



# Western Solar

Renewable Energy Solutions

Designing Quality Solar Systems in Washington State Since 1979



### 12.8 kW Commercial Solar System Cash Flow and Payback Analysis

Solar System Size - Watts DC	12,800
Energy Generated - kWh/yr	13,259
Installed Price per Watt/DC	\$7.60
Total System Cost Installed	\$97,280
Year One Cash Flow to Owner	\$38,334
Net Cost at end of Year One	\$58,946
Average Monthly Savings	\$294
Year One Savings and Incentives	\$3,527
Payback Period	Year 9
Payback Period w/ Added Property Value	Year 1
Solectria Online Monitoring System	*Free*

### Return On Investment

Annual After-tax Return on Investment	5.0%	S&P 500 Stocks last 5 years	-40%	Money Market last 5 years	3%
Annual Return including added property value	12.4%				

### System Design Assumptions

\*Includes historical 7% annual increase in utility rates and assumes 20 degree tilt, southfacing installation.  
 \*\*Current Funding level at \$0.15/kWh of solar produced  
 \*\*\*Current Rate for Greentags with the Northwest Cooperative  
 \*\*\*\*\$21 per \$1 in annual energy savings  
 See article from Appraisal Journal on our website at [www.westernsolarinc.com](http://www.westernsolarinc.com) or call 1-360-746-0859

**Solectria Online Monitoring System  
Included for Free to Participants in the  
Bellingham Energy Efficiency Challenge**



Year	Installed Cost	30% Federal Tax Credit or Grant	Advanced Federal Depreciation	Savings electricity not purchased*	Washington State Annual Production Credit Payment**	Annual Green Tag Payments***	Total annual energy savings	Average Monthly Savings	Total Cash-Flows	Value added to property****
1	(\$97,280)	\$29,184	\$5,622.78	\$1,273	\$1,989	\$265	\$3,527	\$294	(\$58,946)	\$74,065
2			\$8,996.45	\$1,362	\$1,989	\$265	\$3,616	\$301	(\$46,334)	\$75,936
3			\$5,397.87	\$1,457	\$1,989	\$265	\$3,711	\$309	(\$37,225)	\$77,938
4			\$3,238.72	\$1,559	\$1,989	\$265	\$3,813	\$318	(\$30,173)	\$80,080
5			\$3,238.72	\$1,668	\$1,989	\$265	\$3,922	\$327	(\$23,011)	\$82,372
6			\$1,619.36	\$1,785	\$1,989	\$265	\$4,039	\$337	(\$17,353)	\$84,825
7				\$1,910	\$1,989	\$265	\$4,164	\$347	(\$13,188)	\$87,449
8				\$2,044	\$1,989	\$265	\$4,298	\$358	(\$8,891)	\$90,257
9				\$2,187	\$1,989	\$265	\$4,441	\$370	(\$4,449)	\$93,262
10				\$2,340	\$1,989	\$265	\$4,594	\$383	\$145	\$96,477
11				\$2,504	\$1,989	\$265	\$4,758	\$396	\$4,903	\$99,917
12				\$2,679	\$1,989	\$265	\$4,933	\$411	\$9,836	\$103,598
13				\$2,867	\$1,989	\$265	\$5,121	\$427	\$14,957	\$107,536
14				\$3,067	\$1,989	\$265	\$5,321	\$443	\$20,278	\$111,750
15				\$3,282	\$1,989	\$265	\$5,536	\$461	\$25,814	\$116,259
16				\$3,512	\$1,989	\$265	\$5,766	\$480	\$31,580	\$121,084
17				\$3,758	\$1,989	\$265	\$6,012	\$501	\$37,592	\$126,246
18				\$4,021	\$1,989	\$265	\$6,275	\$523	\$43,867	\$131,770
19				\$4,302	\$1,989	\$265	\$6,556	\$546	\$50,423	\$137,681
20				\$4,603	\$1,989	\$265	\$6,857	\$571	\$57,280	\$144,005
20 Year Total				\$52,182	\$39,777	\$5,304	\$97,262		\$57,280	\$144,005