

A GREEN² OPPORTUNITY

Make Money. Save the Planet.

Cashflow Summary

[ISD 881 - Maple Lake]

Capital Lease w/ PPA - Solar for Minnesota Non-Profits, Schools
& Public Organizations

2019 Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10° tilt & 180° az w/ 466.6 kWAC SolarEdge
Inverters



ver. 11.15.19

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Solar Array Technical Information

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10°tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

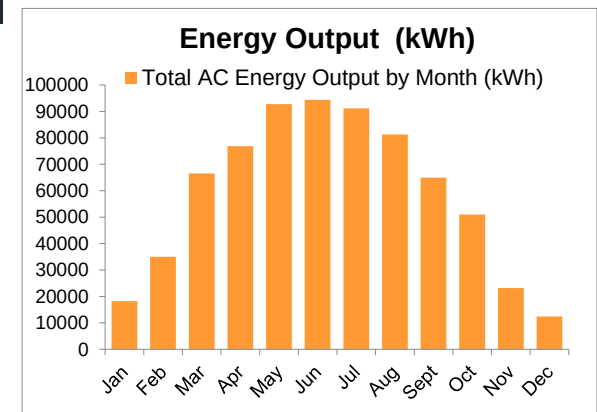
Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Solar Array Specification (Typical)

System Size (kW DC)	620.62
Inversion Ratio (DC / AC)	1.330
Maximum AC Output of Inverters (AC KW)	466.6
Maximum Peak AC Output including AC line losses (kW)	452.6
Expected Energy Production (kWh/kW DC)	1140
Expected Energy Production (kWh/Year)	707,507

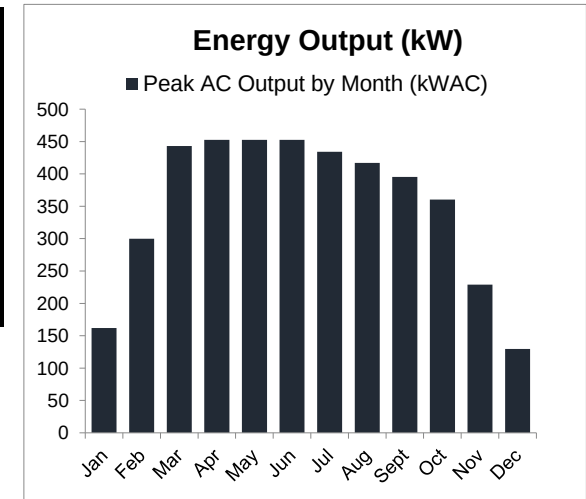
Information on Expected Solar Array Production (kWh)

Typical Solar Array Energy Production (kWh) using NREL modeling, Helioscope or PV Syst modelling tools with average adjusted historical weather conditions in Minneapolis, MN using TMY3 Weather Data. <http://www.nrel.gov> Estimated performance is based on information including but not limited to the equipment used, the solar array's kW DC size, AC/DC line losses, standard rectangular configuration, and the array pointing due south. Your System's energy production will vary with actual equipment, layout and weather conditions. Expected Energy Production below does not include any annual degradation in solar panel kWDC output.



Expected Energy Production from the Solar Array

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Total AC Energy Output by Month (kWh)	18197	35011	66548	76822	92730	94325	91125	81300	64916	50974	23161	12398	707507
	2.6%	4.9%	9.4%	10.9%	13.1%	13.3%	12.9%	11.5%	9.2%	7.2%	3.3%	1.8%	100.0%
Peak AC Output by Month (kWAC)	162	300	443	453	453	453	434	417	395	360	229	130	
	35.8%	66.3%	97.9%	100.0%	100.0%	100.0%	95.9%	92.1%	87.3%	79.6%	50.6%	28.6%	





Utility Bill Savings

Net Metering w/ Solar Photovoltaic Demand Credit Rider Tariff

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10°tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

System Sizing & Energy Assumptions	
Energy System Size (kW DC)	620.62
Energy System Production (kWh from 1 to 7 PM)	53.40%
kWh generated per kW DC of Solar Panels	1140
Annual degradation - reduction in kWh output (% / year)	0.50%
Ten year average increase in utility costs (%/year)	3.50%

Energy Expense: Savings (kWh)	
Year 1 Energy Expense Savings (\$)	\$51,834
Energy Savings per kWh (\$ / kWh)	\$0.0733
Utility Billing Plan	General Service Rate Plan

Demand Expense: Savings (kW)	
Year 1 Demand Expense Savings (\$)	\$10,245
Demand Savings per kWh (\$ / kWh)	\$0.0145
Maximum instantaneous production (kW AC)	452.6
Estimated % realized on utility bill to reduce demand fees	12.8%
Available production to reduce demand (kW AC)	57.9
Average demand charge cost (\$/kW)	\$14.74

PV Credit Rider: Rate A-86 Savings (kWh)	
Year 1 A-86 PV Rider Savings via Utility Bill Credit (\$)	\$26,598
PV Credit Rider Savings per kWh (\$ / kWh)	\$0.0376
Estimated energy production: hours 1 to 7PM (kWh)	377809
Photovoltaic Credit Rider (\$ / kWh)	\$0.07040
Photovoltaic Credit Rider Escalator (% / year)	1.00%

Year 1: Combined Total Savings: (kWh & kW)	
Total savings / kWh produced from solar array (\$/kWh)	\$0.1253
Energy Expense Savings (\$/kWh)	\$0.0733
Demand Expense Savings (\$/kWh)	\$0.0145
A-85 PV Credit Rider Savings (\$/kWh)	\$0.0376

Note ¹ The above PV Credit rate reflects a new rate Code A86 promulgated by the Public Utilities Commission on October 17, 2019 that replaced rate Code A-85 (\$0.07139 / kWh). Projects whose applications are deemed complete by Xcel before the new rate is published qualify for the A85 rate. The above rate is applicable through April, 2027. Rates are adjusted every 3 years during rate cases based on utility expense increases incurred since the prior rate case. PV Credit expected, but not guaranteed.

https://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/rates/MN/Me_Section_5.pdf, pg152.

Note ² Assumes Excess Energy payment increases at same rate as utility cost.

Utility Bill Savings							
Year	Electricity Produced (kWh/year)	Energy & Demand Expense Reduction / PV Rider Utility Bill Credit				Total Savings	
		Energy Expense Savings (\$/year)	Demand Expense Savings (\$/year)	PV Credit ¹ [Rate A-86] (\$/year)	Revenue ² from Excess Energy (\$/year)	Annual Savings (\$)	Cumulative Annual Savings (\$)
1	707507	\$ 51,834	\$ 10,245	\$ 26,598	\$ -	\$ 88,677	\$ 88,677
2	703969	\$ 53,380	\$ 10,551	\$ 26,465	\$ -	\$ 90,395	\$ 179,072
3	700449	\$ 54,972	\$ 10,865	\$ 26,332	\$ -	\$ 92,170	\$ 271,241
4	696947	\$ 56,611	\$ 11,190	\$ 26,201	\$ -	\$ 94,001	\$ 365,243
5	693462	\$ 58,300	\$ 11,523	\$ 26,069	\$ -	\$ 96,683	\$ 461,925
6	689995	\$ 60,038	\$ 11,867	\$ 25,938	\$ -	\$ 98,631	\$ 560,556
7	686545	\$ 61,829	\$ 12,221	\$ 25,807	\$ -	\$ 100,642	\$ 661,198
8	683112	\$ 63,673	\$ 12,585	\$ 25,676	\$ -	\$ 103,519	\$ 764,717
9	679696	\$ 65,572	\$ 12,961	\$ 25,545	\$ -	\$ 105,657	\$ 870,374
10	676298	\$ 67,528	\$ 13,347	\$ 25,414	\$ -	\$ 107,864	\$ 978,238
11	672917	\$ 69,542	\$ 13,745	\$ 25,283	\$ -	\$ 110,955	\$ 1,089,192
12	669552	\$ 71,616	\$ 14,155	\$ 25,152	\$ -	\$ 113,300	\$ 1,202,492
13	666204	\$ 73,752	\$ 14,577	\$ 25,021	\$ -	\$ 115,721	\$ 1,318,213
14	662873	\$ 75,952	\$ 15,012	\$ 24,890	\$ -	\$ 119,044	\$ 1,437,257
15	659559	\$ 78,217	\$ 15,460	\$ 24,759	\$ -	\$ 121,617	\$ 1,558,874
16	656261	\$ 80,550	\$ 15,921	\$ 24,628	\$ -	\$ 124,271	\$ 1,683,145
17	652980	\$ 82,952	\$ 16,396	\$ 24,497	\$ -	\$ 127,847	\$ 1,810,992
18	649715	\$ 85,426	\$ 16,885	\$ 24,366	\$ -	\$ 130,668	\$ 1,941,660
19	646466	\$ 87,974	\$ 17,388	\$ 24,235	\$ -	\$ 133,577	\$ 2,075,237
20	643234	\$ 90,598	\$ 17,907	\$ 24,104	\$ -	\$ 137,429	\$ 2,212,667
21	640018	\$ 93,300	\$ 18,441	\$ 23,973	\$ -	\$ 140,521	\$ 2,353,188
22	636818	\$ 96,083	\$ 18,991	\$ 23,842	\$ -	\$ 143,710	\$ 2,496,898
23	633634	\$ 98,948	\$ 19,558	\$ 23,711	\$ -	\$ 147,862	\$ 2,644,760
24	630466	\$ 101,899	\$ 20,141	\$ 23,580	\$ -	\$ 151,250	\$ 2,796,010
25	627314	\$ 104,939	\$ 20,742	\$ 23,449	\$ -	\$ 154,744	\$ 2,950,753
26	624177	\$ 108,068	\$ 21,360	\$ 23,318	\$ -	\$ 159,223	\$ 3,109,976
27	621056	\$ 111,291	\$ 21,997	\$ 23,187	\$ -	\$ 162,934	\$ 3,272,910
28	617951	\$ 114,611	\$ 22,653	\$ 23,056	\$ -	\$ 166,761	\$ 3,439,672
29	614861	\$ 118,029	\$ 23,329	\$ 22,925	\$ -	\$ 171,597	\$ 3,611,269
30	611787	\$ 121,549	\$ 24,025	\$ 22,794	\$ -	\$ 175,662	\$ 3,786,931
31	608728	\$ 125,174	\$ 24,741	\$ 22,663	\$ -	\$ 179,853	\$ 3,966,784
32	605684	\$ 128,908	\$ 25,479	\$ 22,532	\$ -	\$ 185,077	\$ 4,151,861
33	602656	\$ 132,752	\$ 26,239	\$ 22,401	\$ -	\$ 189,528	\$ 4,341,389
34	599643	\$ 136,712	\$ 27,022	\$ 22,270	\$ -	\$ 194,118	\$ 4,535,507
35	596645	\$ 140,789	\$ 27,828	\$ 22,139	\$ -	\$ 199,765	\$ 4,735,273
36	593662	\$ 144,988	\$ 28,658	\$ 22,008	\$ -	\$ 204,639	\$ 4,939,911
37	590694	\$ 149,313	\$ 29,512	\$ 21,877	\$ -	\$ 209,663	\$ 5,149,574
38	587741	\$ 153,766	\$ 30,393	\$ 21,746	\$ -	\$ 215,772	\$ 5,365,346
39	584802	\$ 158,352	\$ 31,299	\$ 21,615	\$ -	\$ 221,106	\$ 5,586,452
40	581878	\$ 163,075	\$ 32,233	\$ 21,484	\$ -	\$ 226,605	\$ 5,813,058



Financing Summary

Utility Bill Expense Savings w/ your Solar Array

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10° tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Year	Utility Bill Expense Savings	Green ² Solar Leasing Utility Bill Expense & Savings vs. Utility	
	Utility Bill Power Purchase Expense Reduction	Solar Array Power Purchase Expense	Power Purchase Expense Savings w/ Solar Array
1	\$88,677	\$70,941	\$17,735
2	\$90,395	\$72,316	\$18,079
3	\$92,170	\$73,736	\$18,434
4	\$94,001	\$75,201	\$18,800
5	\$96,683	\$77,346	\$19,336
6	\$98,631	\$78,905	\$19,726
7	\$100,642	\$80,513	\$20,128
8	\$103,519	\$82,815	\$20,704
9	\$105,657	\$84,526	\$21,131
10	\$107,864	\$86,291	\$21,573
11	\$110,955	\$88,764	\$22,191
12	\$113,300	\$90,640	\$22,660
13	\$115,721	\$92,577	\$23,144
14	\$119,044	\$95,235	\$23,809
15	\$121,617	\$97,293	\$24,323
16	\$124,271	\$99,417	\$24,854
17	\$127,847	\$102,278	\$25,569
18	\$130,668	\$104,534	\$26,134
19	\$133,577	\$106,862	\$26,715
20	\$137,429	\$109,944	\$27,486
21	\$140,521		\$140,521
22	\$143,710		\$143,710
23	\$147,862		\$147,862
24	\$151,250		\$151,250
25	\$154,744		\$154,744
Total	\$2,950,753	\$1,770,135	\$1,180,619

During the Term of your Lease and PPA

you will receive approximately...

20.0%

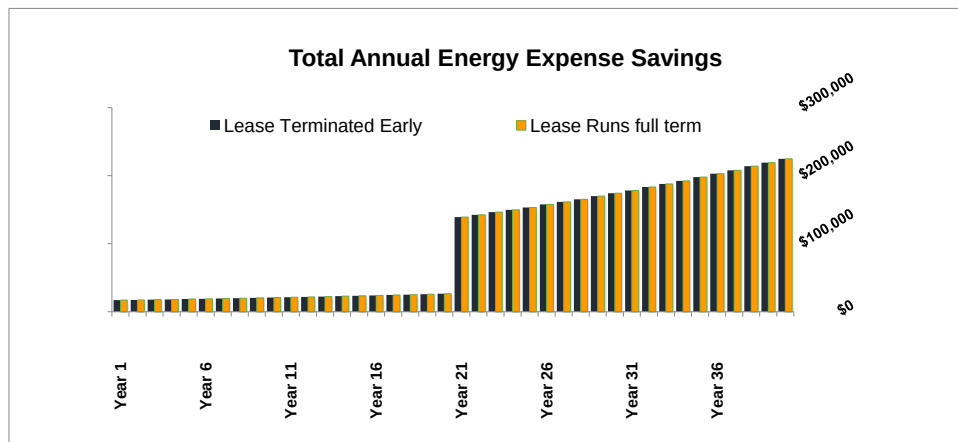
Utility Bill Expense Savings during years

1 to 20

Assuming an Average Annual Utility Rate Increase of

3.50%

Thereafter, you will receive ALL of the ENERGY generated from your solar array for FREE!





40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10°tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Year	Customer's Utility Savings and Rent Income		
	Utility Bill Savings	Rent Revenue	Total Annual Customer Revenue
Year 1	\$ 88,677	\$ 250	\$ 88,927
Year 2	\$ 90,395	\$ 250	\$ 90,645
Year 3	\$ 92,170	\$ 250	\$ 92,420
Year 4	\$ 94,001	\$ 250	\$ 94,251
Year 5	\$ 96,683	\$ 250	\$ 96,933
Year 6	\$ 98,631	\$ 250	\$ 98,881
Year 7	\$ 100,642	\$ 250	\$ 100,892
Year 8	\$ 103,519	\$ 250	\$ 103,769
Year 9	\$ 105,657	\$ 250	\$ 105,907
Year 10	\$ 107,864	\$ 250	\$ 108,114
Year 11	\$ 110,955	\$ 250	\$ 111,205
Year 12	\$ 113,300	\$ 250	\$ 113,550
Year 13	\$ 115,721	\$ 250	\$ 115,971
Year 14	\$ 119,044	\$ 250	\$ 119,294
Year 15	\$ 121,617	\$ 250	\$ 121,867
Year 16	\$ 124,271	\$ 250	\$ 124,521
Year 17	\$ 127,847	\$ 250	\$ 128,097
Year 18	\$ 130,668	\$ 250	\$ 130,918
Year 19	\$ 133,577	\$ 250	\$ 133,827
Year 20	\$ 137,429	\$ 250	\$ 137,679
Year 21	\$ 140,521	\$ -	\$ 140,521
Year 22	\$ 143,710	\$ -	\$ 143,710
Year 23	\$ 147,862	\$ -	\$ 147,862
Year 24	\$ 151,250	\$ -	\$ 151,250
Year 25	\$ 154,744	\$ -	\$ 154,744
Year 26	\$ 159,223	\$ -	\$ 159,223
Year 27	\$ 162,934	\$ -	\$ 162,934
Year 28	\$ 166,761	\$ -	\$ 166,761
Year 29	\$ 171,597	\$ -	\$ 171,597
Year 30	\$ 175,662	\$ -	\$ 175,662
Year 31	\$ 179,853	\$ -	\$ 179,853
Year 32	\$ 185,077	\$ -	\$ 185,077
Year 33	\$ 189,528	\$ -	\$ 189,528
Year 34	\$ 194,118	\$ -	\$ 194,118
Year 35	\$ 199,765	\$ -	\$ 199,765
Year 36	\$ 204,639	\$ -	\$ 204,639
Year 37	\$ 209,663	\$ -	\$ 209,663
Year 38	\$ 215,772	\$ -	\$ 215,772
Year 39	\$ 221,106	\$ -	\$ 221,106
Year 40	\$ 226,605	\$ -	\$ 226,605
TOTAL	\$ 5,813,058	\$ 5,000	\$ 5,818,058

Customer's Expenses		
Energy Payment to GreenSky (subject to sales tax)	Insurance Expense & Utility Fees	Total Annual Expenses
\$ (70,941)	\$ (900)	\$ (71,841)
\$ (72,316)	\$ (918)	\$ (73,234)
\$ (73,736)	\$ (936)	\$ (74,672)
\$ (75,201)	\$ (955)	\$ (76,156)
\$ (77,346)	\$ (974)	\$ (78,320)
\$ (78,905)	\$ (994)	\$ (79,898)
\$ (80,513)	\$ (1,014)	\$ (81,527)
\$ (82,815)	\$ (1,034)	\$ (83,849)
\$ (84,526)	\$ (1,054)	\$ (85,580)
\$ (86,291)	\$ (1,076)	\$ (87,367)
\$ (88,764)	\$ (1,097)	\$ (89,861)
\$ (90,640)	\$ (1,119)	\$ (91,759)
\$ (92,577)	\$ (1,141)	\$ (93,718)
\$ (95,235)	\$ (1,164)	\$ (96,399)
\$ (97,293)	\$ (1,187)	\$ (98,481)
\$ (99,417)	\$ (1,211)	\$ (100,628)
\$ (102,278)	\$ (1,235)	\$ (103,513)
\$ (104,534)	\$ (1,260)	\$ (105,794)
\$ (106,862)	\$ (1,285)	\$ (108,147)
\$ (109,944)	\$ (1,311)	\$ (111,255)
\$ -	\$ (1,337)	\$ (1,337)
\$ -	\$ (1,364)	\$ (1,364)
\$ -	\$ (1,391)	\$ (1,391)
\$ -	\$ (1,419)	\$ (1,419)
\$ -	\$ (1,447)	\$ (1,447)
\$ -	\$ (1,476)	\$ (1,476)
\$ -	\$ (1,506)	\$ (1,506)
\$ -	\$ (1,536)	\$ (1,536)
\$ -	\$ (1,567)	\$ (1,567)
\$ -	\$ (1,598)	\$ (1,598)
\$ -	\$ (1,630)	\$ (1,630)
\$ -	\$ (1,663)	\$ (1,663)
\$ -	\$ (1,696)	\$ (1,696)
\$ -	\$ (1,730)	\$ (1,730)
\$ -	\$ (1,764)	\$ (1,764)
\$ -	\$ (1,800)	\$ (1,800)
\$ -	\$ (1,836)	\$ (1,836)
\$ -	\$ (1,872)	\$ (1,872)
\$ -	\$ (1,910)	\$ (1,910)
\$ -	\$ (1,948)	\$ (1,948)
\$ (1,770,135)	\$ (54,358)	\$ (1,824,492)

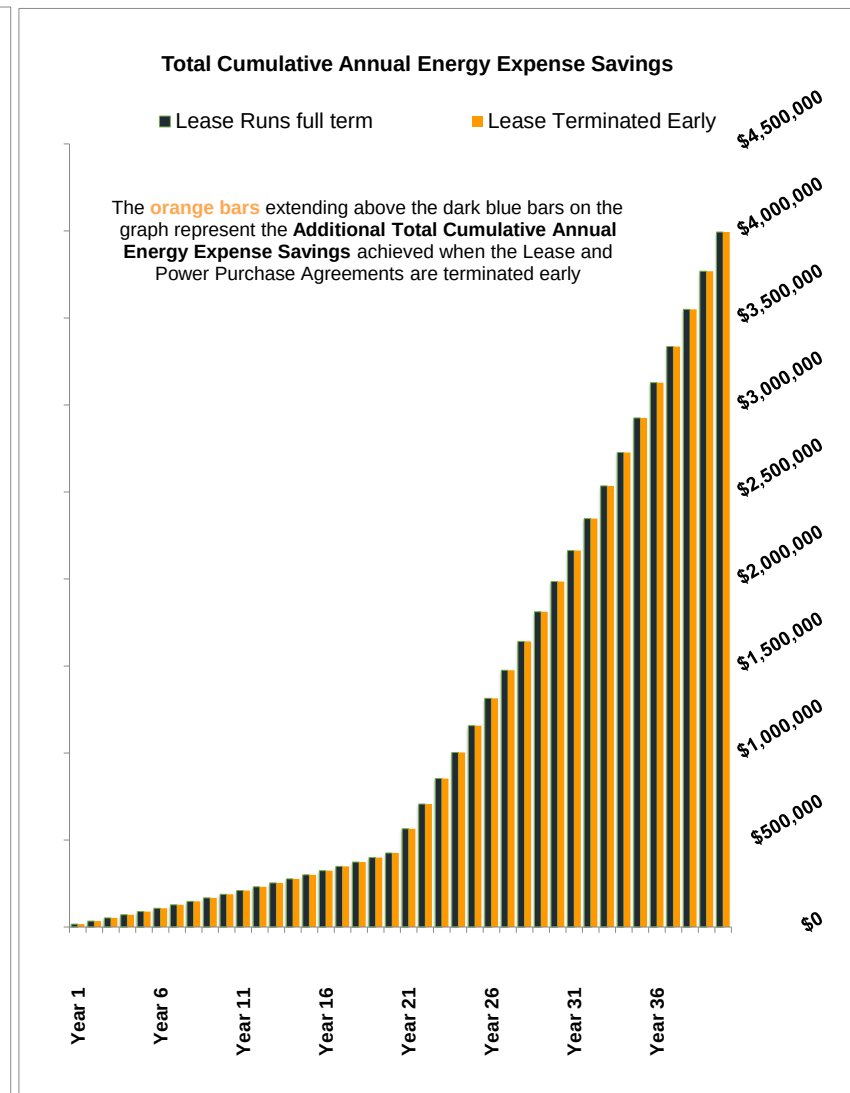
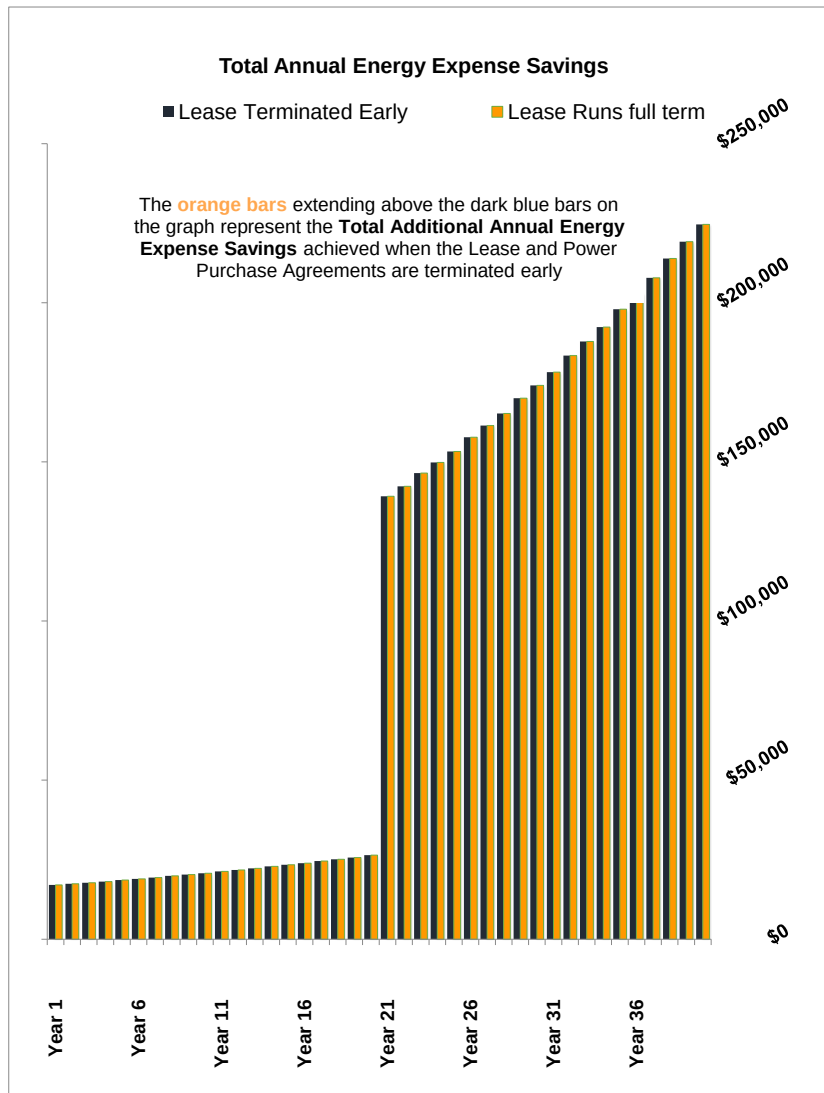
Annual Savings	
Total Annual Energy Expense Savings	Total Cumulative Annual Energy Expense Savings
\$ 17,085	\$ 17,085
\$ 17,411	\$ 34,496
\$ 17,747	\$ 52,244
\$ 18,095	\$ 70,339
\$ 18,612	\$ 88,951
\$ 18,982	\$ 107,934
\$ 19,365	\$ 127,298
\$ 19,920	\$ 147,218
\$ 20,327	\$ 167,545
\$ 20,747	\$ 188,292
\$ 21,344	\$ 209,636
\$ 21,791	\$ 231,427
\$ 22,253	\$ 253,680
\$ 22,895	\$ 276,574
\$ 23,386	\$ 299,960
\$ 23,893	\$ 323,853
\$ 24,584	\$ 348,437
\$ 25,123	\$ 373,560
\$ 25,680	\$ 399,240
\$ 26,425	\$ 425,665
\$ 139,184	\$ 564,849
\$ 142,346	\$ 707,195
\$ 146,471	\$ 853,666
\$ 149,831	\$ 1,003,496
\$ 153,296	\$ 1,156,793
\$ 157,747	\$ 1,314,539
\$ 161,428	\$ 1,475,967
\$ 165,225	\$ 1,641,193
\$ 170,030	\$ 1,811,223
\$ 174,064	\$ 1,985,287
\$ 178,223	\$ 2,163,510
\$ 183,415	\$ 2,346,924
\$ 187,833	\$ 2,534,757
\$ 192,388	\$ 2,727,145
\$ 198,001	\$ 2,925,146
\$ 202,839	\$ 3,127,985
\$ 207,827	\$ 3,335,812
\$ 213,900	\$ 3,549,712
\$ 219,197	\$ 3,768,908
\$ 224,657	\$ 3,993,565
\$ 3,993,565	

This Cashflow summary is intended only as an example.

40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10° tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan





iDEAL Energies Deliverables - A Turnkey Service

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10° tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Project Task & Deliverables

Solar Survey

Site Electrical Systems Review

System Layout and Electrical Engineering

Structural Engineering & Analytical Testing (review of roof / soil adequacy to support the system)

Tariff Application, Procurement, Engineering and Processing Fees, if any

Utility Interconnection Agreement(s)

Solar Array Equipment

Solar Array Installation

Electrical Connection – connect system to your building's electrical switchgear

System monitoring equipment and software for web based monitoring

Building Permit & Inspection

Electrical Permit & Inspection

Project Management

Training

Start-up

Solar Array Supporting Documentation

Federal Tax Credit Documentation

All Other Required Deliverables

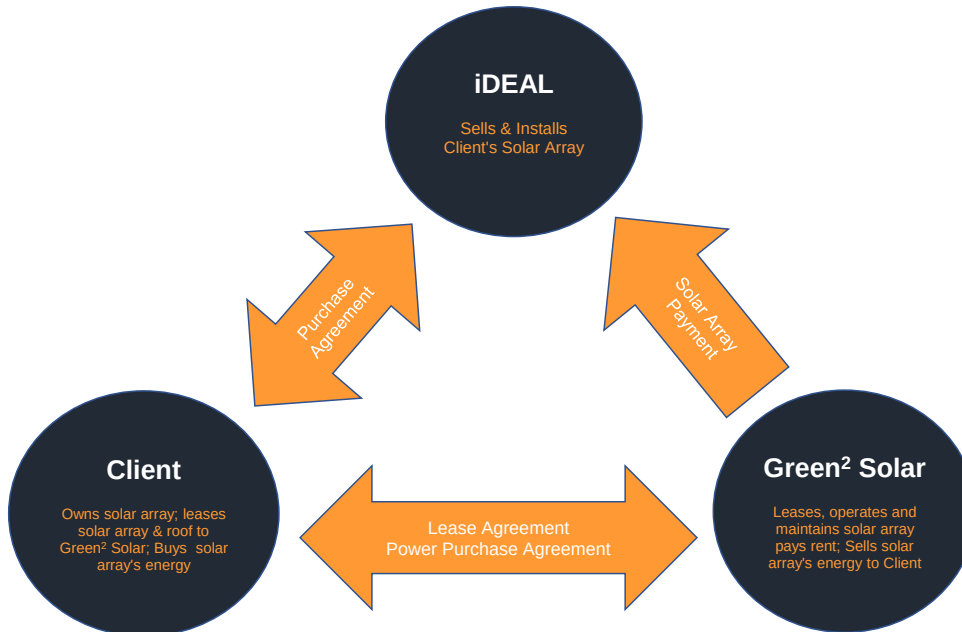


Capital Lease - How It Works

Rooftop Ballasted Solar Array - 620.62 kWDC 385 Watt Solar Panels @ 10°tilt & 180° az w/ 466.6 kWAC SolarEdge Inverters

Xcel Photovoltaic Credit Rider Tariff
General Service Rate Plan

Our Capital Lease Program



Purchase, Lease-back, and Power Purchase Highlights

Client

1. Is the Fee Title Owner of the solar array
2. Receives annual rent from Green² Solar Leasing
3. Pays Green² Solar Leasing for power generated from the solar array
4. Insures the solar array

Ownership

Our Client purchases their solar array from Ideal Energies and immediately owns it outright.
(Client is the fee title owner)

Facility Lease

Under the Facility Lease, Green² Solar Leasing pays Ideal Energies for the solar array, and becomes the tax owner so they can leverage tax benefits on the Client's behalf. The Facility Lease also assigns any rebates to Green² Solar Leasing to help pay for the solar array. Immediately after the purchase, the Client Leases the solar array to Green² Solar Leasing for annual lease payments, and Green² Solar Leasing operates and maintains it on the Client's behalf.

Green² Solar Leasing

1. Pays Purchase Price to Ideal Energies for Client
2. Pays annual rent to Client
3. Receives and uses available tax benefits
4. Receives and uses available Rebates
5. Operates and maintains solar array for Client
6. Bills Client for Power generated from the solar array

Power Purchase

The Client pays Green² Solar Leasing for the energy generated from the solar array at a discount vs. utility rates.