



Genie

Solar Energy

Powering Your Future





Publicly Traded

Genie Solar Energy, LLC (GSE) is a fully owned subsidiary of publicly-traded Genie Energy, Ltd (NYSE: GNE). Genie Energy was founded in 2004 under IDT Energy, and spun off from it's parent company in 2011. With an extensive history in the energy industry and a balance sheet to support our customers, commercial customers can rest assured that we will be a solar partner in the long-term. Genie Energy's market cap sits at \$178.46M (as of 3/11/21), ensuring Genie Energy will be around for the life of your system.

Energy Experts

Genie Energy's management team has over a hundred years worth of combined experience in all aspects of the energy supply chain, from exploration and procurement to brokerage and optimization. Genie Energy has several brands serving commercial and industrial customers. This includes Diversegy, a commercial energy advisory and Prism Solar Technologies, a US solar manufacture of bifacial solar panels.

Strong Financials

As a publicly traded company, our balance sheet supports the ability to back large scale projects. Our customers can rest assured that we will be here in 15, 20, and 30 plus years from now.



Genie Energy Financial Highlights

Market Cap (as of 3/11/21)	\$78.5 Million
Total Assets (as of 3/11/21)	\$191.3 Million
2020 Operating Revenues	\$305 Million



125,303 pounds of coal not burned
(based on CO2 emissions)

159,806
kWh of
electricity
generated
over the life
of the system



281,114 miles not driven (based
on greenhouse gas emissions)

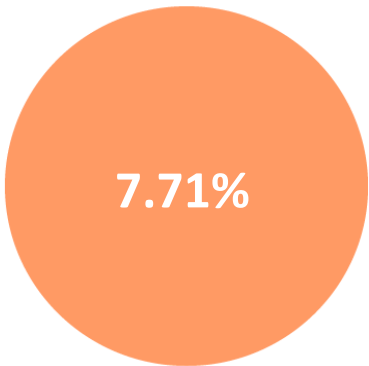


Electrical usage of 22 houses per year
for 25 years



You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of difference you want to make.

- Jane Goodall



Of facility kWh

The electricity generated from the solar array will offset 159,806 kWh per year from the utility with a 147.7 kW system

Key Assumptions

System Size	147.7 kW-DC
Est Year 1 Production	159,806 kWh
Initial blended utility rate	\$0.102
Effective tax rate	35%
Utility rate escalator	3%
Annual solar degradation	-.5%

Cash Purchase

Cash-On-Cash Return
In Year 4
Total Value Realization
\$657,700

Cash Flow Forecast

Year	Solar Price	Investment Tax Credit	Depreciation	NJ State Incentive	Annual Value of Electric Generated	Yearly Net Cash Flow	Cumulative Cash Position
0	\$ (301,537)					\$ (301,537)	\$ (301,537)
1		\$ 90,461	\$ 77,993	\$ 15,981	\$ 16,405	\$ 200,840	\$ (100,697)
2				\$ 15,901	\$ 16,813	\$ 32,714	\$ (67,984)
3				\$ 15,821	\$ 17,231	\$ 33,052	\$ (34,932)
4				\$ 15,742	\$ 17,659	\$ 33,401	\$ (1,530)
5				\$ 15,663	\$ 18,098	\$ 33,761	\$ 32,231
6				\$ 15,585	\$ 18,548	\$ 34,133	\$ 66,364
7				\$ 15,507	\$ 19,009	\$ 34,516	\$ 100,879
8				\$ 15,430	\$ 19,481	\$ 34,911	\$ 135,790
9				\$ 15,352	\$ 19,965	\$ 35,317	\$ 171,107
10				\$ 15,276	\$ 20,461	\$ 35,737	\$ 206,844
11				\$ 15,199	\$ 20,970	\$ 36,169	\$ 243,013
12				\$ 15,123	\$ 21,491	\$ 36,614	\$ 279,627
13				\$ 15,048	\$ 22,025	\$ 37,072	\$ 316,700
14				\$ 14,972	\$ 22,572	\$ 37,545	\$ 354,244
15				\$ 14,898	\$ 23,133	\$ 38,031	\$ 392,275
16					\$ 23,708	\$ 23,708	\$ 415,983
17					\$ 24,297	\$ 24,297	\$ 440,280
18					\$ 24,901	\$ 24,901	\$ 465,181
19					\$ 25,520	\$ 25,520	\$ 490,700
20					\$ 26,154	\$ 26,154	\$ 516,854
21					\$ 26,804	\$ 26,804	\$ 543,658
22					\$ 27,470	\$ 27,470	\$ 571,127
23					\$ 28,152	\$ 28,152	\$ 599,280
24					\$ 28,852	\$ 28,852	\$ 628,132
25					\$ 29,569	\$ 29,569	\$ 657,700
	\$ (301,537)	\$ 90,461	\$ 77,993	\$ 231,498	\$ 559,286	\$ 657,700	\$ 657,700

Key Assumptions

System Size	147.7 kW-DC
Est Year 1 Production	159,806 kWh
Initial blended utility rate	\$0.102
Effective tax rate	35%
Utility rate escalator	3%
Annual solar degradation	-.5%

Power Purchase Agreement

No Money Out Of Pocket
 40% Savings On Utility Rate
 Total Value Realization

\$ 279,713

Cash Flow Forecast

Year	Solar Price	PPA Rate (1.5% Esc)	Annual PPA Spend	Annual Value of Electric Generated	Yearly Net Cash Flow	Cumulative Cash Position
1	\$	0.0620	\$ (9,907.97)	\$ 16,405.44	\$ 6,497.47	\$ 6,497.47
2	\$	0.0629	\$ (10,006.31)	\$ 16,813.12	\$ 6,806.81	\$ 13,304.28
3	\$	0.0639	\$ (10,105.62)	\$ 17,230.92	\$ 7,125.30	\$ 20,429.58
4	\$	0.0648	\$ (10,205.92)	\$ 17,659.11	\$ 7,453.19	\$ 27,882.77
5	\$	0.0658	\$ (10,307.21)	\$ 18,097.94	\$ 7,790.73	\$ 35,673.49
6	\$	0.0668	\$ (10,409.51)	\$ 18,547.67	\$ 8,138.16	\$ 43,811.65
7	\$	0.0678	\$ (10,512.83)	\$ 19,008.58	\$ 8,495.76	\$ 52,307.41
8	\$	0.0688	\$ (10,617.17)	\$ 19,480.95	\$ 8,863.78	\$ 61,171.18
9	\$	0.0698	\$ (10,722.54)	\$ 19,965.05	\$ 9,242.50	\$ 70,413.69
10	\$	0.0709	\$ (10,828.96)	\$ 20,461.18	\$ 9,632.22	\$ 80,045.90
11	\$	0.0720	\$ (10,936.44)	\$ 20,969.64	\$ 10,033.20	\$ 90,079.10
12	\$	0.0730	\$ (11,044.98)	\$ 21,490.73	\$ 10,445.75	\$ 100,524.85
13	\$	0.0741	\$ (11,154.61)	\$ 22,024.78	\$ 10,870.17	\$ 111,395.02
14	\$	0.0752	\$ (11,265.32)	\$ 22,572.09	\$ 11,306.78	\$ 122,701.80
15	\$	0.0764	\$ (11,377.12)	\$ 23,133.01	\$ 11,755.89	\$ 134,457.69
16	\$	0.0775	\$ (11,490.04)	\$ 23,707.87	\$ 12,217.82	\$ 146,675.51
17	\$	0.0787	\$ (11,604.08)	\$ 24,297.01	\$ 12,692.93	\$ 159,368.44
18	\$	0.0799	\$ (11,719.25)	\$ 24,900.79	\$ 13,181.54	\$ 172,549.98
19	\$	0.0811	\$ (11,835.56)	\$ 25,519.57	\$ 13,684.01	\$ 186,233.98
20	\$	0.0823	\$ (11,953.03)	\$ 26,153.73	\$ 14,200.70	\$ 200,434.68
21	\$	0.0835	\$ (12,071.67)	\$ 26,803.65	\$ 14,731.99	\$ 215,166.67
22	\$	0.0848	\$ (12,191.48)	\$ 27,469.72	\$ 15,278.25	\$ 230,444.92
23	\$	0.0860	\$ (12,312.48)	\$ 28,152.35	\$ 15,839.87	\$ 246,284.79
24	\$	0.0873	\$ (12,434.68)	\$ 28,851.93	\$ 16,417.25	\$ 262,702.04
25	\$	0.0886	\$ (12,558.09)	\$ 29,568.90	\$ 17,010.81	\$ 279,712.85
\$	(301,537.34)		\$ (218,004.49)	\$ 559,285.73	\$ 279,712.85	\$ 279,712.85

The type of equipment used will effect the overall system cost and efficiency. Additionally, some products have shorter warranty periods. Genie Solar Energy is not tied to one product or manufacturer and will source the best equipment that makes sense for the project.

332 panels will provide a 147.7 KW system with an estimated 159,806 kWh of electricity generated in a year

- Rooftop systems to contain Prism Solar (445W), production warrantied for 25 years
- SolarEdge inverters or equivalent
- All systems will have a remote monitoring portal for access to real time and historical energy generation data
- Solar electric system installation with a 5-year limited warranty for workmanship; covering the cost of labor to repair photovoltaic panels and/or inverters that fail as a result of defective workmanship.
- Installation of solar array including connection to building systems and utility grid
- Required building permits and interconnection agreement

