

Financial Overview for 20 kW Commercial, Roof Mounted System

This proposal is for the turn-key installation of a photovoltaic (PV) system, including: system design, incentive applications, permitting, procurement, installation, inspections and system walk-through.

System Cost and Incentive Summary

(\$43,465)	Total Project Cost (before incentives are factored in)
\$10,005	Energy Trust Cash Incentive. Current as of 6/20/2018.
\$13,039	Federal Investment Tax Credit - 30% of Total Project Cost.
\$10,345	Depreciation - 85% of project cost, over 6 years.
\$0	Optional USDA - REAP Grant (25% of project cost)

Pro Forma Inputs

Size (kW)		20.01
Price (\$/Watt)		\$ 2.174
Energy Trust Rebate (per watt)		\$ 0.50
Solar Resource Value of Roof		95%
1st Year Production (kWh/yr)		23,885
Utility Power Rate (\$/kWh)		\$ 0.100
Utility Rate Inflation		5.00%
Combined State and Fed Tax Rate	(estimated)	28.00%
IRR after taxes		13.05%

Materials

Module Brand	SolarWorld
Model	345 watt XL modules
Quantity	58
Total Watts	20,010
Inverter(s)	SMA Sunny Tripower 20000TL
Racking	Sunmodo - Metal Roof Mount

Yr	Project Cost	Energy Trust Cash Incentive	Annual Production (kWh)	30% Federal Tax Credit	Depreciation Benefit	Tax Effect of Cash Incentive and Savings	Utility Bill Energy Savings	Annual Cash Flow	Cumulative Payback
0	(\$43,465)	\$10,005				(\$2,801)		(\$36,261)	(\$36,261)
1			23,885	\$13,039	\$2,069	(\$669)	\$2,389	\$16,828	(\$19,433)
2			23,766		\$3,310	(\$699)	\$2,495	\$5,107	(\$14,326)
3			23,647		\$1,986	(\$730)	\$2,607	\$3,863	(\$10,463)
4			23,529		\$1,192	(\$763)	\$2,724	\$3,153	(\$7,310)
5			23,411		\$1,192	(\$797)	\$2,846	\$3,241	(\$4,069)
6			23,294		\$596	(\$832)	\$2,973	\$2,736	(\$1,333)
7			23,178			(\$870)	\$3,106	\$2,236	\$903
8			23,062			(\$909)	\$3,245	\$2,336	\$3,240
9			22,946			(\$949)	\$3,390	\$2,441	\$5,681
10			22,832			(\$992)	\$3,542	\$2,550	\$8,231
11			22,718			(\$1,036)	\$3,700	\$2,664	\$10,895
12			22,604			(\$1,082)	\$3,866	\$2,784	\$13,679
13			22,491			(\$1,131)	\$4,039	\$2,908	\$16,587
14			22,378			(\$1,182)	\$4,220	\$3,038	\$19,625
15			22,267			(\$1,234)	\$4,409	\$3,174	\$22,799
16			22,155			(\$1,290)	\$4,606	\$3,316	\$26,116
17			22,044			(\$1,347)	\$4,812	\$3,465	\$29,580
18			21,934			(\$1,408)	\$5,027	\$3,620	\$33,200
19			21,825			(\$1,471)	\$5,252	\$3,782	\$36,982
20			21,715			(\$1,536)	\$5,487	\$3,951	\$40,933
21			21,607			(\$1,605)	\$5,733	\$4,128	\$45,060
22			21,499			(\$1,677)	\$5,989	\$4,312	\$49,373
23			21,391			(\$1,752)	\$6,258	\$4,505	\$53,878
24			21,284			(\$1,831)	\$6,538	\$4,707	\$58,585
25			21,178			(\$1,912)	\$6,830	\$4,918	\$63,503
	(\$43,465)	\$10,005	562,640	\$13,039	\$10,345	(\$32,505)	\$106,083	\$63,503	\$63,503