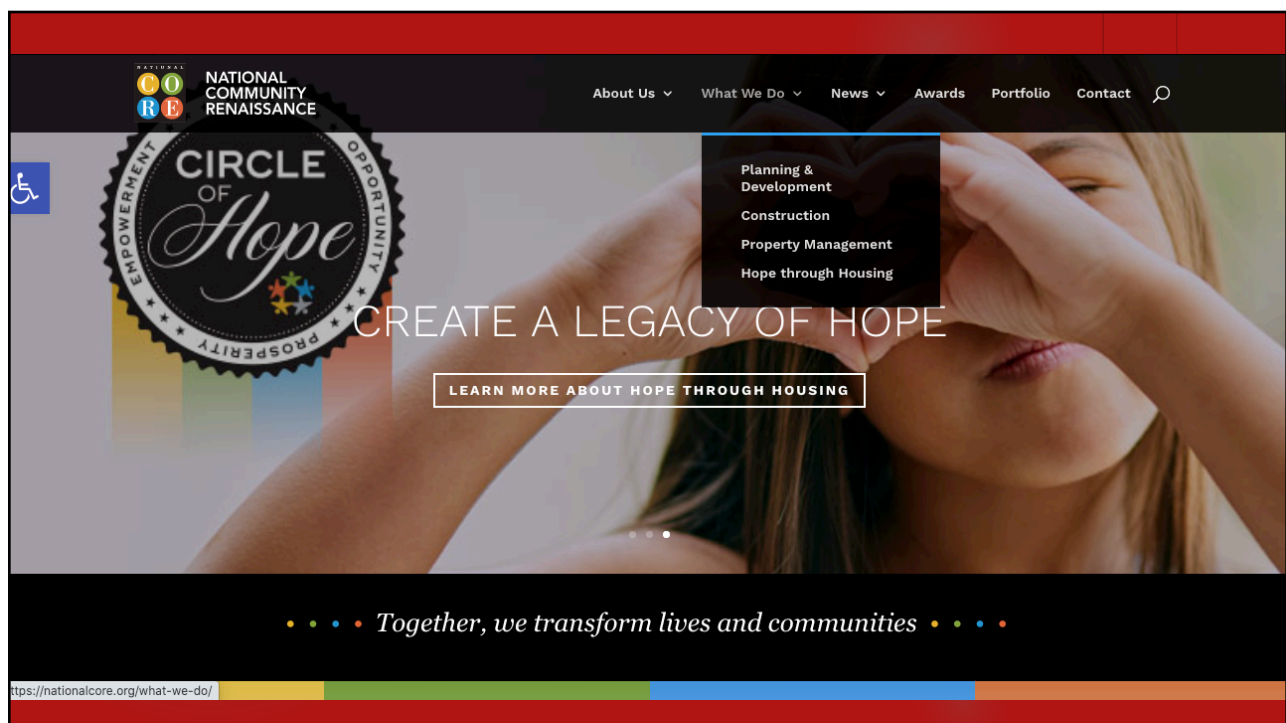



1



2



OUR COMMITMENT TO SUSTAINABILITY...

National CORE awarded Power Builder distinction by U.S. Green Building Council's 2018 LEED Homes Awards

Jun 20, 2019

Annual awards honor prominent projects, developers, and builders in residential sustainability Rancho Cucamonga, Calif. – June 20, 2019 – National Community Renaissance (National CORE) has been named a Power Builder by the U.S. Green Building Council (USGBC) as a part...

[read more](#)


National Community Renaissance becomes first developer to sign onto AIA's 2030 Commitment

Apr 16, 2019

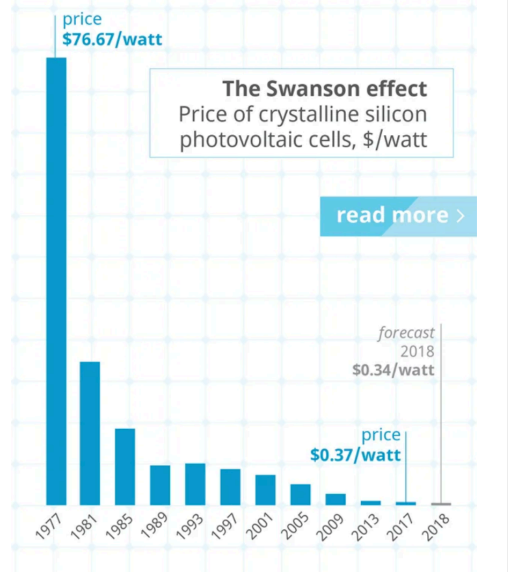
WASHINGTON – April 16, 2019 – The American Institute of Architects (AIA) is welcoming National Community Renaissance (National CORE), one of the nation's largest nonprofit developers of affordable housing, as the first developer to sign the AIA 2030 Commitment. AIA's...

[read more](#)

3



OUR COMMITMENT TO SUSTAINABILITY...



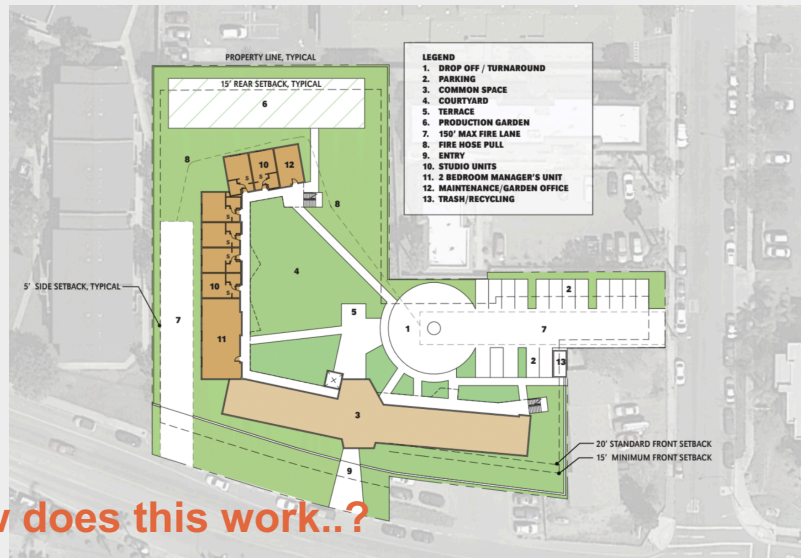
The Swanson effect
Price of crystalline silicon photovoltaic cells, \$/watt

<https://cleantechnica.com/2014/02/04/current-cost-solar-panels/>

The Dropping Cost of PV

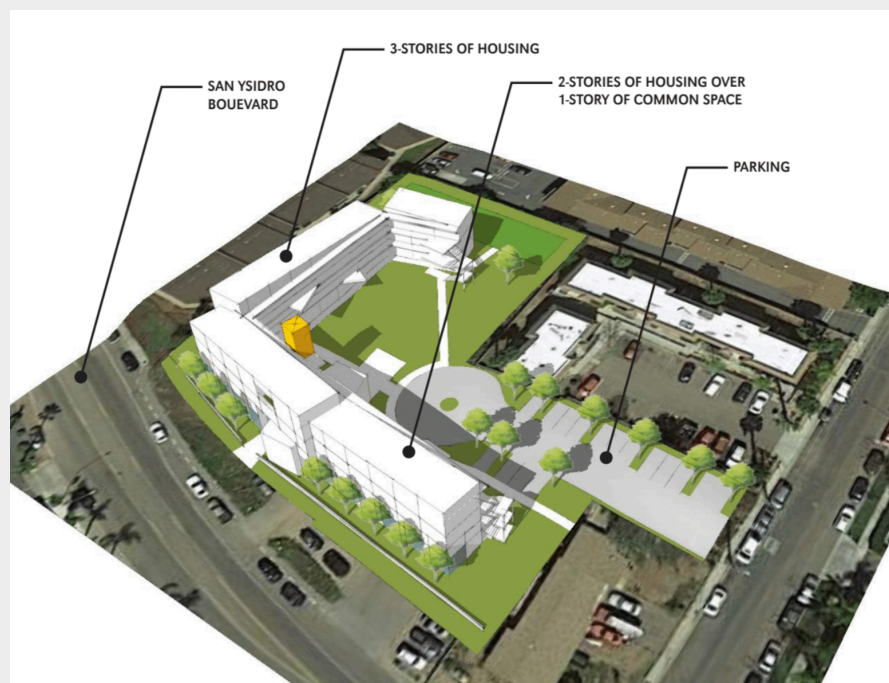
1. These are real savings
2. We see this playing out on every project.
3. Affordable housing developers must take advantage of this (there is too much at stake not to)
4. The impact of Time of Use energy and Battery Storage is a work in progress

4



How does this work..?
San Ysidro Senior Village

5



6



Operational Economics...Before PV... (PV = Photovoltaic Energy...) Energy from the sun (it's free)

2.1.4 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: SDG&E - TOU-DR1

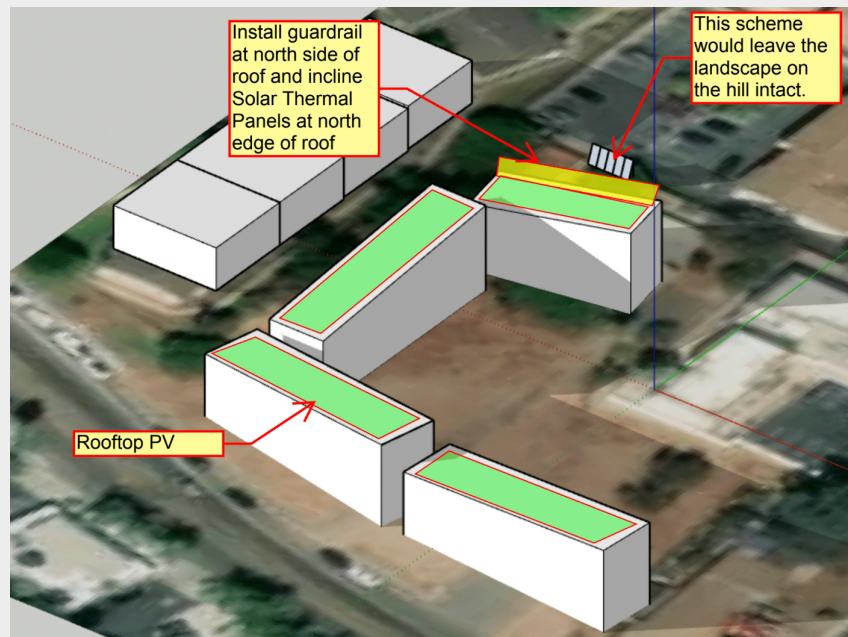
Time Periods	Energy Use (kWh)	Charges	Charges
Bill Ranges & Seasons			Total
1/1/2018 - 2/1/2018 W1	\$5,190	\$5,530	\$4,480
2/1/2018 - 3/1/2018 W1			\$3,946
3/1/2018 - 4/1/2018 W2			\$4,265
4/1/2018 - 5/1/2018 W2	\$4,100	\$4,402	\$4,140
5/1/2018 - 6/1/2018 W3			\$4,231
6/1/2018 - 7/1/2018 S1			\$4,510
7/1/2018 - 8/1/2018 S1	\$4,296	\$4,612	\$4,966
8/1/2018 - 9/1/2018 S1			\$5,632
9/1/2018 - 10/1/2018 S1			\$6,061
10/1/2018 - 11/1/2018 S1	\$53,074	\$56,775	\$5,530
11/1/2018 - 12/1/2018 W1			\$4,402
12/1/2018 - 1/1/2019 W1			\$4,612
Totals:			\$56,775

**This is the annual operational budget for electricity –
What we should expect to pay SDG&E under nomrmal circumstances**

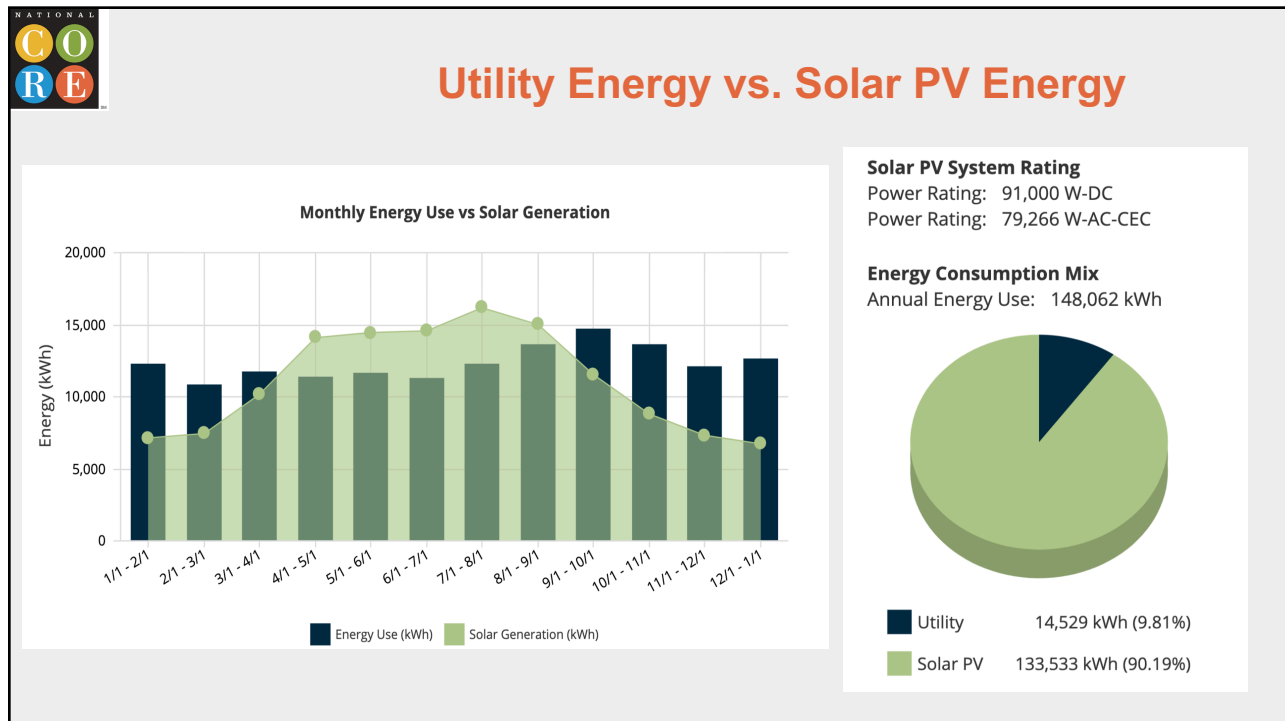
7



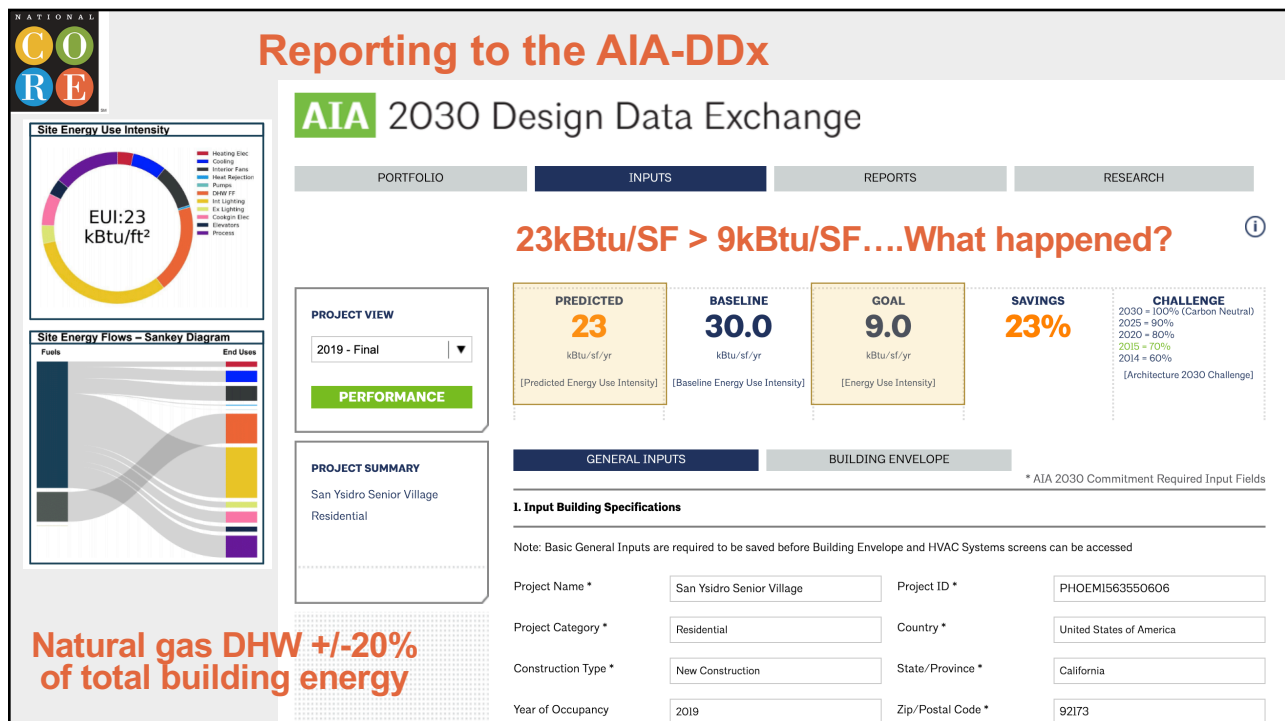
Designing for PV – now T24...101



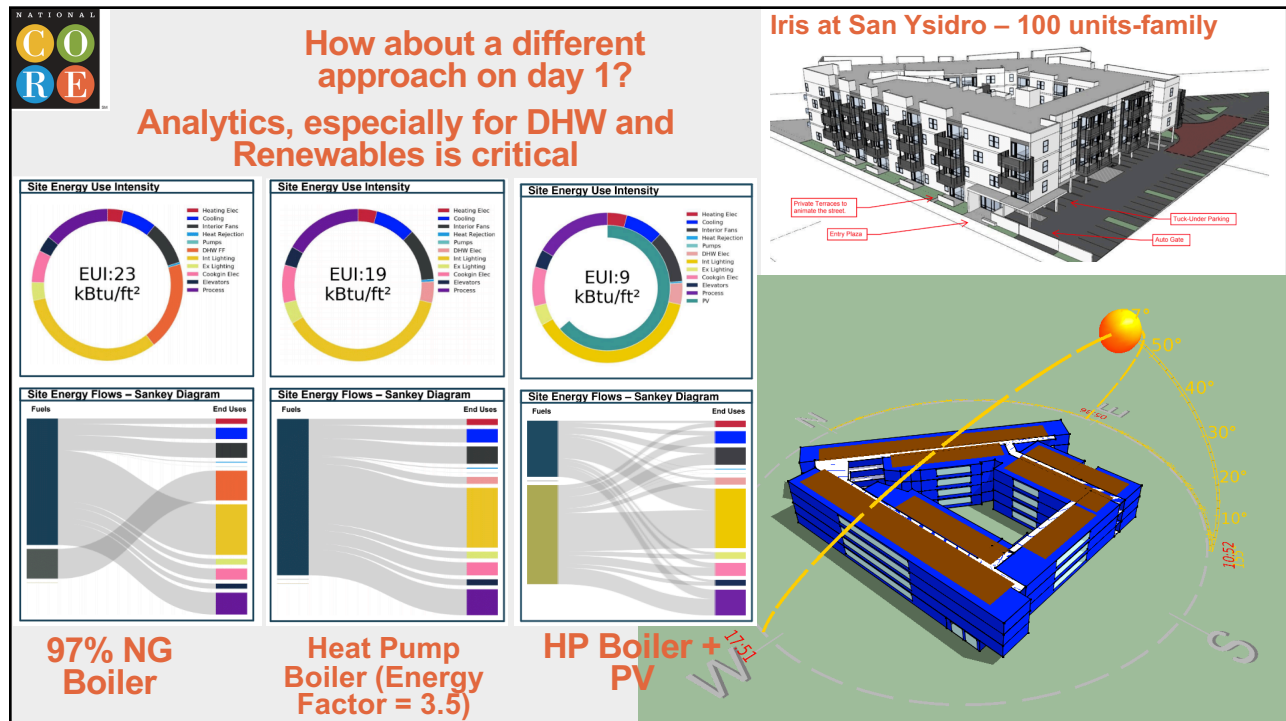
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9



10



11

NATIONAL COORE

Back to San Ysidro Senior Village.

If you're out of money, lease the PV???

3.2 Cal Solar Lease

Inputs and Key Financial Metrics

End of Term Buyout Payment	\$34,000	Term	6	Electricity Escalation Rate	3%
PPA Escalation Rate	2.5%	Total Payments	\$134,251	Federal Income Tax Rate	0%
Starting PPA Rate	\$0.12	PV Degradation Rate	0.8%	State Income Tax Rate	0%
Upfront Payment	\$0				

Years	PPA Payments	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-	-	-	-
1	-\$16,024	\$47,525	\$31,501	\$31,501
2	-\$16,293	\$48,546	\$32,253	\$63,754
3	-\$16,566	\$49,587	\$33,021	\$96,775
4	-\$16,842	\$50,646	\$33,804	\$130,579
5	-\$17,121	\$51,724	\$34,603	\$165,182
6	-\$17,404	\$52,821	\$35,417	\$200,599
7	-\$34,000	\$53,938	\$19,938	\$220,537
8	-	\$55,074	\$55,074	\$275,611
9	-	\$56,229	\$56,229	\$331,840
10	-	\$57,405	\$57,405	\$389,245

12



Or, better yet, buy it???

3.1 Cash Purchase

Inputs and Key Financial Metrics

Total Project Costs	\$316,943	25-Year ROI	424.4%	Electricity Escalation Rate	3%
25-Year IRR	23.48%	PV Degradation Rate	0.8%	Federal Income Tax Rate	0%
25-Year NPV	\$622,357	Discount Rate	5%	State Income Tax Rate	0%
Payback Period	4 Years				

Years	Project Costs	NSHP - Step 7 (affordable housing)	Electric Bill Savings	Total Cash Flow	Cumulative Cash Flow
Upfront	-\$316,943	-	-	-\$316,943	-\$316,943
1	-	\$118,900	\$47,525	\$166,424	-\$150,519
2	-	-	\$48,546	\$48,546	-\$101,972
3	-	-	\$49,587	\$49,587	-\$52,385
4	-	-	\$50,646	\$50,646	-\$1,739
5	-	-	\$51,724	\$51,724	\$49,985
6	-	-	\$52,821	\$52,821	\$102,806
7	-	-	\$53,938	\$53,938	\$156,744
8	-	-	\$55,074	\$55,074	\$211,818
9	-	-	\$56,229	\$56,229	\$268,048
10	-	-	\$57,405	\$57,405	\$325,452

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Operational Economics – This is the key

Rate Schedule: SDG&E - TOU-DR1

Time Periods	Energy Use (kWh)			Charges		Charges
	On Peak	Off Peak	Super Off Peak	NBC	Energy	
1/1/2018 - 2/1/2018 W1	2,746	681	1,942	\$212	\$1,816	\$2,028
2/1/2018 - 3/1/2018 W1	1,996	-334	2,022	\$176	\$1,233	\$1,409
3/1/2018 - 4/1/2018 W2	1,545	998	-619	\$184	\$654	\$838
4/1/2018 - 5/1/2018 W2	749	-446	-2,			
5/1/2018 - 6/1/2018 W3	338	-4,214	1,	\$1,554	\$1,754	
6/1/2018 - 7/1/2018 S1	-476	-3,605	1,	\$2,049	\$2,251	
7/1/2018 - 8/1/2018 S1	-370	-4,038	1,			
8/1/2018 - 9/1/2018 S1	901	-3,327	1,			
9/1/2018 - 10/1/2018 S1	2,044	-418	2,	\$1,688	\$1,900	

Annual Electricity Savings: \$47,525

\$2,070 \$2,292
\$7,097 \$9,251

14




15

CURB Fleet Administrator

tkohut@nationalcore.org [Logout](#)

Search by location name, location street address, city, state, zip code, user name, email address, or CURB serial number.

	Locations	Available	In Process	Active Hubs
# in TOTAL FLEET	2	0	0	5



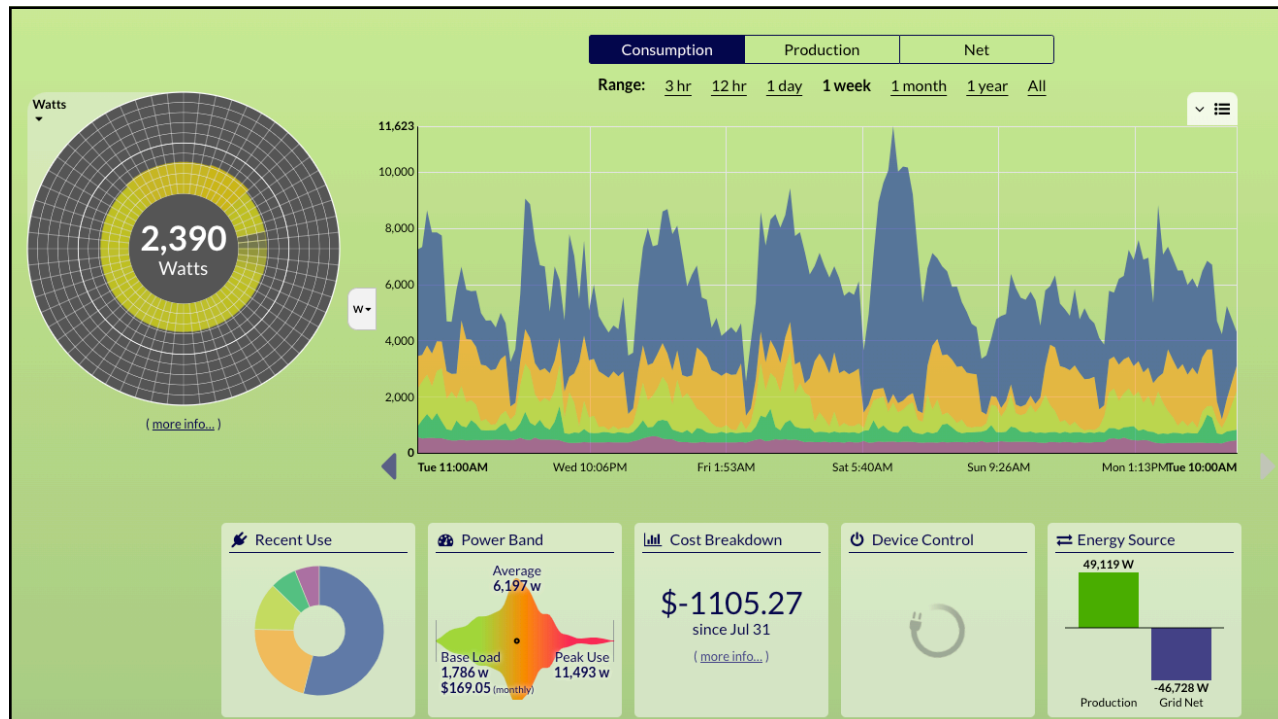
national_community_renaissance

[Available CURBs](#)
[In-Process Installs](#)
[Active Locations](#)

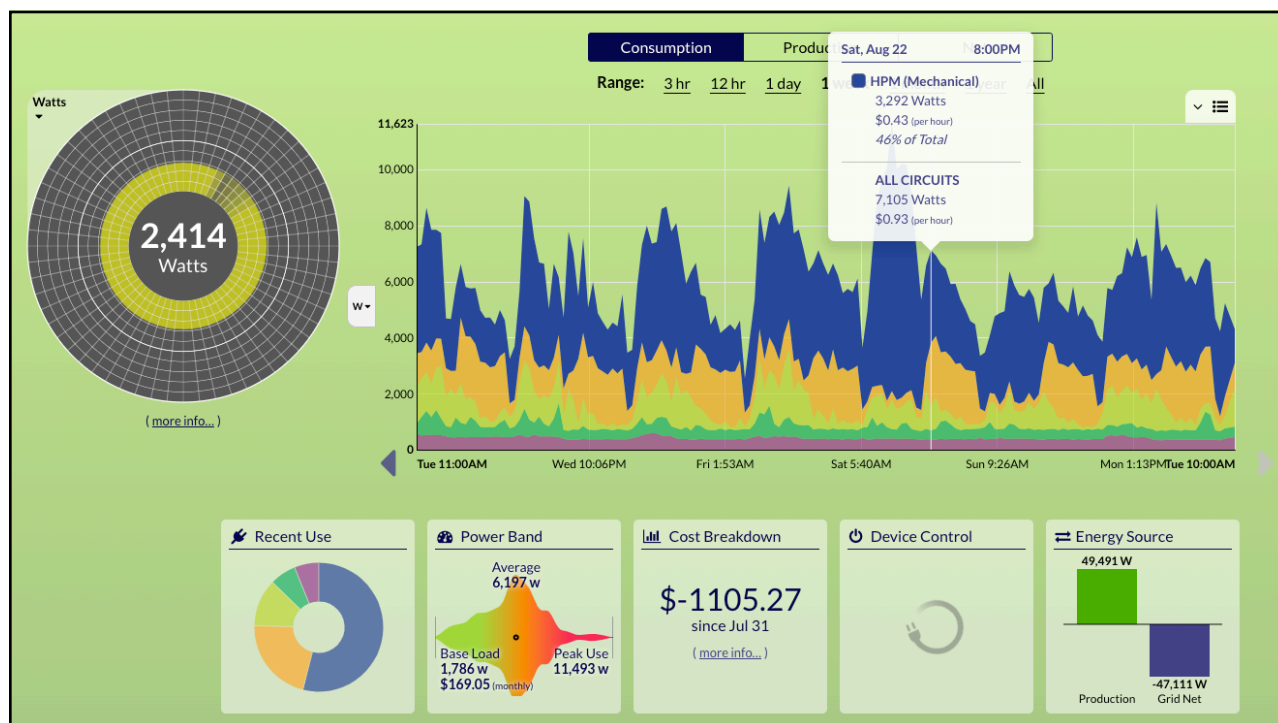
Range: [Last 24 hours](#) [Last 30 days](#)

Location	Date Modified	Email Address	Utility Provider	CURB Serial #	Consump...	Solar Product...	Grid Off...
▼ San Ysidro Seniors Village 517 w san ysidro bl san ysidro, CA 92041	August 11, 2020 (first installed April 21, 2020)	tkohut@nationalcore.org Timothy Kohut (310) 869-9706	Simple plan	<div>● d6hmjswa</div> <div>● dgwe8nac</div>	00: 143.34 kWh	388.97 kWh	271%
Energy Projections Add Hub							
Preview Download							
<h2>Operational Economics in Action</h2>							
▶ Oakcrest Terrace	December 19, 2019	tkohut@nationalcore.org	Simple plan	<div>● djumcsqv</div> <div>● d7fkds8</div>	1.93 kWh	—	—

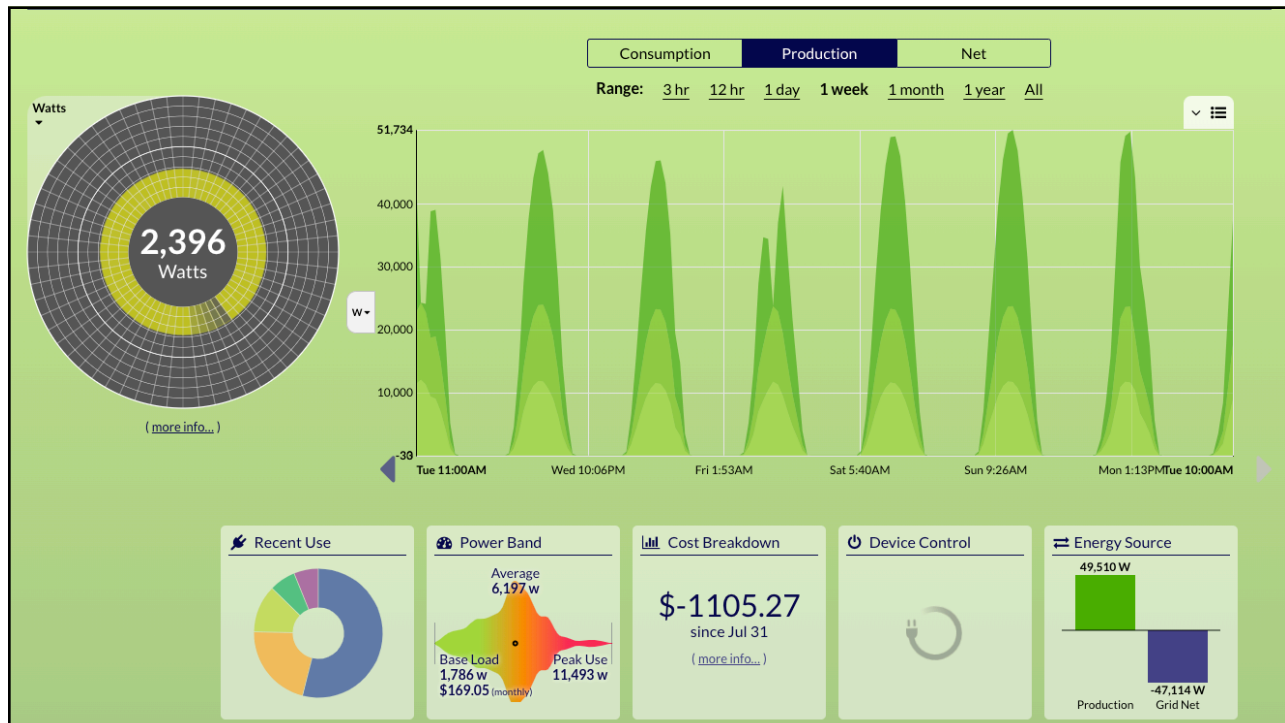
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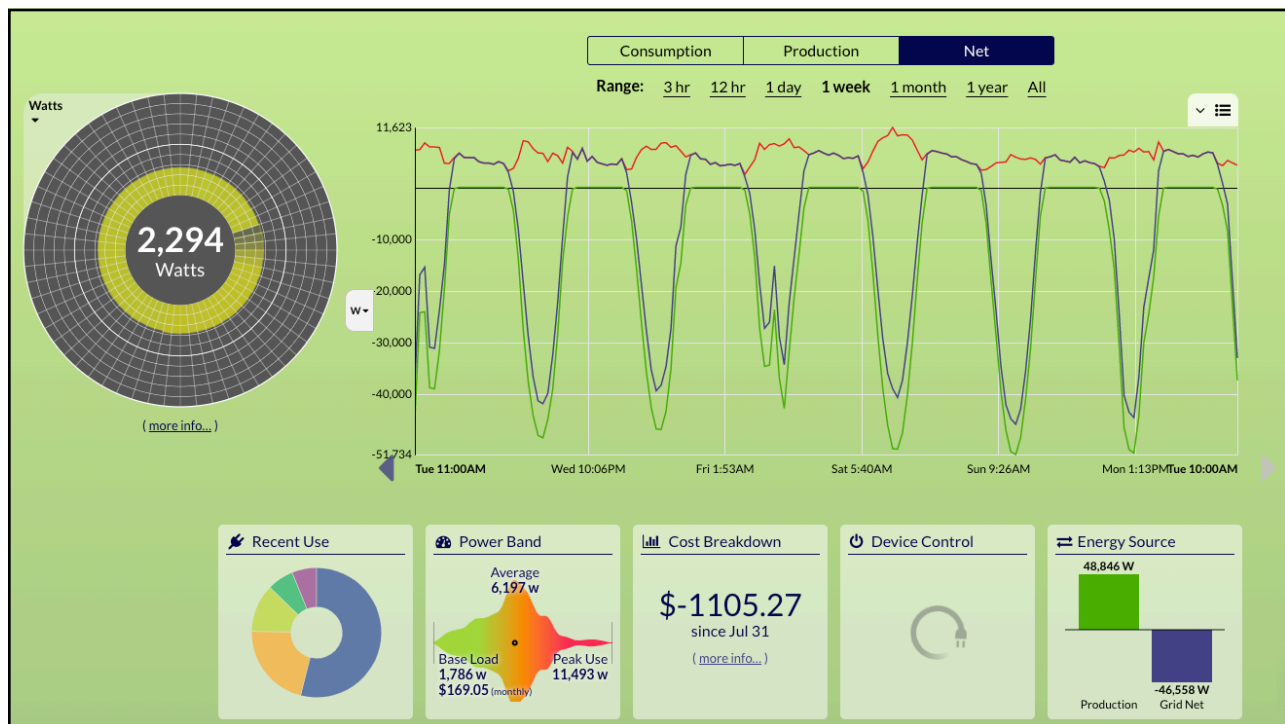
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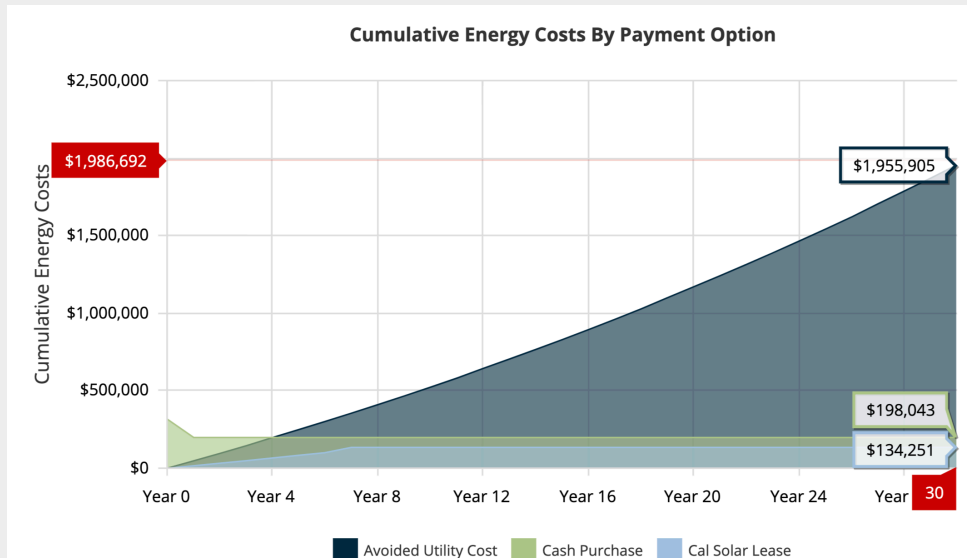


If you remember one slide, remember this one

What does \$47,000 in annual utility savings look like over time?

**San Village –
51 Units –
Housing for
the formerly
homeless –
project is
master
metered**

**\$2M of
operational
savings in
30 years**



21



What can we do with that utility savings?....

...we have plenty of ideas



This is just a piece of the social / environmental justice equation

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