

Ψ PSIDA™ Photovoltaic Systems Industrial Design and Automation

Date. July 06, 2013

To: Customer A

Subject: 10.24 kW Return on Investment analysis for New York City and surrounding area using PVac640 rooftop mounted systems, pitched or flat roof.

Darus,

Used the 22 year NASA data averaged over the area of NYC , southern boundary - 40 degrees North Latitude, Northern Boundary - 41 N, Eastern Boundary of 74W and Western Boundary of 75West. This essentially covers NYC and some of Northern New Jersey.

We used the data report of June 19th, 2013 from the New York - New Jersey Information office to obtain an average cost per kWh of 19.3 cents. I assumed that all power generated is actually used. The kWh per month projected production of a 16 unit, PVac640 system at \$1.81 CAPEX and \$0.25 per watt install cost was used for the analysis. We did not figure in any loan costs.

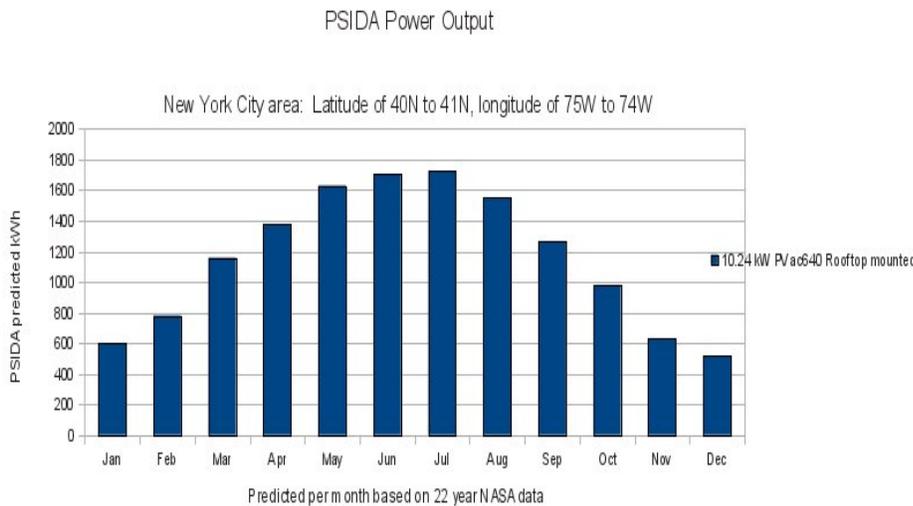


Figure 1. 10.24 kW total installed system. Lowest production in January of 599 kWh and highest production in July of 1726 kWh. Variations per year predicted to be +/- 10%.

PSIDA 10.18 kW Rooftop install - New York_Northern New Jersey_Long Island

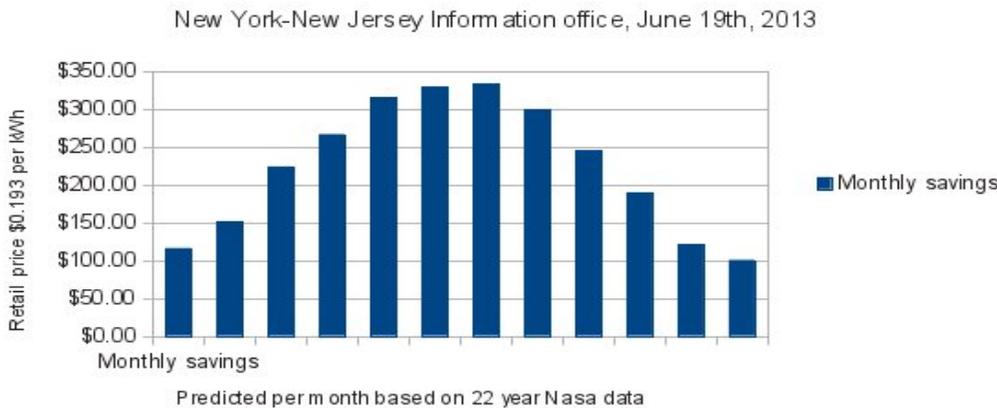
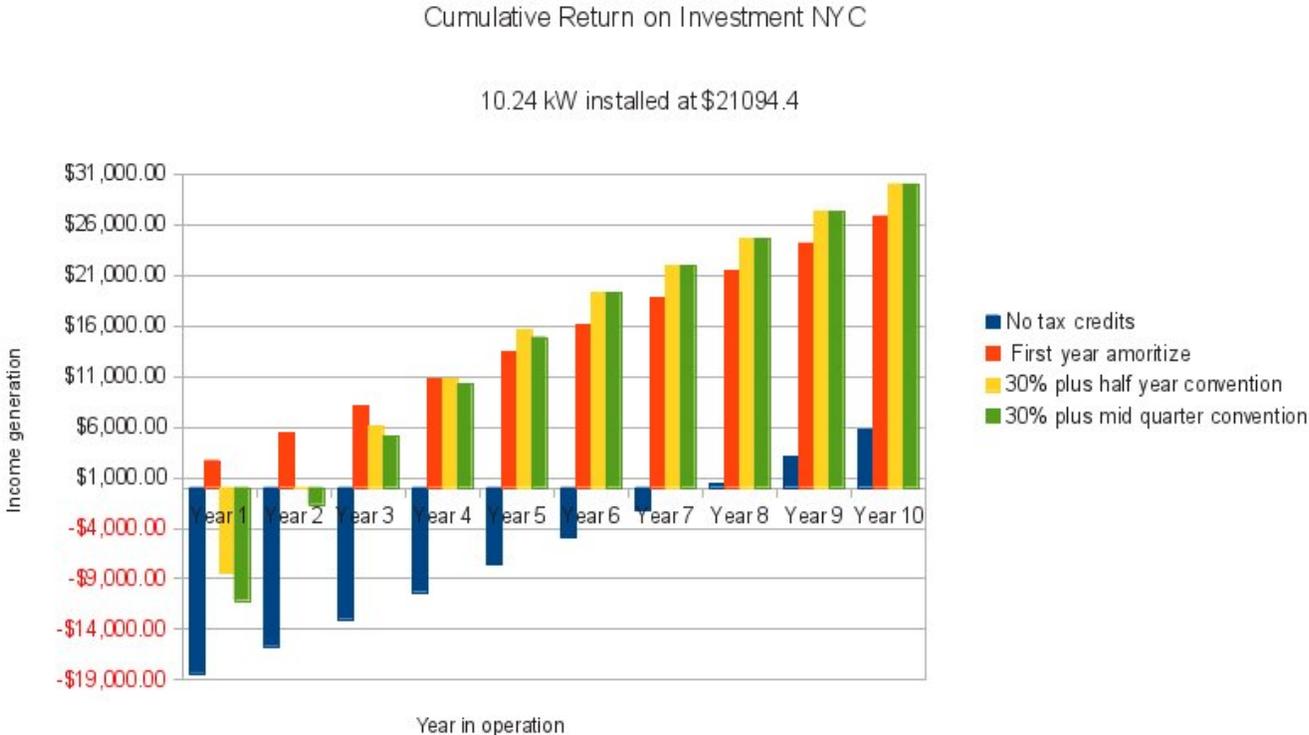


Figure 2. Income saved per month based on the present \$0.193 per kWh rate presently in place.

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Figure 3. Return on Investment with the assumption that the business making the install can use all power generated and can use the different USA tax credits available.



The investment return is based on the 20 year warranty of PSIDA Solar PVac systems, no storage system utilization, grid tied systems. Note that even without tax credits, the system is paid off by year 8 and profit occurs after year 8. Also note that in general the systems are good for 30 to 50 years of production and it is assumed that the retail rate stays constant at \$0.193 per kWh.

In summary, the investments pay off with reasonable return for the 10.24 kW installations even in New York with reduced output in the Winter. All data is based on actual measured 22 year NASA data, not projections of the actual weather or sunlight availability.

I hope this helps your folks in assessing their investments into solar power.

My best regards,
 John Nistler
 PSIDA GR LLC