

# Maryland Survey: Solar Power Experiences & Advancements



## Waredaca

The solar panels at Waredaca (Montgomery County) were installed by Aurora Energy in November of 2019. Robert Butts reported, "we did not see significant savings until spring, but have been very pleased with the performance since then." Butts purchased the panels by taking advantage of a USDA grant program. "Familiarity with the grant program was one of the reasons we went with Aurora, and they did not disappoint. We are very pleased with the process and the outcome," Butts added.



## Dressage At Sundown

Installed by Solar City, now Tesla, in June 2014, the panels at Dressage at Sundown (Montgomery County) are located on the house only and produce more energy than the residence needs. "I don't regret what we did, but I would sure like to expand the system," said Paul Schopf. "Now, I see that doing so is much more complicated."

environmentally clean energy source. But does it work? Seventy-seven point eight percent of survey participants say yes!

Under peak solar conditions, most participants said their systems generate more power than they use, which allows them to sell power back to the grid.

Half of the participants with solar said they produce more than their energy needs for their properties, while the other half said they produce close to 100% of their needs. A few participants said they wish they had more panels in order to produce more energy as their current systems can only power lights versus additional items such as stall fans.

## Storing Power

One of the more recent changes in Maryland is the State now allows residential solar storage batteries. Storage batteries allow homeowners to store energy in their batteries for later use, whether at night or during a power outage. Many roof-top systems can generate enough power, under peak conditions, to run the house, charge the batteries, and still have power left over to sell back to the grid.

Storage batteries are smaller than many generators and can be designed to take up very little floor space. They must be installed in a place protected from the elements, most often in a basement or a garage. Many companies manufacture solar batteries, one of the most popular, again, being Solar City/Tesla. Batteries can be purchased after the initial system is installed, or they can be designed into the system at the outset.

The majority (75%) of our solar power participants do not currently have storage batteries with 66.7% of those wanting to know more about them. For the 25% who do have storage batteries, all stated they are located inside a home or other building on the property.

## Why Not Solar?

A majority of survey participants said they do not currently have solar power on their property, and of those, 60.7% stated they thought it was too expensive. A minority (14.3%) had concerns about reliability, and an additional 10.7% said they did not have enough information to make a decision on installing solar power or not. No survey participants clicked the "lack of space" option. Fourteen percent of the participants who don't have solar power selected "other" as the reason.

The participants who chose "other" expressed concern about safety generally and possible roof damage specifically. Others felt that solar companies made unrealistic promises.

Two participants said they were concerned about "solar farming" taking over agricultural land and open green space. One participant suggested adding solar systems to buildings within cities and suburbs instead of creating solar farming in agricultural reserves.

Industrial-sized solar power generating facilities, aka "solar farms," are permitted in Maryland, and Maryland generates about 4% of its energy from solar power. Each county has its own zoning rules about where commercial solar installations can be located and what restrictions apply to their operations.

There has been recent legislative activity in Montgomery and Howard Counties on land use issues for solar farms, and at the State level on net metering, which activities we discuss in more detail in this month's Government Relations column on page 41 of this issue.

Of those who do not currently have solar power, 64.3% said they would consider adding it to their property while 25% said "possibly" and 10.7% said no.

In general, most participants who do not currently have solar power want clear information and details on the actual cost of the system

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