



“Clean Energy in Michigan” Series, Number 8

Brownfield Developments

East Lansing Community Solar

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The following case study is one of several produced recently by a *Dow Sustainability Fellows* project team. The team highlighted four brownfield sites in Michigan that have been developed or are being considered for solar projects. Each of these case studies examines the technical, economic, social, and other relevant characteristics of a specific project.

- Access the full report, *Accelerating Solar Development on Michigan Brownfields: Challenges and Pathways Forward*.

Background

This project is located in East Lansing, Michigan, on the site of a retired, capped landfill. It is a 1-acre project on a 2.7 acre site that will produce 430,000 kWh annually—enough to power around 60 homes. The site holds 1,000 solar panels. The project opened in December 2018.

The project was driven by an East Lansing-area nonprofit, Michigan Energy Options, under the auspices of Community Energy Options, an LLC it created for the project. Michigan Energy Options (MEO) partnered with the Lansing Board of Water and Light (Lansing BWL), the City of East Lansing, and Pivot Energy, a Denver-based solar energy company that develops, finances, builds, and manages community and commercial solar projects around the country.

Financing

Lansing BWL customers (residential and commercial) can opt into the program by leasing one or more panel(s) for a 25-year period, at a cost of \$400 per panel for the lease's duration.

While the cost to lease a panel for the 25-year period is \$400, the total estimated on-bill savings over that period is \$650, meaning that customers can expect a 60% profit margin on their investment.

The program is supported by individuals and businesses leasing one or more panels, with the major investors being the city of East Lansing and the Capital Area Transportation Authority, which leased 300 and 189 panels, respectively. In total, about 144 customers signed up for the program.

Photo courtesy of DTE Energy



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The *Clean Energy in Michigan* series provides case studies and fact sheets answering common questions about clean energy projects in Michigan.

Find this document and more about the project online at graham.umich.edu/climate-energy/energy-futures.

Lessons and Takeaways

MEO conducted extensive community outreach from the outset of the project, partnering with staff from the MSU extension program to ensure community buy-in. The intention was to bring community members along from the beginning, to avoid the type of potential negative response that other communities in the state have faced in response to renewable energy projects, particularly from wind power generation. The project faced numerous delays, though, as well as a significant unexpected expense stemming from a local government permitting determination that required installation of a fence around the entire project site, which added significant cost.

The success of the project was due in large part to a strong partnership forged between a key set of actors: a local environmental NGO that conceptualized and drove the project forward; the municipal utility that saw value in the project and enthusiastically supported it; the city, which helped to secure the land and provided significant investment as the largest buyer of the electricity; and a private solar development company that supplied the technical expertise necessary to implement the vision.

The solar park will include educational signage and offer tours for school and community groups. Community Energy Options will also be planting and maintaining native wildflowers and grasses at the site, which will provide an important food source for pollinating insects and wild birds, and will beautify the park. The site will also feature the installation of a sculpture by a local artist.



Image credit: Michigan Energy Options

