

Value Analysis Calculator for HPP Solar Project Purchasing 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											
	Land Purchase	(\$1,200,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	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	(\$1,200,500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)
	Cumulative investment	(\$1,200,500)	(\$1,201,000)	(\$1,201,500)	(\$1,202,000)	(\$1,202,500)	(\$1,203,000)	(\$1,203,500)	(\$1,204,000)	(\$1,204,500)	(\$1,205,000)
NET VALUE											
	Year total	(\$928,500)	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500	\$271,500
	Cumulative total	(\$928,500)	(\$657,000)	(\$385,500)	(\$114,000)	\$157,500	\$429,000	\$700,500	\$972,000	\$1,243,500	\$1,515,000
	Breakeven point	5th Year									
	ROI	-77.34%	-54.70%	-32.08%	-9.48%	13.10%	35.66%	58.21%	80.73%	103.24%	125.73%

		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											
	Land Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	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	(\$1,205,500)	(\$1,206,000)	(\$1,206,500)	(\$1,207,000)	(\$1,207,500)	(\$1,208,000)	(\$1,208,500)	(\$1,209,000)	(\$1,209,500)	(\$1,210,000)
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	\$1,786,500	\$2,058,000	\$2,329,500	\$2,601,000	\$2,872,500	\$3,144,000	\$3,415,500	\$3,687,000	\$3,958,500	\$4,230,000
	net return	\$1,786,500,000	\$2,058,000,000	\$2,329,500,000	\$2,601,000,000	\$2,872,500,000	\$3,144,000,000	\$3,415,500,000	\$3,687,000,000	\$3,958,500,000	\$4,230,000,000
	Breakeven point										
	ROI	148.20%	170.65%	193.08%	215.49%	237.89%	260.26%	282.62%	304.96%	327.28%	349.59%

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
- Estimated Cost for Land Acquisition is \$1,200,000.
- 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.