



Below is a transcript of the Q&As from our webinar “How to Evaluate Solar for Your Organization” presented on February 25, 2021. Some questions asked are not included below if they were answered live during the webinar.

Q: How does the feasibility analysis compare to an ASHRAE Level I or Level II audit? Or do you recommend doing that separately or in addition to the feasibility analysis?

A: Our audit is an analysis of your historic energy usage, and how that guides us towards potential size of a solar installation, and opportunity for efficiency measures. It is not as deep a dive as an ASHRAE analysis. If that is of interest, it would be a separate exercise. We have worked with organizations that do that sort of analysis.

Q: In many of our parishes we have parking lots. Assuming we can get the zoning to work, what are the possibilities--is it feasible economically--to do large scale solar on the parking lot, while still being able to have parking?

A: Great question! There are opportunities there to place solar on carport structures, so you can still utilize that space for parking while also capturing the solar to generate electricity. In some cases this can make economic sense for the project and can be integrated into the project costs. That depends on many variables like the current cost of energy, consumption, possible incentives...many variables, as you'll hear us say quite a bit :)

Q: Thx for this helpful presentation! When y'all design systems, do you include / integrate charging stations for EVs in with solar systems?

A: It depends on the particular situation. Where carports make sense, EV charging systems can make a great deal of sense, as well. Perhaps less so with a rooftop installation, but even there it may be possible, and if it is important to you as the host, we can quantify that and advise.

Q: We seem to be entering a period in which the federal government is going to be encouraging expanded use of renewable energy sources and to enhance energy generating technology. Presumably that will include enhanced tax and other incentives for installing solar, reducing the cost and increasing the energy effectiveness and reliability of solar arrays, and finding other ways to encourage the use of clean electric. That means that the costs (or returns) for renewable energy projects are going to become more favorable in the near future. Does that mean that we should consider scheduling a solar project for a more distant future date when much of this will have settled out and be known?

A: Great question. I'm marking this one for Robert and Page to answer at the end of the presentation - they can speak to this a lot more precisely. In general, *right now* is a very good time to implement solar, there are already quite a few incentives in many markets. We're hopeful this favorability will continue in the future but we're seeing many organizations strike while the iron is hot now. Again, I'll let my colleagues speak more to this one. Thanks!

A: I think the answer is a question back to you. What is the opportunity cost of waiting? How much savings are you willing to defer by not getting started today versus how much more do you think you can save by waiting. I would not expect to see more tax incentives for solar. I don't really know what other sorts of incentives to expect (although I am eagerly awaiting to see what comes down the pike!)

Q: We have a worship center with 180 deg of glass. Could your feasibility study and financing embrace, separately or combined, upgrading the windows and a solar panel project?

A: Yes, as part of our analysis we can include evaluating upgrades to your buildings including windows or the roof, and can provide you with those options to see how those added variables would affect the total project cost or feasibility of it being financed.

Q: If an individual or a not-for-profit wanted to be on the other side of this process by being an investor in projects like this, what is the anticipated payback for investors?

A: Typically, a nonprofit is not an eligible equity investor, because that disallow the Investment Tax Credit, even if the nonprofit were a minority partner. But there is great opportunity to be a debt impact investor into these projects. If you are interested in something like that, we can arrange a time to discuss in more detail.

Q: What about regional considerations? We are in northern Ohio. Is this something that would deter installations because of average cloud cover?

A: Not necessarily. We are able to access weather data modeling from the National Renewable Energy Labs to model solar production potential down to a few square miles from any given location. Solar potential in Ohio is less than you would find in Colorado, for example, but we can quantify that for you with a high level of confidence. Again, over the course of a year.

Q: what is average time to pay back for investment?

A: It depends on how you pay for it, and where you are. If you are doing a PPA or a loan, it is quite possible that the payback will be immediate. If you are buying the asset, payback could be anywhere from 3-5 years in the very richest markets in the country, to 25+ years in those parts of the country with little sunshine and cheap grid power.

Q: What are the implications for building property insurance? Who covers the panels?

A: The owner of the solar system will insure the panels - so if its a PPA project, the 3rd party investor that owns the system will insure it. The insurance coverage requirements are addressed in the PPA contract. As Robert mentioned just now, if it's not a 3rd party owner type arrangement, if the organization decides to own the solar asset, the insurance is on the owner, and likely your current property liability insurance already would cover that. Those are questions we investigate during our feasibility analysis for an organization.

Q: Could you share a bit about your cost structure for your services?

A: We get paid by whomever pays for the project. All of the up front feasibility work is done at no cost to you. If you decide to proceed with a project, however it gets paid for, we build our compensation into the cost of the project.

Q: How do repairs/maintenance work with a PPA arrangement

A: The system owner is responsible for repairs and maintenance. It is common to have an O&M agreement with the same contractor that builds the system in the first place.

Q: Does a hail storm/ wind storm ruin the panels?

A: Typically not. The system is engineered for local wind conditions, and the modules are covered by tempered glass that is robust against all but the most catastrophic of hail storms. In the event of Act of God type damages, the system should be covered by insurance.

Q: What is the current state of end-of-life disposal and recycling of solar panels

A: There is actually a liquid secondary market for used solar equipment. Even 25 years on, those modules still generate energy, and there are developing markets that want to buy and use that equipment at pennies on the dollar.

Q: do you know what are utility regulations in PA?

A: PA generally has pretty cheap energy, so the economics can be challenging. But the regulatory environment is quite conducive to solar. You can do a PPA, and net metering.