Modeling Incentives in SAM Webinar (August 13, 2024)

Question and Answer Transcript

Can we have a benchmarks for NPV, etc. together in order to determine if values are reasonable?

For internal rates of return: https://atb.nrel.gov/, for PPA prices for solar: https://emp.lbl.gov/tracking-sun-tool

Will you posting this webinar to YouTube?

Yes the webinar recording will be posted to the SAM youtube channel (https://www.youtube.com/channel/UC_Z7m8z5tOclfNgaTfGDdPQ).

What is AC degradation?

AC degradation is specific to the technology models- this refers to the amount that a system's AC power degrades year-over-year because of various system component degradation phenomena.

Can you please provide the link where you will be posting, or email it to us?

The recording and slide deck will be posted at https://sam.nrel.gov/events.html

Where is the depreciation page?

The depreciation page is one of the last pages on the left side. It is not present in the cash-loan model for commercial and residential, depreciation for those projects is handled on the financials assumptions.

I typically model using a detailed PV Model with Commercial Owner--the summary includes Simple Payback rather than IRR. Will IRR be included for this model in the future?

We would be happy to add this as a wishlist item- we had stuck with payback period thinking that would make more sense to most home and business owners, but I can see how it could possibly be useful for some businesses as well. I can't say off the top of my head if all of the elements we would need to calculate IRR are available in the commercial model. We usually track new feature requests on our Github site,github.com/nrel/sam, where you're welcome to request features or comment on features we've listed.

Will certificates be given at the end of this session please?

We unfortunately do not provide certificates for webinars.

The cost is introduced by KW? 1000$/KW

Many costs can be input per kW, which allows for easy scaling with system size (particularly useful if you're using parametrics or doing a lot of runs changing system sizes). However, many cost inputs also have an option to input a fixed cost in dollars instead.

How does PVWatts work into SAM?

PVWatts is a version of PV performance calculations that can be used with all of SAM's financial models. It has the same underlying performance model as the Detailed Photovoltaic model, with more input variables pre-selected for the user. The PVWatts implementation in SAM is the same as the PVWatts website, and can then be paired in SAM with the detailed financial models.

Not an incntive question. Is there any way for SAM to be ran in a Virtual Machine since our organizaiton IT has rejected to install the software on the organization computers...

Yes, we run and test in several VMs using VirtualBox for various versions of Linux with a Windows host machine. Also, running on MacOS we run several VMs with Parallels. Just download and install the guest OS version from https://sam.nrel.gov/download.html