The Lansing Board of Water & Light, City of East Lansing, City of Lansing and Michigan Energy Options have partnered to create a community solar program that will let both residential and commercial electric customers support the development of large solar installations in the community.

In late 2016, East Lansing expects to have its first community solar project. The project is a 300kW system at Burcham Park, a 24-acre park and former landfill. The system will feature 1,000 solar panels (300 watts each), producing a total of 385,000 kilowatt-hours of power each year and is expected to be operational in fall 2016. Participants can lease one or more panels for 25 years at a one-time cost of $399 per panel. In return, they get a credit on each month’s energy utility bill for the amount of power created by the panel(s) they lease. Panels are expected to pay for themselves within 12 years.

The Lansing Board of Water & Light (BWL) is a municipal utility that provides drinking water, electricity, steam and related services to the greater Lansing area. The utility began investigating community solar because they saw that customers were very interested in supporting solar and realized that not everyone wanted or could have solar panels on their roofs. By installing the community solar park, they were still able to offer these customers the chance to “go solar.”

To advance the project, the utility partnered with Michigan Energy Options (MEO), a nonprofit organization they had worked with for years on energy efficiency programming. MEO has served as the project manager – helping coordinate all aspects of planning and implementation, including outreach, community education, and partner coordination. The utility selected Patriot Solar Group to design, construct and operate the facility, including marketing and administration. They then entered into a Power Purchase Agreement with Patriot Solar.

Following the Burcham Park Project, the partners have plans for a second community solar project at the Water Treatment Plant in Lansing.
Lessons Learned

Know your customers
At the outset of the project, a community solar survey was sent out to city residents. This survey provided important information and insights that not only helped shape the projects, but also proved invaluable as partners championed the project with other agencies and elected officials. The survey included questions about how well residents understood community solar and gauged their interest. It helped the planners understand how residents felt about the financial, social and environmental benefits of the project. Most importantly, the survey revealed that 90% of the respondents wanted a community solar project in East Lansing. This has been an important piece of data as partners have met with decision-makers, including the city council and city manager.

Thoughtful siting and other site improvements increase support
While the Burcham site was a former municipal landfill, it is now a park and residents have expressed some concerns about the aesthetics of the solar installation. The panels will use approximately one acre in the southwest corner of the park. To be sensitive to the community members’ concern, the designers have used landscaping to ensure that the panels are largely screened from public view. The project has also dedicated funds to generally improve the park – in addition to the landscaping, the project will install public art and park amenities.

Minimize risk with pre-registration
To ensure that there was sufficient interest in the projects, construction for each project won’t start until 80% of the project is leased. Within a week of the Burcham Park project announcement in October, 2015, 100 solar panels were already spoken for, and in 10 months that number had increased to 700. Customers pre-registered through the MI Community Solar website and were not asked to deposit any money until the project was within a month of operation. Given the level of interest in pre-registration, the partners are confident that 80% of the project will be subscribed very quickly after they begin accepting deposits.

Offer flexible lease terms
While the program does require a 25-year lease, BWL has designed flexible terms, in recognition that many people will move in that time period. If a customer breaks their lease, the rights to the solar panels can be transferred to a third party – this could be a new resident at the address, a different customer within the BWL service area, or even an organization to which the lessee would like to donate the power credit. MEO will help to facilitate these ownership transfers. For customers that do lease for 25 years, they will have the option to extend their Power Purchase Agreement for an additional five years.

Local review process improvements
The project has required numerous local permits and review processes. To navigate this complex process, the partners created a flowchart to show the various approvals. Given that this project was the first of its kind, the process was anticipated to be cumbersome. The partners will use this experience, however, as an educational opportunity and will be providing feedback to the city about ways they can improve and streamline the permitting requirements in order to make it easier and less costly for future community solar projects.

However, Kinch also noted that each project will inevitably have a unique set of conditions and issues that will arise. A key lesson learned for him was that these projects can’t be planned with a linear approach. “There are a lot of critical paths that have to move on parallel tracks,” he said. “If you can’t push ahead on legal, financial, marketing, and development in parallel, it will never get done.”