

**1887 Orchard Ave., Solar Harvest  
PV R.O.I. & SIMPLE PAYBACK**

9/11/2006

**PV System Size (Watts):** 6,840  
**Average Monthly kWh produced:** 850

**Notes:**  
Net present value NOT considered.  
Actual costs (health, environmental, social) of non-PV electricity NOT considered.

First 6 months' value of generated electricity, not counting rate increases

Years in which payback is achieved

**PV System Annual Value: 4 Different Rates of Electricity Cost Increases Per Year**

**KW/hr Rate Increase per year**

year	PV System Annual Value: 4 Different Rates of Electricity Cost Increases Per Year				KW/hr Rate Increase per year			
	0% / yr	3% / yr	8% / yr	15% / yr	3% > /yr	8% > /yr	15% > /yr	
1	\$500	\$1,000	\$1,030	\$1,080	\$1,150	\$0.1030	\$0.1080	\$0.1150
2	\$1,000	\$1,061	\$1,166	\$1,323		\$0.11	\$0.12	\$0.13
3	\$1,000	\$1,093	\$1,260	\$1,521		\$0.11	\$0.13	\$0.15
4	\$1,000	\$1,126	\$1,360	\$1,749		\$0.11	\$0.14	\$0.17
5	\$1,000	\$1,159	\$1,469	\$2,011		\$0.12	\$0.15	\$0.20
6	\$1,000	\$1,194	\$1,587	\$2,313		\$0.12	\$0.16	\$0.23
7	\$1,000	\$1,230	\$1,714	\$2,660		\$0.12	\$0.17	\$0.27
8	\$1,000	\$1,267	\$1,851	\$3,059		\$0.13	\$0.19	\$0.31
9	\$1,000	\$1,305	\$1,999	\$3,518		\$0.13	\$0.20	\$0.35
10	\$1,000	\$1,344	\$2,159	\$4,046		\$0.13	\$0.22	\$0.40
11	\$1,000	\$1,384	\$2,332	\$4,652		\$0.14	\$0.23	\$0.47
12	\$1,000	\$1,426	\$2,518	\$5,350		\$0.14	\$0.25	\$0.54
13	\$1,000	\$1,469	\$2,720	\$6,153		\$0.15	\$0.27	\$0.62
14	\$1,000	\$1,513	\$2,937	\$7,076		\$0.15	\$0.29	\$0.71
15	\$1,000	\$1,558	\$3,172	\$8,137		\$0.16	\$0.32	\$0.81
16	\$1,000	\$1,605	\$3,426	\$9,358		\$0.16	\$0.34	\$0.94
17	\$1,000	\$1,653	\$3,700	\$10,761		\$0.17	\$0.37	\$1.08
18	\$1,000	\$1,702	\$3,996	\$12,375		\$0.17	\$0.40	\$1.24
19	\$1,000	\$1,754	\$4,316	\$14,232		\$0.18	\$0.43	\$1.42
20	\$1,000	\$1,806	\$4,661	\$16,367		\$0.18	\$0.47	\$1.64
21	\$1,000	\$1,860	\$5,034	\$18,822		\$0.19	\$0.50	\$1.88
22	\$1,000	\$1,916	\$5,437	\$21,645		\$0.19	\$0.54	\$2.16
23	\$1,000	\$1,974	\$5,871	\$24,891		\$0.20	\$0.59	\$2.49
24	\$1,000	\$2,033	\$6,341	\$28,625		\$0.20	\$0.63	\$2.86
25	\$1,000	\$2,094	\$6,848	\$32,919		\$0.21	\$0.68	\$3.29
26	\$1,000	\$2,157	\$7,396	\$37,857		\$0.22	\$0.74	\$3.79
27	\$1,000	\$2,221	\$7,988	\$43,535		\$0.22	\$0.80	\$4.35
28	\$1,000	\$2,288	\$8,627	\$50,066		\$0.23	\$0.86	\$5.01
29	\$1,000	\$2,357	\$9,317	\$57,575		\$0.24	\$0.93	\$5.76
30	\$1,000	\$2,427	\$10,063	\$66,212		\$0.24	\$1.01	\$6.62
Value of electricity produced over 30 yrs.		\$30,000	\$49,003	\$122,346	\$499,957			
Net value of energy (initial cost less generated)		\$20,700	\$39,703	\$113,046	\$490,657			
SUM through highlighted break-even year above		\$10,000	\$9,159	\$9,637	\$10,067			
Pay back in years, +/- 0.5 years		9.3	8.3	7	5.5			
Percent of system lifetime for simple payback		31%	28%	23%	18%			
Cost of PV System with an expected life time of 30 years:						\$9,300		

<b>Itemization:</b>	Initial cost	\$42,000
	Solar Rewards Program Rebates	(\$30,700)
	less projected federal tax credits	(\$2,000)
		\$9,300