

Value Analysis Calculator for HPP Solar Project Using City Land

		Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10
BENEFITS											
Increased revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reduced costs		272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000
Avoided costs		0	0	0	0	0	0	0	0	0	0
Year total		\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000
Cumulative value		\$272,000	\$544,000	\$816,000	\$1,088,000	\$1,360,000	\$1,632,000	\$1,904,000	\$2,176,000	\$2,448,000	\$2,720,000
INVESTMENTS											
System Interconnection		(\$60,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Maintenance		(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Year total		(\$60,500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)
Cumulative investment		(\$60,500)	(\$61,000)	(\$61,500)	(\$62,000)	(\$62,500)	(\$63,000)	(\$63,500)	(\$64,000)	(\$64,500)	(\$65,000)
NET VALUE											
Year total		\$211,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500
Cumulative total		\$211,500	\$483,000	\$754,500	\$1,026,000	\$1,297,500	\$1,569,000	\$1,840,500	\$2,112,000	\$2,383,500	\$2,655,000
Breakeven point		1st Year									
ROI		349.59%	791.80%	1226.83%	1654.84%	2076.00%	2490.48%	2898.43%	3300.00%	3695.35%	4084.62%

		Yr11	Yr12	Yr13	Yr14	Yr15	Yr16	Yr17	Yr18	Yr19	Yr20
BENEFITS											
Increased revenue		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reduced costs		272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000	272,000
Avoided costs		0	0	0	0	0	0	0	0	0	0
Year total		\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000	\$272,000
Cumulative value		\$2,992,000	\$3,264,000	\$3,536,000	\$3,808,000	\$4,080,000	\$4,352,000	\$4,624,000	\$4,896,000	\$5,168,000	\$5,440,000
INVESTMENTS											
System Interconnection		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Maintenance		(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Year total		(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)
Cumulative investment		(\$65,500)	(\$66,000)	(\$66,500)	(\$67,000)	(\$67,500)	(\$68,000)	(\$68,500)	(\$69,000)	(\$69,500)	(\$70,000)
NET VALUE											
Year total		\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500
Cumulative total		\$2,926,500	\$3,198,000	\$3,469,500	\$3,741,000	\$4,012,500	\$4,284,000	\$4,555,500	\$4,827,000	\$5,098,500	\$5,370,000
<i>net return</i>		<i>\$2,926,500,000</i>	<i>\$3,198,000,000</i>	<i>\$3,469,500,000</i>	<i>\$3,741,000,000</i>	<i>\$4,012,500,000</i>	<i>\$4,284,000,000</i>	<i>\$4,555,500,000</i>	<i>\$4,827,000,000</i>	<i>\$5,098,500,000</i>	<i>\$5,370,000,000</i>
Breakeven point											
ROI		4467.94%	4845.45%	5217.29%	5583.58%	5944.44%	6300.00%	6650.36%	6995.65%	7335.97%	7671.43%

Project Detail:

- Third Party System construction, ownership and maintenance
- System Size: 2 MW
- Projected life 20years
- Estimated Annual System output: 3,500,000 kWh
- Projected Power Purchase Agreement for Energy: 0.050 kWh
- Energy (\$0.03), capacity (\$0.017), transmission (0.013), REC sales (0.010) - offsets based on current markets: 0.070 kWh
- The estimated annual peak offset and subsequent capacity, transmission and REC's offsets = \$272K
- The estimated annual peak offset and subsequent capacity, transmission offset (No REC's) = \$209K
- System Interconnection is a one time cost of \$60,000.
- System Interconnection ongoing maintenance is \$10,000 over the life of the project or \$500 per year.