



Ann Arbor & Pittsfield Municipal Landfill Solar Project

FREQUENTLY ASKED QUESTIONS

What is this project?

This project, known as the Ann Arbor Landfill Solar Project, is a roughly 24MW solar installation designed adjacent to and on the capped landfill, on the open water behind the Wheeler Service Center, and on portions of the Planned Unit Development held between the Township of Pittsfield and the City of Ann Arbor (collectively known as the landfill). 24MW is roughly the equivalent of annual energy usage for 5,000 homes.

What is the value proposition of the project?

This project will bring a large-scale renewable energy installation to the area. This adds renewable energy to our local grid, which, based on 2019 generation, is currently 68% based on fossil fuels and 8% based on renewable energy. The project also supports the City of Ann Arbor and Pittsfield Township's goals of powering municipal operations with 100% clean and renewable energy while simultaneously reducing greenhouse gas emissions associated with fossil fuel energy use. The solar project will also have low maintenance costs, reduce dependence on foreign sources of fuel, support energy independence, reduce air and water pollution associated with fossil fuel energy sources, and help provide electricity during peak hours of demand.

Are solar panels a viable option in Michigan?

Yes! While Ann Arbor's solar potential is not at the same level as the Southwest United States, it is only marginally less than some cities in Texas and Florida, and higher than cities in the Northeast and Northwest. Ann Arbor's solar potential is also significantly better than Germany's, where there is more installed solar per capita than anywhere in the world.

How much of the City and Township's electrical use would this offset?

This installation would offset over 80% of the current

municipal electricity usage for the City of Ann Arbor. Pittsfield Township municipal operations currently use around 1,700,000 kilowatt-hours of electricity each year. Through this project, Pittsfield Township plans to procure 1,600,000 kilowatt-hours of electricity per year which would, including upcoming energy efficiency upgrades, offset 100% of the Township's usage.

How does this project align with the City of Ann Arbor and Pittsfield Township's clean energy goals?

Ann Arbor has a goal of powering City operations with 100% clean and renewable energy by 2035, although with the recent Climate Emergency Declaration, there

is a strong desire to achieve this goal as soon as possible. To achieve 100% clean and renewable energy for municipal operations, the City is looking to convert all viable municipally-owned natural-gas powered infrastructure to electric, implementing energy efficiency improvements at City facilities, installing rooftop solar systems on viable municipal roofs, and advancing the 24MW solar facility on the landfill.



Pittsfield Township recently passed a Township Preservation Plan, which is an addendum to the Townships 2020 Sustainable Vision Master Plan. The Preservation Plan advances the Township's role in supporting and providing renewable energy options. Powering Township operations with clean and renewable energy is an essential step in reducing dependence on non-renewable energy sources.

Can individuals buy into the project to receive renewable energy?

The renewable energy produced at the site is being designated to offset a large portion of municipal energy usage for the City of Ann Arbor and Pittsfield Township. As such, at this time, the project is not being offered to individuals.



Will the electricity generated be directly used by City sites?

The electricity produced at the landfill site would be fed into the energy grid and distributed throughout the DTE electrical system. The City and Township would continue to receive electricity from the grid at each City site. Given this, there is no guarantee that the City and Township would receive the physical electrons that are being generated at the solar energy facility. However, the City and Township would have a power purchase agreement with the developer of the landfill, meaning that the City and Township would get credit for the renewable energy being generated at the landfill solar installation.

How long is the solar project expected to be in operation and what happens after?

The project will be engineered and financed for a yet-to-be-determined period of time. Traditional operating time frames are 25-35 years. After this time period, the installation will be assessed. If the installation continues to be economical, we will continue to perform upgrades and keep the site in production. If the site proves uneconomical, it will be decommissioned.

How does the cost of other forms of renewable energy compare to this project?

Utility-scale solar is one of the least-expensive forms of renewable energy. When comparing the lifetime projects costs and associated energy production, utility-scale solar projects are over three times more affordable compared to residential rooftop solar.

What will this project cost?

The final costs for the project have not yet been determined. The engineering review and the distribution studies will provide much greater clarity about the potential costs for the project.

Who will pay for the installation?

Who pays and how much is paid will depend on the final ownership model agreed upon. These details have not yet been determined. There is no plan to pursue a tax increase to pay for this project. The City of Ann Arbor and Pittsfield Township plan to use existing resources to finance costs associated with the construction of the solar energy facility. Moreover, this project would very likely be eligible for the federal Business Energy Investment Tax Credit (ITC), which is currently 26% for systems commencing construction in 2020 and dropping to 22% in 2021 and 10% in following years. The City and Township will be working with the potential developer to maximize the potential financial benefit from this tax credit as well as any other opportunities.

Will the project have a fence or buffer? How will you minimize visual impact?

Three types of visual buffers are being proposed for the site. The first is a pre-existing berm which blocks a large portion of the site from Stone School Road. Additionally, landscaping buffers will be planted to reduce visual disruption and improve the site aesthetics. Finally, a fence will be installed around the transformer and the arrays. The Township Planning Commission will review fencing and buffers as part of the Planned Unit Development review.

Who gets the Renewable Energy Credits generated from the site?

The City of Ann Arbor and Pittsfield Township would get the renewable energy credits generated from the site and would be able to count those towards their goal of powering municipal operations with 100% clean and renewable energy.