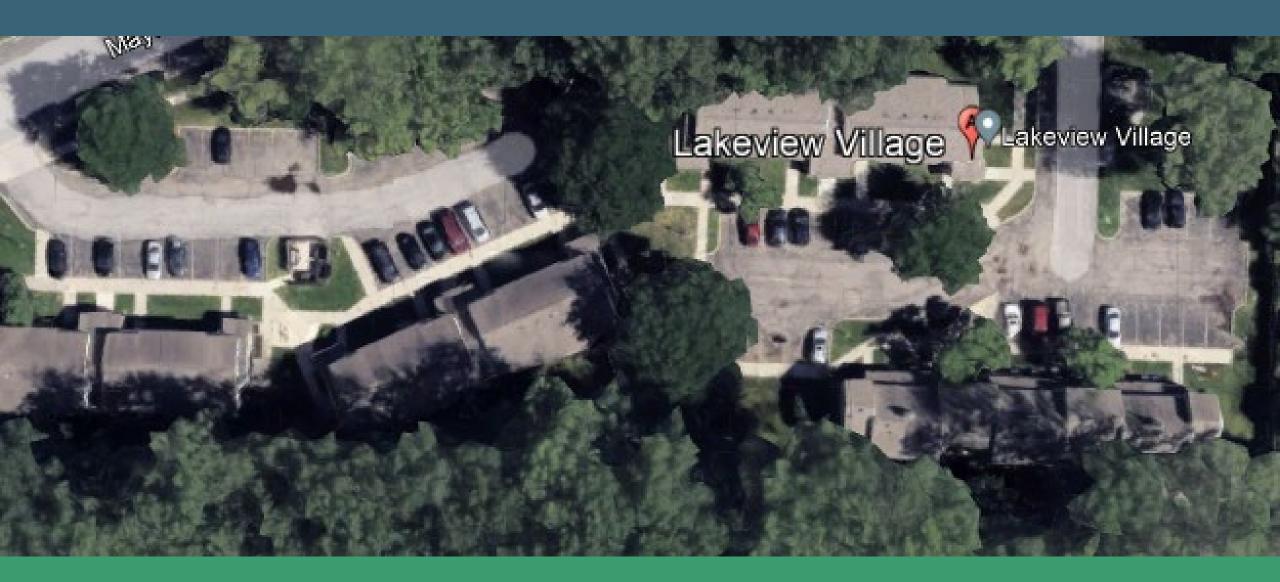




# Lakeview Village, Middleton



#### **Site Overview**

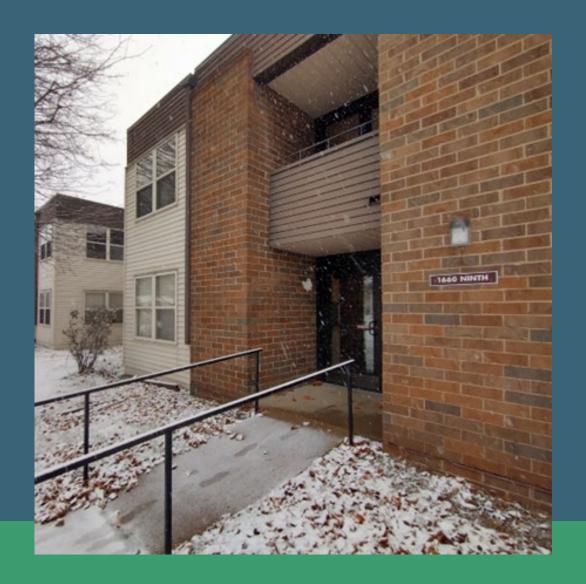


- Poor solar access
  - Carport solution requires extensive trenching

- Installing new common meter
  - Using exception for central heating



# Villa West, Green Bay



Battery design and placement

Feasibility of full microgrid



### **Challenges and Solutions**

#### **Challenges and Solutions**

- Getting benefits to tenants
  - Creative metering and/or increased project cost
- Electrical upgrades
  - Coordinate multiple contractors
- Increased electrical loads from building electrification
  - Efficiency then solar
- Site suitability
  - Creative solar layouts
- Funding
  - Tax benefits, incentives, grants

#### **Contact information**

- Jake Archbell
- Jake.archbell@ElevateNP.org



- ElevateNP.org
- info@ElevateNP.org
- @ElevateNPOrg
- @ElevateNPO
- @ElevateNP