

ENERGY TOOLBASE™

Prepared For
Generic Customer
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\$560 Monthly Bill

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The team at ALL Save Energy are your local Commercial Solar Energy Specialist. A family-owned business, with an expert team of designers and installers, ALL Save Energy provides the most economical Solar PV Solution - with a hassle free process from beginning to end. Top Tier Solar Energy products coupled with industry leading warranties and Industry Best Practices deliver the best value available. The team of professionals at ALL Save Energy will guide you through the process from start to finish, making the transition to Solar Energy exciting and lucrative with minimal impact on your business operations throughout the project.



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1 Project Summary

Payment Options	Cash Purchase	15-Year Loan
IRR - Term	21.1%	0.0%
LCOE PV Generation	\$0.083 /kWh	\$0.165 /kWh
Net Present Value	\$43,701	\$51,972
Payback Period	4.5 Years	-
Total Payments	\$45,415	\$70,092
Total Incentives	\$20,421	\$20,421
Net Payments	\$24,994	\$49,670
Electric Bill Savings - Term	\$138,501	\$138,501
Upfront Payment	\$45,415	\$0
Loan Term	-	15 Years

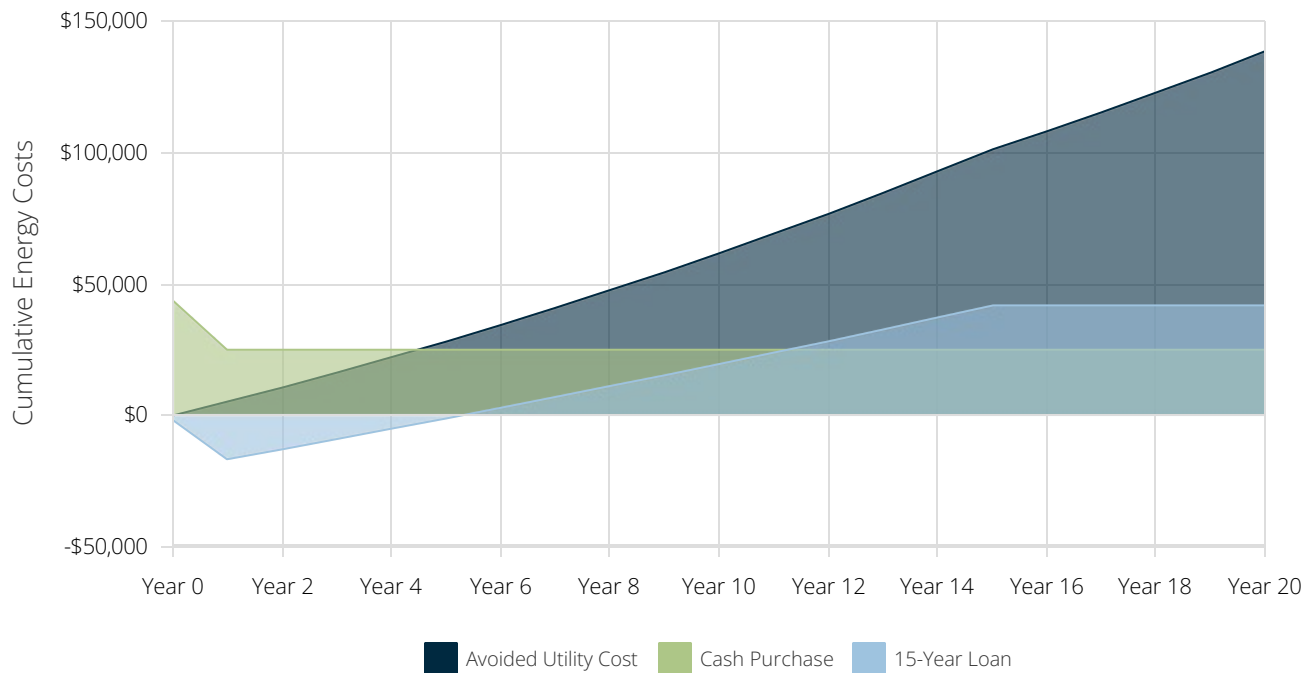
Combined Solar PV Rating

Power Rating: 11,000 W-DC
 Power Rating: 9,680 W-AC-CEC

Combined ESS Ratings

Energy Capacity: 19.8 kWh
 Power Rating: 7.6 kW

Cumulative Energy Costs By Payment Option



2.1.1 PV System Details

General Information

Facility: Residential Model
 Address: 9311 Single Tree Ct Stockton CA 95209

Solar PV System Rating

Power Rating: 11,000 W-DC
 Power Rating: 9,680 W-AC-CEC

Solar PV Equipment Description

Solar Panels: 11.0 kW-DC Standard Modules
 Inverters: Standard Inverter

Energy Consumption Mix

Annual Energy Use: 15,888 kWh

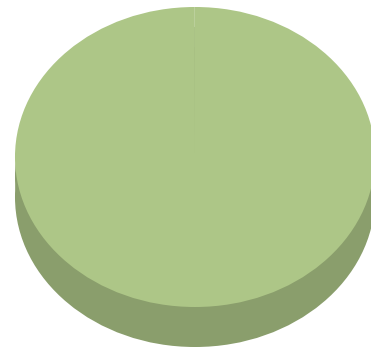
Solar PV Equipment Typical Lifespan

Solar Panels: Greater than 30 Years
 Inverters: 25 Years

Solar PV System Cost and Incentives

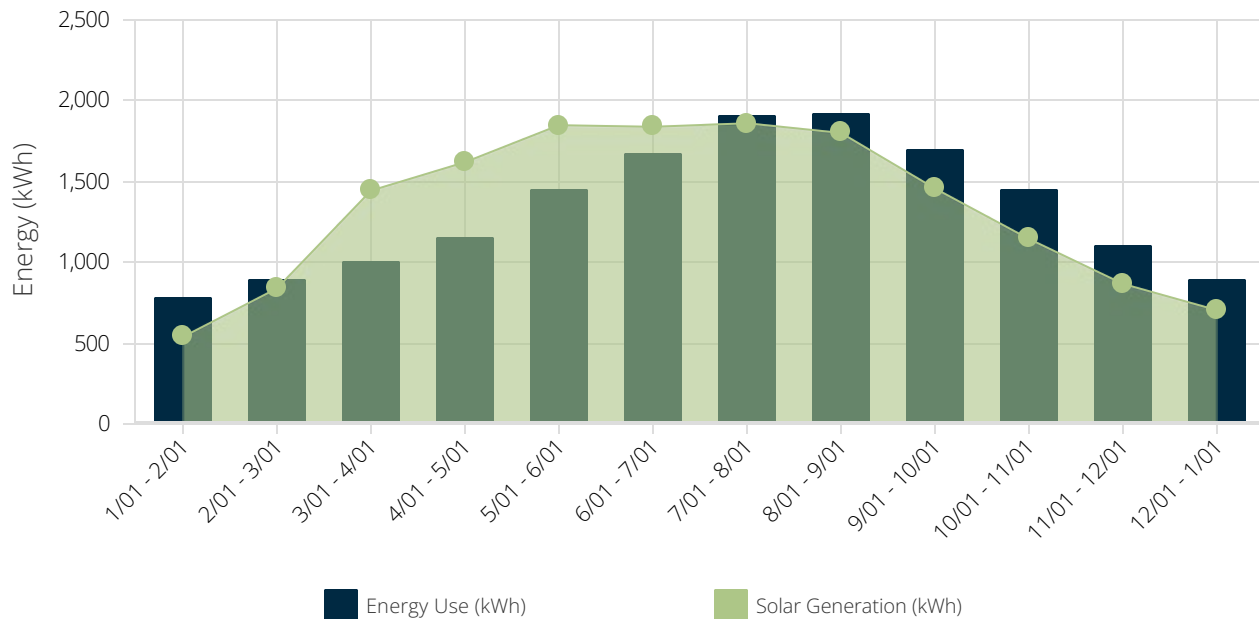
Solar PV System Cost	\$32,776
Federal Tax Credit	-\$9,608
All Save Rebate	-\$750

Net Solar PV System Cost \$22,418



Utility	-77 kWh (0.00%)
Solar PV	15,965 kWh (100.00%)

Monthly Energy Use vs Solar Generation



2.1.2 Energy Storage System (ESS) Details

General Information

Facility: Residential Model
Address: Stockton CA 95209

ESS System Ratings

Energy Capacity: 19.8 kWh
Power Rating: 7.6 kW

ESS Equipment Description

Battery Banks: 7.6kw/19.8kWh Energy Storage System
Inverters: 7.6kw/19.8kWh Energy Storage System

ESS Equipment Typical Lifespan

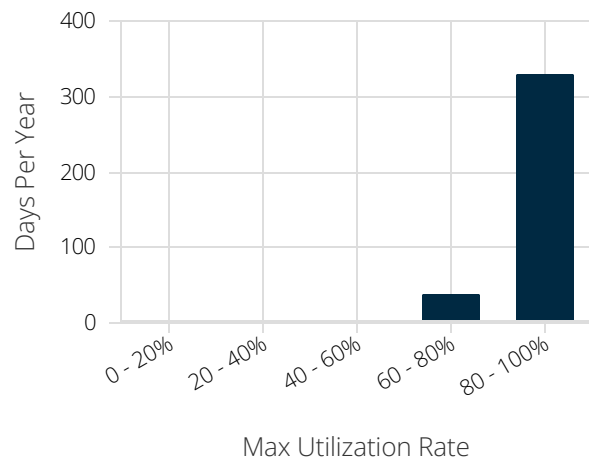
Battery Banks: 15 Years
Inverters: 15 Years

ESS Cost and Incentives

ESS Cost \$12,639
Federal Tax Credit (ESS) **-\$3,792**
SGIP Incentive **-\$1,772**
All Save Rebate **-\$4,500**

Net ESS Cost \$2,575

Energy Storage Annual Utilization



Energy Output and Demand Savings From Solar PV and Energy Storage				
Date Range	ESS Energy Discharge (kWh)	Solar PV Generation (kWh)	ESS Energy as % of PV Energy	Total Demand Savings
1/1/2023 - 2/1/2023	295	539	54.73%	\$0
2/1/2023 - 3/1/2023	369	839	43.98%	\$0
3/1/2023 - 4/1/2023	469	1,444	32.48%	\$0
4/1/2023 - 5/1/2023	479	1,620	29.57%	\$0
5/1/2023 - 6/1/2023	479	1,849	25.91%	\$0
6/1/2023 - 7/1/2023	471	1,839	25.61%	\$0
7/1/2023 - 8/1/2023	501	1,861	26.92%	\$0
8/1/2023 - 9/1/2023	507	1,801	28.15%	\$0
9/1/2023 - 10/1/2023	481	1,457	33.01%	\$0
10/1/2023 - 11/1/2023	436	1,145	38.08%	\$0
11/1/2022 - 12/1/2022	434	867	50.06%	\$0
12/1/2022 - 1/1/2023	382	704	54.26%	\$0
Total	5,303	15,965	33.22%	\$0

2.1.3 Rebates and Incentives

This section summarizes all incentives available for this project. The actual rebate and incentive amounts for this project are shown in each example.

Investment Tax Credit (ITC), Residential - 30%

The Inflation Reduction Act (IRA) of 2022 establishes and extends the federal Investment Tax Credit (ITC) for solar photovoltaic (PV) systems at a rate of 30% of the total PV system cost. The 30% ITC was extended for 10 years, through 2032. Unlike tax deductions, this tax credit can be used to directly offset your tax liability dollar for dollar.

Total Incentive Value: \$9,608

Transfer Switch Upgrade Promo

\$750 Discount for Systems over 6.0kW for transfer switch upgrade.

Total Incentive Value: \$750

Investment Tax Credit (ITC), Residential - 30% (ESS)

The Inflation Reduction Act (IRA) of 2022 established a federal Investment Tax Credit (ITC) for energy storage system (ESS) projects at a rate of 30% of the total ESS system cost. The IRA explicitly stated that the 30% ESS ITC was applicable for standalone ESS projects, and also ESS projects paired with a solar PV system. The ESS ITC was established for 10 years, through 2032. Unlike tax deductions, this tax credit can be used to directly offset your tax liability dollar for dollar.

Total Incentive Value: \$3,792

SGIP – Step 7 Residential (\$150/kWh)

The 2020 Self-Generation Incentive Program (SGIP), Step 7 incentive is \$0.15/Wh for small residential (<10 kW) Energy Storage Systems (ESS). Residential storage projects will receive the entire incentive paid upfront. The methodology for calculating an SGIP incentive is dynamic and based on several factors, including: the hourly duration of the ESS, and the total energy capacity (kWh) of the ESS. The sum of the SGIP incentive and other incentives received for the project may not exceed the total eligible project costs. Disclaimer on the Greenhouse Gas (GHG) reduction requirement: the incentive calculation assumes that the ESS reduces at least 5 kg/kWh of GHG reduction, and there is no corresponding reduction in SGIP amount.

Total Incentive Value: \$2,362

Battery Upgrade Promo

\$4,500 Discount on first 9.9kWh ESS for Systems over 10.0kW

Total Incentive Value: \$4,500

2.1.4 Utility Rates

You have the option to remain on your current rate schedule (E-1) or switch to an alternative rate schedule (E-ELEC). The rates for each are shown below and your estimated electric bills are shown on the following page for each rate schedule.

Customer Charges					Energy Charges				
Season	Charge Type	Rate Type	E-1	E-ELEC	Season	Charge Type	Rate Type	E-1	E-ELEC
W	Flat Rate	per day	-	\$0.49	W	T < 10.2 kw	Import	\$0.35841	-
S	Flat Rate	per day	-	\$0.49	W	10.2 kw < T	Import	\$0.44692	-
					S	T < 15 kw	Import	\$0.35841	-
					S	15 kw < T	Import	\$0.44692	-
					W	On Peak	Import	-	\$0.33438
					W	Part-Peak	Import	-	\$0.31229
					W	Off-Peak	Import	-	\$0.29843
					S	On Peak	Import	-	\$0.56589
					S	Part-Peak	Import	-	\$0.40401
					S	Off-Peak	Import	-	\$0.34733

2.1.5 Current Electric Bill

The table below shows your annual electricity costs based on the most current utility rates and your previous 12 months of electrical usage.

Rate Schedule: PG&E - E-1

Time Periods	Energy Use (kWh)	Charges		
		NBC	Energy	Total
Bill Ranges & Seasons	Total			
1/1/2023 - 2/1/2023 W	777	\$25	\$294	\$319
2/1/2023 - 3/1/2023 W	888	\$29	\$343	\$372
3/1/2023 - 4/1/2023 W	999	\$33	\$386	\$418
4/1/2023 - 5/1/2023 W	1,150	\$38	\$449	\$487
5/1/2023 - 6/1/2023 W	1,450	\$47	\$573	\$620
6/1/2023 - 7/1/2023 S	1,666	\$55	\$650	\$705
7/1/2023 - 8/1/2023 S	1,900	\$62	\$746	\$808
8/1/2023 - 9/1/2023 S	1,920	\$63	\$754	\$817
9/1/2023 - 10/1/2023 S	1,700	\$56	\$664	\$720
10/1/2023 - 11/1/2023 W	1,450	\$47	\$573	\$620
11/1/2022 - 12/1/2022 W	1,100	\$36	\$429	\$465
12/1/2022 - 1/1/2023 W	888	\$29	\$340	\$369
Total	15,888	\$520	\$6,199	\$6,719

2.1.6 New Electric Bill

Rate Schedule Option 1: PG&E - E-1

Time Periods Bill Ranges & Seasons	Energy Use (kWh)			Charges		
	Total	NBC	Energy	Total		
1/1/2023 - 2/1/2023 W	284	\$11	\$92	\$104		
2/1/2023 - 3/1/2023 W	106	\$9	\$34	\$43		
3/1/2023 - 4/1/2023 W	-371	\$3	\$126	\$123		
4/1/2023 - 5/1/2023 W	-399	\$3	\$138	\$135		
5/1/2023 - 6/1/2023 W	-321	\$8	\$105	\$97		
6/1/2023 - 7/1/2023 S	-94	\$10	\$31	\$21		
7/1/2023 - 8/1/2023 S	117	\$15	\$38	\$53		
8/1/2023 - 9/1/2023 S	196	\$15	\$64	\$79		
9/1/2023 - 10/1/2023 S	319	\$17	\$104	\$121		
10/1/2023 - 11/1/2023 W	374	\$15	\$127	\$142		
11/1/2022 - 12/1/2022 W	294	\$13	\$96	\$109		
12/1/2022 - 1/1/2023 W	247	\$10	\$80	\$91		
Total	752	\$131	\$236	\$368		

New Rate Schedule Option 2: PG&E - E-ELEC

Time Periods Bill Ranges & Seasons	Energy Use (kWh)			Charges			
	On Peak	Part-Peak	Off-Peak	Other	NBC	Energy	Total
1/1/2023 - 2/1/2023 W	67	49	168	\$15	\$11	\$93	\$120
2/1/2023 - 3/1/2023 W	33	24	49	\$14	\$9	\$73	\$96
3/1/2023 - 4/1/2023 W	-56	-21	-295	\$15	\$3	\$19	\$37
4/1/2023 - 5/1/2023 W	-71	-16	-313	\$15	\$3	\$23	\$41
5/1/2023 - 6/1/2023 W	17	13	-351	\$15	\$8	\$60	\$83
6/1/2023 - 7/1/2023 S	22	31	-147	\$15	\$10	\$94	\$119
7/1/2023 - 8/1/2023 S	41	66	10	\$15	\$15	\$151	\$181
8/1/2023 - 9/1/2023 S	42	58	96	\$15	\$15	\$156	\$186
9/1/2023 - 10/1/2023 S	66	80	173	\$15	\$17	\$180	\$212
10/1/2023 - 11/1/2023 W	87	78	208	\$15	\$15	\$126	\$157
11/1/2022 - 12/1/2022 W	62	58	173	\$15	\$13	\$105	\$133
12/1/2022 - 1/1/2023 W	58	49	140	\$15	\$10	\$84	\$110
Total	368	469	-89	\$180	\$131	\$1,164	\$1,475

Annual Electricity Savings: \$5,244

3.1 Cash Purchase

Assumptions and Key Financial Metrics

IRR - Term	21.1%	Net Present Value	\$43,701	Payback Period	4.5 Years
ROI	260.1%	PV Degradation Rate	0.57%	Discount Rate	7.0%
Energy Cost Escalation Rate	5.0%	Federal Income Tax Rate	25.0%	State Income Tax Rate	9.0%
Total Project Costs	\$45,415				

Years	Project Costs	All Save Rebate	SGIP Incentive	Electric Bill Savings	Federal Tax Effect	Total Cash Flow	Cumulative Cash Flow
Upfront	-\$45,415	-	\$2,362	-	-\$591	-\$43,643	-\$43,643
1	-	\$5,250	-	\$5,244	\$13,400	\$23,893	-\$19,750
2	-	-	-	\$5,433	-	\$5,433	-\$14,317
3	-	-	-	\$5,627	-	\$5,627	-\$8,690
4	-	-	-	\$5,828	-	\$5,828	-\$2,862
5	-	-	-	\$6,034	-	\$6,034	\$3,172
6	-	-	-	\$6,246	-	\$6,246	\$9,418
7	-	-	-	\$6,465	-	\$6,465	\$15,883
8	-	-	-	\$6,690	-	\$6,690	\$22,573
9	-	-	-	\$6,921	-	\$6,921	\$29,494
10	-	-	-	\$7,158	-	\$7,158	\$36,652
11	-	-	-	\$7,402	-	\$7,402	\$44,054
12	-	-	-	\$7,653	-	\$7,653	\$51,707
13	-	-	-	\$7,910	-	\$7,910	\$59,617
14	-	-	-	\$8,173	-	\$8,173	\$67,790
15	-	-	-	\$8,444	-	\$8,444	\$76,234
16	-	-	-	\$6,835	-	\$6,835	\$83,069
17	-	-	-	\$7,132	-	\$7,132	\$90,201
18	-	-	-	\$7,442	-	\$7,442	\$97,643
19	-	-	-	\$7,764	-	\$7,764	\$105,407
20	-	-	-	\$8,101	-	\$8,101	\$113,508
Totals:	-\$45,415	\$5,250	\$2,362	\$138,501	\$12,809	\$113,508	-

3.2 15-Year Loan

Assumptions and Key Financial Metrics

PV Degradation Rate	0.57%	Energy Cost Escalation Rate	5.0%	Federal Income Tax Rate	25.0%
State Income Tax Rate	9.0%	Interest Rate	6.25%	Total Project Cost	\$45,415
Upfront Payment	\$0	Loan Term	15 Years		

Years	Financing Payments	All Save Rebate	SGIP Incentive	Electric Bill Savings	State Tax Effect	Federal Tax Effect	Total Cash Flow	Cumulative Cash Flow
Upfront	-	-	\$2,362	-	-	-\$591	\$1,772	\$1,772
1	-\$4,673	\$5,250	-	\$5,244	\$251	\$14,033	\$20,105	\$21,877
2	-\$4,673	-	-	\$5,433	\$240	\$606	\$1,606	\$23,482
3	-\$4,673	-	-	\$5,627	\$228	\$577	\$1,759	\$25,241
4	-\$4,673	-	-	\$5,828	\$216	\$545	\$1,916	\$27,157
5	-\$4,673	-	-	\$6,034	\$203	\$512	\$2,076	\$29,233
6	-\$4,673	-	-	\$6,246	\$189	\$477	\$2,239	\$31,472
7	-\$4,673	-	-	\$6,465	\$174	\$439	\$2,405	\$33,876
8	-\$4,673	-	-	\$6,690	\$158	\$399	\$2,573	\$36,449
9	-\$4,673	-	-	\$6,921	\$141	\$356	\$2,745	\$39,194
10	-\$4,673	-	-	\$7,158	\$123	\$310	\$2,919	\$42,113
11	-\$4,673	-	-	\$7,402	\$104	\$262	\$3,095	\$45,208
12	-\$4,673	-	-	\$7,653	\$83	\$210	\$3,274	\$48,482
13	-\$4,673	-	-	\$7,910	\$62	\$156	\$3,454	\$51,936
14	-\$4,673	-	-	\$8,173	\$38	\$97	\$3,636	\$55,572
15	-\$4,673	-	-	\$8,444	\$14	\$35	\$3,820	\$59,392
16	-	-	-	\$6,835	-	-	\$6,835	\$66,227
17	-	-	-	\$7,132	-	-	\$7,132	\$73,359
18	-	-	-	\$7,442	-	-	\$7,442	\$80,801
19	-	-	-	\$7,764	-	-	\$7,764	\$88,565
20	-	-	-	\$8,101	-	-	\$8,101	\$96,666
Totals:	-\$70,092	\$5,250	\$2,362	\$138,501	\$2,221	\$18,423	\$96,666	-