

Solar Electric Investment, Incentive and Energy Savings Analysis

Incentives and energy savings depend upon several factors that may not be represented in this analysis.
 A trusted tax professional should verify the figures provided.
 Dovetail Solar and Wind provides assistance with applications for incentives and rebates.
 Dovetail Solar and Wind does not take responsibility for any future changes in tax law or other incentives.

A personalized solar electric analysis for:

Bill Decker and

Erie Rd,
 Temperance, MI 48182



August 4, 2009

prepared by:
 David M Leahy
 Dovetail Solar and Wind
 Voice (419) 913-5037, (810) 599-4302
 Fax (432) 224-6914
 dleahy@dovetailsolar.com

Site Location:
 Erie Rd,
 Temperance, MI 48182

Utility: Consumers Power
 Current Rate Schedule: Residential

Historical Usage: 12,000 kWh/yr

System Information	Cost Information
Proposed System Size 4.0 kW DC (STC)	Proposed System Cost per rated Watt \$7.67 per DC (STC) Watt
System's CEC Rating 3.2 kW AC (CEC)	Estimated Federal Tax Bracket 28.0%
20 Sharp ND-198UC1 modules and 1 Fronius USA, LLC IG 4000 POS inverters	Current Utility Rate are as high as 0.0 c/kWh
Location's Avg Sun Hours 4.4 Sun Hours	Current Utility Rate Average 0.0 c/kWh
Estimated Annual Production 4,570 kWh/yr	Estimated First Year Utility Savings \$0 per year

Gross System Cost with Sales Tax	\$30,370
PBI Incentive and Grants	-\$34,680
	\$0
	\$0
	\$0
	\$0
	\$0
30% Federal Tax Credit	-\$9,111
System Cost After all Incentives	-\$13,421

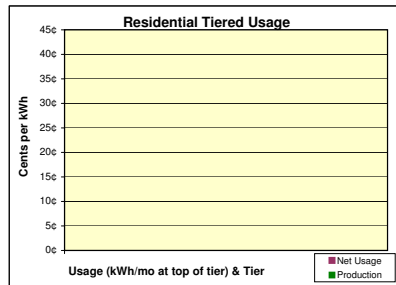
Payback / Return on Investment 7.5 Years

Year	Average Utility Rate c/kWh	Utility Savings \$/year	Net Utility Savings, sRECs, PBIs, etc, after tax & maintenance	Tax & Rebate Incentives	Cost / Payback Schedule (Cumulative Cash Position)
0					(\$30,370)
1	0.0	\$0	\$2,894	\$9,111	(\$18,365)
2	0.0	\$0	\$2,877		(\$15,487)
3	0.0	\$0	\$2,860		(\$12,627)
4	0.0	\$0	\$2,843		(\$9,784)
5	0.0	\$0	\$2,826		(\$6,959)
6	0.0	\$0	\$2,808		(\$4,150)
7	0.0	\$0	\$2,791		(\$1,359)
8	0.0	\$0	\$2,774		\$1,415
9	0.0	\$0	\$2,757		\$4,171
10	0.0	\$0	\$2,739		\$6,911
11	0.0	\$0	\$2,722		\$9,633
12	0.0	\$0	\$2,705		\$12,338
13	20.0	\$1,095	\$0		\$13,433
14	20.0	\$1,086	\$0		\$14,519
15	20.0	-\$1,167	\$0		\$13,351
16	20.0	\$1,067	\$0		\$14,418
17	20.0	\$1,057	\$0		\$15,475
18	25.00	\$1,047	\$0		\$16,523
19	25.00	\$1,038	\$0		\$17,561
20	25.00	\$1,028	\$0		\$18,588
21	25.00	\$1,018	\$0		\$19,606
22	25.00	\$1,008	\$0		\$20,613
23	25.00	\$997	\$0		\$21,611
24	25.00	\$987	\$0		\$22,598
25	25.00	\$977	\$0		\$23,574

Results

Old Monthly Electric Bill	N/A
Estimated New Electric Bill	N/A
% Bill Offset	N/A

\$14,623 Net Present Value with 9% Discount Rate
The IRR over 25 years is 20.6%
Over 25 years it will provide total savings of: \$44,833
 including bill savings, PBIs, sRECs, maintenance, & inverter replacement
It will pay for itself in 7 years
This project could increase your home's value by: \$29,000
Source: The Appraisal Journal, www.ongrid.net/AppraisalJournalPVValue10.98.pdf



Carbon Dioxide and Environmental Benefits
 Based on estimated production, this system will reduce emissions by:
90 tons of CO2 over 25 years

Bill Decker and
Decker Homes

Solar Analysis provided by:
David M Leahy
Dovetail Solar and Wind
(419) 913-5037, (810) 599-4302
(432) 224-6914
dleahy@dovetailsolar.com

4.0 kW Residential PV System



August 4, 2009

Site Address:
Erie Rd,
Temperance, MI 48182

Mailing Address:
Erie Rd,
Temperance, MI 48182

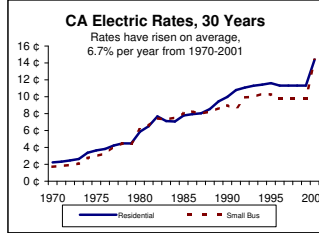
ELECTRICAL ENERGY USAGE, BILLING & TAX INPUTS & ASSUMPTIONS

1,000 kWh Average Winter Monthly Historic Usage
1,000 kWh Average Summer Monthly Historic Usage
12,000 kWh Total Annual Historic Usage

Utility: Consumers Power
Current Rate Schedule: Residential

28% Federal Income Tax Rate
5.3% State Income Tax Rate
33.3% Combined Fed & State Income Tax Rate

3.1% Assumed General Inflation (maintenance, etc)
The CPI has increased 3.1% annually since 1981
4.0% Assumed Electric Rate Escalation
Average California Electric Rates increased 6.7% annually from 1970 to 2001



SOLAR ELECTRIC SYSTEM

3.960 kW PV system size (STC DC Rating)

Comprising 20 Sharp ND-198UC1 modules and 1 Fronius USA, LLC IG 4000 POS inverter.

PV Array is 33° up from horizontal, and facing S

4.4 Hours of equivalent full noontime sun occurs at Temperance, MI
This is based on 30-year annual average data for nearby Toledo, OH
found in the NREL Redbook (redc.nrel.gov/solar/pubs/redbook)

This level of sunshine can vary +/- 9% year to year due to weather

72% Total system efficiency factor, accounting for:
inverter, module heating, wire losses, dust & dirt, and module mismatch factors
Normal per CEC guidebook is about 71%
This does not include shading or array orientation factors

4.4 Hours of effective full noontime sun, factoring in shading & orientation

4,570 kWh/year estimated production (1,426 kWh per year per kW CEC AC Capacity Rating)
Offsets about 38% of estimated/adjusted future usage

0.5% Annual Module Degradation Rate (normally 0% to 1%)
Affects future energy production due to module aging

Disclaimer: This information is provided as an illustration of potential financial benefits stemming from ownership of a renewable energy power system. This is not a production guarantee.

A professional accountant or tax advisor should confirm these estimates.

Neither OnGrid Solar nor any authorized user warrants the applicability of these estimates for particular business cases, and both disclaim all liability

OnGrid Solar Financial Analysis Tool v3.95
SFA-PQNJ7WZQALNPPEAPN1



ENERGY COSTS/SAVINGS	
HISTORIC ENERGY COSTS WITHOUT SOLAR:	
\$	0 Historic Average Monthly Charges
ESTIMATED FUTURE ENERGY COSTS WITH ADJUSTMENTS IN USAGE (BEFORE SOLAR)	
\$	0 Average Monthly Charges accounting for adjustments in usage
ESTIMATED FUTURE ENERGY COSTS WITH SOLAR AND ADJUSTMENTS	
\$	0 Average Monthly Charges with Solar
SAVINGS USING SOLAR:	
\$	0 Savings in 1st month due to solar (with usage adjustments) Savings will increase over time as electric rates rise
\$	0 First year savings due to solar
\$	0 Pre-Tax value of the first year annual savings due to solar

SYSTEM PRICING & CAPITAL COST SUMMARY	
\$	30,370 Total System Cost (includes full service, parts, delivery, installation, warranty, sales tax)
\$	-
\$	-
\$	-
\$	-
\$	-
\$	30,370 Gross Top Line Cost (\$7.67 per STC DC Watt)
\$	- Rebates and Grant (if applicable)
\$	30,370 System Price after Rebate (typically, the net contract amount)
\$	Estimated Permit Fees NOT included in system contract price
\$	-
\$	30,370 Cost After Rebate & Fees (may be the Tax Creditable Amount, see Tax Advisor)
\$	-
\$	(34,680) PBI Incentive
\$	(9,111) Federal Tax Credit
\$	-
\$	(13,421) Net System Cost with Tax Benefits
\$	-
\$	-
\$	(13,421) TOTAL NET AFTER-TAXES COST OF SYSTEM