**U.S. Department of Energy (DOE)  
Clean Energy to Communities (C2C) Program**

Summary of Technical Assistance (TA) Support

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| Icon  Description automatically generatedBuildings |
| Icon  Description automatically generatedClean Power |
| Climate Mitigation and Resilience |
| Cross-Sectoral Justice |
| A picture containing text, clipart  Description automatically generatedJobs and Economic Development |
| Icon  Description automatically generatedMobility |

**­­Bainbridge Island, Washington**

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From October 2023 through April 2024, Pacific Northwest National Laboratory provided technical assistance to the Courtyards on Madison Condominium Association, located in Bainbridge Island, Washington, in two different areas:

* Solar Modeling: Since each residence is individually metered, utility rules and technical feasibility indicated that a rooftop solar potential analysis for each individual building would be the best approach. The System Advisor Model™ was used to analyze solar technical potential and evaluate payback period with and without incentives
* Resilience Analysis: For select residences that provided detailed load data, the REopt® model was used to size an optimal home battery to meet critical load during an outage

Impact



This technical assistance request equipped the Courtyards on Madison Condominium Association with key information needed to help residence pursue solar, either through customer-owned solar, third-party owned solar, or other options like community solar and utility clean energy programs. A picture containing clipart

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**Background**

Ann Arbor is a city of approximately 122,000 people located in southeast Michigan. The city and its residents are leaders in sustainability and climate action. Their A2ZERO Climate Action Plan outlines their just transition pathway to community-wide carbon neutrality by 2030. With equity as a focus, they are implementing strategies to improve home energy efficiency (EE) and electrify appliances. Toward this, the city wants to explore community geothermal heating and cooling to serve a variety of building types including rental and affordable housing. The city has applied to DOE’s Geothermal Heating and Cooling Design and Deployment program and garnered the support of City Council to pursue these projects, but they need to understand the concept’s feasibility in order to make a “go, no-go” decision.

Bainbridge Island is a city with a population of approximately 25,000. The Courtyards on Madison Condominium Association, located in Bainbridge Island, houses 30 owners/tenants who generally have long tenures and are predominantly retirees on a fixed income. The association also houses some families with young children and a few renters. Energy costs on Bainbridge Island are high, and the island’s electric grid is vulnerable to power outages during storms. The City of Bainbridge Island has committed to shifting businesses and residents to renewable energy within 10‒15 years; the Courtyards on Madison Condominium Association was interested in installing rooftop solar to participate in the city’s renewable energy goals, and to decrease costs and improve resilience for its residents.

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For more information, visit:  
**energy.gov/eere/clean-energy-communities-program**

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