

WARRANT ARTICLE 13

SOLAR ON THE LANDFILL

The proposed warrant article seeks approval to construct a solar panel array on the capped landfill at Truro's Transfer Station. This thoughtfully planned project will transform currently unused space into a valuable community asset that generates clean energy and revenue.



Advantages Of Solar Energy:

- ✓ Projected to generate ~\$500k in revenue per year
- ✓ Built on unused landfill at transfer station
- ✓ Reduces Truro's Green House Gas Emissions
- ✓ Builds a sustainable future for Truro
- ✓ Unanimously supported by Select Board
- ✓ Unanimously supported by Energy, Finance, and Climate Action Committees

Clean and Profitable: the Solar Project on Landfill at the Truro Transfer Station

Warrant Article #13, which will be up for vote at the May 3, 2025 Annual Town Meeting, proposes an appropriation for the installation of a solar panel array on our town landfill at the Transfer Station. This initiative is supported by the Climate Action Committee because it offers both environmental and financial benefits. The array is expected to net millions of dollars for Truro in its lifetime, while delivering clean, renewable energy. The project has four key benefits that make it a great investment for Truro.

Climate Action: The green energy generated by the solar array will significantly reduce our carbon footprint, helping to mitigate climate change. This is especially important in Truro, as our Outer Cape location makes us vulnerable to climate change impacts.

Financial Opportunity: It creates an impressive new revenue stream that is expected to completely pay for itself. At approximately \$500,000 annually, this project would become one of Truro's largest income sources—generating more profit than all beach permits combined. This isn't just great for the environment; it's a tremendous financial boost for our Town Budget.

Energy Independence: We can utilize this electricity internally at reduced costs, keeping energy dollars within our community, rather than flowing to outside utility companies.

Resilience Planning: With optimal upgrades in the future, this system could provide backup power to essential town buildings during grid outages caused by extreme weather events.

Financial Investment: While the \$5 million price tag might initially seem steep, it's important to understand that we expect this will be a self-funding investment. The town will issue a bond, spreading payments over time (similar to a mortgage). The anticipated revenue from the solar array is expected to sufficiently cover these payments and all maintenance costs.

Inflation Reduction Act (IRA) Benefits: Currently, the federal government will reimburse us 50% of the cost of the system. However, with the new administration these incentives are now uncertain. While the Inflation Reduction Act makes this project even more financially attractive, our financial models show that the project can be profitable for Truro even without these incentives. The IRA enhances the returns, but is not required for this to be a sound financial investment for our town.

This solar project is projected to generate millions in net revenue over its lifetime, fully pay for itself, and deliver clean, renewable energy for many years to come. Let's take this opportunity to invest in Truro's sustainable future!

By **Alex Limpaecher**, on behalf of the Truro Climate Action Committee

This statement was supported by a vote of the Climate Action Committee at a public meeting held on April 15th, 2025.

Solar Landfill cost/revenue comparison - Land lease vs. ownership

Land Lease				
Company	Total year 1	System size	20 year total	Buyout option at 10 years
Kearsarge	\$83,545	1.5% annual escalator 1.6 MW DC	\$1,942,310	Not named
Commercial Solar Guy	\$52,565	0.7% annual escalator 1.32 MW DC	\$1,125,460	\$5,454,870
Citizens Energy	\$167,400	2% annual escalator 1.8 MW DC	\$4,067,380	\$6,600,000

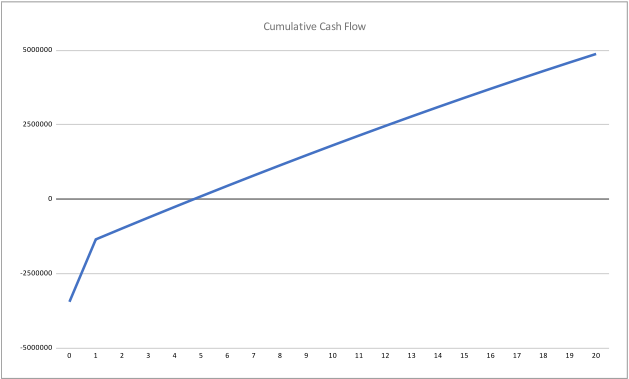
Ownership					Worst case scenario: With neither IRA nor SMART 3.0				With no IRA and SMART 3.0 Rates - \$0.27/kWh			With 50% IRA Direct Pay (or ITC) and no SMART 3.0			Best case: With IRA and SMART 3.0		
Company	System size (MW DC)	Annual generation (kWh/yr)	Project cost	Cost per Watt	Annual revenue	Simple payback (yrs)	20 year total	SMART rate	Annual revenue	Simple payback (yrs)	20 year total	Direct Pay (50% of project cost)	Project cost after Direct Pay	Payback with Direct Pay (yrs)	Simple payback (yrs)		
My Generation	1.59	1,935,284	\$3,816,000	\$2.40	\$391,044	9.8	\$7,820,880	\$0.2021	\$522,527	7.3	\$10,450,534	\$1,908,000	\$1,908,000	4.9	3.7		
BD Electrical	1.63	2,058,561	\$3,767,148	\$2.31	\$428,592	8.8	\$8,571,840	\$0.2082	\$555,811	6.8	\$11,116,229	\$1,883,574	\$1,883,574	4.4	3.4		
DGen Energy	1.41	1,643,000	\$3,445,608	\$2.45	\$345,030	10.0	\$6,900,600	\$0.21	\$443,610	7.8	\$8,872,200	\$1,722,804	\$1,722,804	5.0	3.9		
Opal Energy	1.60	2,185,691	\$3,760,188	\$2.35	\$437,138	8.6	\$11,383,758	Utility savings	\$590,137	6.4	\$11,802,731	\$1,880,094	\$1,880,094	4.3	3.2		
Commercial Solar Guy	1.60	1,600,000	\$3,680,000	\$2.30	\$336,000	11.0	\$6,720,000	\$0.21	\$432,000	8.5	\$8,640,000	\$1,840,000	\$1,840,000	5.5	4.3		
Solcet	1.48	1,769,196	\$4,400,000	\$2.97	\$507,582	8.7	\$10,151,640										
Other ownership costs																	
		<u>Operations and Maintenance</u>					<u>Insurance</u>										
		Min	Max				Max								Additional cost = DPW mowing grass under panels		
Annual		\$20,000	\$40,000		Annual		\$2,500		Annual cost		\$45,000		Annual		\$87,500		
Over 20 years		\$400,000	\$800,000		Over 20 years		\$50,000		Over 20 years		\$984,631		Over 20 years		\$1,834,631		
Solcet O&M cost		\$20,000 with 5% annual increase				\$45,000/yr with 3% annual increase											
		Year 20: \$50,000		20 year cost: \$661,000													
		Year 25: \$65,000		25 year cost: \$955,000													
Includes monitoring and equipment replacement																	
Quote from My Generation outlining the solar project doesn't require much admin work: "We do the initial schedule Zs and we can help change them throughout the life of the system. We also do all of the dealing with Eversource. The initial contracting with us, the O&M company, and getting all of the electric bills gathered and deciding where to send the electricity would take up some time. After that I don't see much if any time commitment going forward."																	

Example 1:

DGen estimate for ownership - solar landfill

ASSUMPTIONS		SOLAR DETAILS	
Proposal Date:	20/3/2025	Power Rating (KW-DC)	1,408
		Power Rating (KW-AC)	1,000
Owner Sector:	Municipal	Degradation Rate	0.5%
Federal Income Tax Rate:	0%	PV kWh/kW-DC	1,167
Discount Rate:	0.0%		
FIT Rate (flat for 20 years):	\$ 0.2723	Total Project Cost	
ITC Percentage:	50%	\$ 3,445,608	
		Total Incentive Savings	\$ 1,722,804
		Net Project Cost	\$ 1,722,804

FINANCIAL OUTCOMES	
Term (years)	20
20 Year IRR	15%
20 Year NPV	\$34,471,566
Simple Payback Period (years)	3.8



CUMULATIVE CASH FLOW		Upfront	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Totals
Years																							
Energy																							
PV Generation (kWh)		-	1,643,372	1,635,155	1,626,979	1,618,844	1,610,750	1,602,696	1,594,683	1,586,709	1,578,776	1,570,882	1,563,028	1,555,213	1,547,436	1,539,699	1,532,001	1,524,341	1,516,719	1,509,135	1,501,590	1,494,082	31,352,091
Project Cost	\$	(3,445,608)																					\$ (606,897)
Feed-In-Tariff Revenue		\$ 447,490	\$ 445,253	\$ 443,026	\$ 440,811	\$ 438,607	\$ 436,414	\$ 434,232	\$ 432,061	\$ 429,901	\$ 427,751	\$ 425,612	\$ 423,484	\$ 421,367	\$ 419,260	\$ 417,164	\$ 415,078	\$ 413,003	\$ 410,938	\$ 408,883	\$ 406,838		8,537,174
O & M		\$ (30,000)	\$ (30,600)	\$ (31,212)	\$ (31,836)	\$ (32,473)	\$ (33,122)	\$ (33,785)	\$ (34,461)	\$ (35,150)	\$ (35,853)	\$ (36,570)	\$ (37,301)	\$ (38,047)	\$ (38,808)	\$ (39,584)	\$ (40,376)	\$ (41,184)	\$ (42,007)	\$ (42,847)	\$ (43,704)		(728,921)
Climate Action Coordinator salary		\$ (45,000)	\$ (46,350)	\$ (47,741)	\$ (49,173)	\$ (50,648)	\$ (52,167)	\$ (53,732)	\$ (55,344)	\$ (57,005)	\$ (58,715)	\$ (60,476)	\$ (62,291)	\$ (64,159)	\$ (66,084)	\$ (68,067)	\$ (70,109)	\$ (72,212)	\$ (74,378)	\$ (76,609)	\$ (78,908)		(1,209,167)
Federal MACRS Depreciation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		-
Federal Tax Credit		\$ 1,722,804	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		1,722,804
Annual Cash Flow	\$	(3,445,608)	\$ 2,095,294	\$ 368,303	\$ 364,074	\$ 359,802	\$ 355,486	\$ 351,124	\$ 346,715	\$ 342,256	\$ 337,746	\$ 333,184	\$ 328,566	\$ 323,893	\$ 319,160	\$ 314,368	\$ 309,513	\$ 304,593	\$ 299,607	\$ 294,552	\$ 289,426	\$ 284,226	4,876,283
Cumulative Cash Flow	\$	(3,445,608)	\$ (1,350,314)	\$ (982,011)	\$ (617,937)	\$ (258,135)	\$ 97,352	\$ 448,476	\$ 795,191	\$ 1,137,447	\$ 1,475,193	\$ 1,808,377	\$ 2,136,943	\$ 2,460,836	\$ 2,779,996	\$ 3,094,364	\$ 3,403,877	\$ 3,708,471	\$ 4,008,078	\$ 4,302,630	\$ 4,592,056	\$ 4,876,283	

Example 2:

BD Electrical estimate for ownership - solar landfill

Years	Cash					PV Generation (kWh)	Total Cash Flow	Cumulative Cash Flow
	Project Costs	O&M / Equipment Replacement	Energy Compensation Rate	Direct pay - 30% ITC	Renewable Energy Credits			
Upfront	-\$3,767,148	-	-	-	-	-	-\$3,767,148	-\$3,767,148
1	-	-	\$428,592	\$1,130,144	\$72,050	2,058,561	\$1,630,786	-\$2,136,362
2	-	-\$23,647	\$439,243	-	\$71,689	2,048,268	\$487,286	-\$1,649,076
3	-	-\$24,120	\$450,147	-	\$71,329	2,037,975	\$497,356	-\$1,151,719
4	-	-\$24,602	\$461,309	-	\$70,969	2,027,683	\$507,676	-\$644,043
5	-	-\$25,094	\$472,737	-	\$70,609	2,017,390	\$518,252	-\$125,792
6	-	-\$25,596	\$484,435	-	\$70,248	2,007,097	\$529,087	\$403,296
7	-	-\$26,108	\$496,409	-	\$69,888	1,996,804	\$540,189	\$943,485
8	-	-\$26,630	\$508,666	-	\$69,528	1,986,511	\$551,564	\$1,495,049
9	-	-\$27,163	\$521,211	-	\$69,168	1,976,219	\$563,216	\$2,058,265
10	-	-\$27,706	\$534,051	-	\$68,807	1,965,926	\$575,153	\$2,633,417
11	-	-\$28,260	\$547,193	-	\$68,447	1,955,633	\$587,380	\$3,220,797
12	-	-\$28,825	\$560,642	-	\$68,087	1,945,340	\$599,904	\$3,820,701
13	-	-\$29,402	\$574,406	-	\$67,727	1,935,047	\$612,731	\$4,433,433
14	-	-\$29,990	\$588,491	-	\$67,366	1,924,755	\$625,868	\$5,059,301
15	-	-\$30,589	\$602,905	-	\$67,006	1,914,462	\$639,321	\$5,698,622
16	-	-\$31,201	\$617,653	-	\$66,646	1,904,169	\$653,098	\$6,351,720
17	-	-\$31,825	\$632,744	-	\$66,286	1,893,876	\$667,204	\$7,018,924
18	-	-\$32,462	\$648,184	-	\$65,925	1,883,583	\$681,648	\$7,700,572
19	-	-\$33,111	\$663,981	-	\$65,565	1,873,291	\$696,436	\$8,397,007
20	-	-\$33,773	\$680,143	-	\$65,205	1,862,998	\$711,575	\$9,108,582
21	-	-\$34,449	-	-	\$64,845	1,852,705	\$30,396	\$9,138,978
22	-	-\$35,138	-	-	\$64,484	1,842,412	\$29,347	\$9,168,325
23	-	-\$35,840	-	-	\$64,124	1,832,119	\$28,284	\$9,196,609
24	-	-\$36,557	-	-	\$63,764	1,821,827	\$27,207	\$9,223,816
25	-	-\$37,288	-	-	\$63,404	1,811,534	\$26,115	\$9,249,931
26	-	-\$38,034	-	-	\$63,043	1,801,241	\$25,009	\$9,274,940
27	-	-\$38,795	-	-	\$62,683	1,790,948	\$23,888	\$9,298,829
28	-	-\$39,571	-	-	\$62,323	1,780,655	\$22,752	\$9,321,581
29	-	-\$40,362	-	-	\$61,963	1,770,362	\$21,601	\$9,343,182
30	-	-\$41,169	-	-	\$61,602	1,760,070	\$20,433	\$9,363,615
Totals:	-\$3,767,148	-\$917,304	\$10,913,142	\$1,130,144	\$2,004,781	57,279,461	\$9,363,615	-

Financial Metrics

Payback: 5.2 Years

ROI: 248.6%

10 Year IRR: 13.4%

20 Year IRR: 18.3%

Assumptions

Utility Escalator: 3.0%

Federal tax
rate: 0.0%

State tax rate: 0.0%

Modeling: Before Tax

Prepared By: Brett Duguay

P: (508) 525-2341, E: brettdd@bdelectrical.services

Example 3:
Includes Equipment Lease
option

Truro Landfill Ballasted Ground Solution

1.484 kWDC / 990 kWAC

Select
Example
Page 1



Project Overview with Funding Options

Equipment Lease

PV System Size (DC)	1484.1 kW	
Annual Electric Production	1,769,196 kWh	
Energy Storage Size	N/A	
Project Cost	\$ 4,435,121	\$ 2.99
ITC Transfer (Net)	\$ (1,884,926)	43%
Net System Cost	\$ 2,550,195	

Tax Exempt Bond

PV System Size (DC)	1484.1 kW	
Annual Electric Production	1,769,196 kWh	
Energy Storage Size	N/A	
Project Cost	\$ 4,435,121	\$ 2.99
ITC Transfer (Net)	\$ (1,602,187)	36%
Net System Cost	\$ 2,832,934	



Project Economics Revenues

Cost and Revenue Assumptions

- Prevailing Wage
- Performance Bond
- Eversource CIP Fee \$357 per kWAC
- Eversource Utility Interconnection and Service Upgrade Costs
- ITC - 40% for Energy Community
- ITC - 10% Adder Using Domestic Content
- Tax Exempt Bond triggers a 15% Reduction in ITC Value
- ITC Transfer vs. Direct Pay Grant - One Year Waiting Period for Direct Pay Grant (Grants are unstable) 15% Processing Fee to Transfer ITC
- Net Metering Credit Agreement with a PowerOptions Municipal Member – Increases SMART Incentive
- SMART 3.0 Incentives
- Value of Net Metering Credit Yr 1 - \$.269 per kWh
- 2.5% Annual Increase Forecast

Year	Revenue			
	Solar Production (kWh)	Generation Revenue	Net Metering SMART Incentive	Total Revenue
1	1,769,196	\$ 475,914	\$ 79,260	\$ 555,174
2	1,759,465	\$ 485,128	\$ 66,992	\$ 552,120
3	1,749,788	\$ 494,522	\$ 54,562	\$ 549,083
4	1,740,164	\$ 504,097	\$ 41,967	\$ 546,064
5	1,730,593	\$ 513,858	\$ 29,203	\$ 543,060
6	1,721,075	\$ 523,807	\$ 16,266	\$ 540,073
7	1,711,609	\$ 533,949	\$ 3,154	\$ 537,103
8	1,702,195	\$ 544,288	\$ -	\$ 544,288
9	1,692,833	\$ 554,827	\$ -	\$ 554,827
10	1,683,523	\$ 565,570	\$ -	\$ 565,570
11	1,674,263	\$ 576,520	\$ -	\$ 576,520
12	1,665,055	\$ 587,683	\$ -	\$ 587,683
13	1,655,897	\$ 599,062	\$ -	\$ 599,062
14	1,646,790	\$ 610,662	\$ -	\$ 610,662
15	1,637,732	\$ 622,486	\$ -	\$ 622,486
16	1,628,725	\$ 634,538	\$ -	\$ 634,538
17	1,619,767	\$ 646,825	\$ -	\$ 646,825
18	1,610,858	\$ 659,349	\$ -	\$ 659,349
19	1,601,998	\$ 672,115	\$ -	\$ 672,115
20	1,593,187	\$ 685,129	\$ -	\$ 685,129
21	1,584,425	\$ 698,395	\$ -	\$ 698,395
22	1,575,710	\$ 711,918	\$ -	\$ 711,918
23	1,567,044	\$ 725,702	\$ -	\$ 725,702
24	1,558,425	\$ 739,754	\$ -	\$ 739,754
25	1,549,854	\$ 754,077	\$ -	\$ 754,077



Project Economics Operating Cost and Cash Flow

Assumptions

- O&M Includes:
- Energy Managers
Salary Allocation
- Maintenance Contract
- “Sinking Fund” for End
of Warranty Replacement
Costs
- Insurance
- Interest Rate on Bond
4.5%
- Interest Rate on Lease
8.75%
- 5% Annual Cost
Increase for Inflation

Operating Costs			Total	
Forecasted O&M	Equipment Lease Payments	Total Costs	Net Cash Flow	Cumulative
\$ (80,000)	\$ (393,010)	\$ (473,010)	\$ 82,164	\$ 82,164
\$ (84,000)	\$ (393,010)	\$ (477,010)	\$ 75,111	\$ 157,274
\$ (88,200)	\$ (393,010)	\$ (481,210)	\$ 67,874	\$ 225,148
\$ (92,610)	\$ (393,010)	\$ (485,620)	\$ 60,444	\$ 285,592
\$ (97,241)	\$ (393,010)	\$ (490,250)	\$ 52,810	\$ 338,402
\$ (102,103)	\$ (393,010)	\$ (495,112)	\$ 44,961	\$ 383,363
\$ (107,208)	\$ (393,010)	\$ (500,217)	\$ 36,886	\$ 420,249
\$ (112,568)	\$ (393,010)	\$ (505,578)	\$ 38,710	\$ 458,959
\$ (118,196)	\$ (393,010)	\$ (511,206)	\$ 43,621	\$ 502,580
\$ (124,106)	\$ (393,010)	\$ (517,116)	\$ 48,454	\$ 551,034
\$ (130,312)	\$ -	\$ (130,312)	\$ 446,209	\$ 997,243
\$ (136,827)	\$ -	\$ (136,827)	\$ 450,856	\$ 1,448,099
\$ (143,669)	\$ -	\$ (143,669)	\$ 455,394	\$ 1,903,492
\$ (150,852)	\$ -	\$ (150,852)	\$ 459,810	\$ 2,363,302
\$ (158,395)	\$ -	\$ (158,395)	\$ 464,091	\$ 2,827,393
\$ (166,314)	\$ -	\$ (166,314)	\$ 468,224	\$ 3,295,617
\$ (174,630)	\$ -	\$ (174,630)	\$ 472,195	\$ 3,767,812
\$ (183,361)	\$ -	\$ (183,361)	\$ 475,987	\$ 4,243,799
\$ (192,530)	\$ -	\$ (192,530)	\$ 479,586	\$ 4,723,385
\$ (202,156)	\$ -	\$ (202,156)	\$ 482,973	\$ 5,206,359
\$ (212,264)	\$ -	\$ (212,264)	\$ 486,131	\$ 5,692,490
\$ (222,877)	\$ -	\$ (222,877)	\$ 489,041	\$ 6,181,531
\$ (234,021)	\$ -	\$ (234,021)	\$ 491,681	\$ 6,673,212
\$ (245,722)	\$ -	\$ (245,722)	\$ 494,032	\$ 7,167,244
\$ (258,008)	\$ -	\$ (258,008)	\$ 496,069	\$ 7,663,313

Operating Costs			Total	
Forecasted O&M	Bond P&I Payments	Total Costs	Net Cash Flow	Cumulative
\$ (80,000)	\$ (196,049)	\$ (276,049)	\$ 279,124	\$ 279,124
\$ (84,000)	\$ (196,049)	\$ (280,049)	\$ 272,071	\$ 551,195
\$ (88,200)	\$ (196,049)	\$ (284,249)	\$ 264,834	\$ 816,030
\$ (92,610)	\$ (196,049)	\$ (288,659)	\$ 257,404	\$ 1,073,434
\$ (97,241)	\$ (196,049)	\$ (293,290)	\$ 249,771	\$ 1,323,205
\$ (102,103)	\$ (196,049)	\$ (298,152)	\$ 241,922	\$ 1,565,126
\$ (107,208)	\$ (196,049)	\$ (303,257)	\$ 233,846	\$ 1,798,973
\$ (112,568)	\$ (196,049)	\$ (308,617)	\$ 235,671	\$ 2,034,643
\$ (118,196)	\$ (196,049)	\$ (314,246)	\$ 240,581	\$ 2,275,224
\$ (124,106)	\$ (196,049)	\$ (320,155)	\$ 245,414	\$ 2,520,639
\$ (130,312)	\$ (196,049)	\$ (326,361)	\$ 250,160	\$ 2,770,798
\$ (136,827)	\$ (196,049)	\$ (332,876)	\$ 254,807	\$ 3,025,605
\$ (143,669)	\$ (196,049)	\$ (339,718)	\$ 259,345	\$ 3,284,950
\$ (150,852)	\$ (196,049)	\$ (346,901)	\$ 263,761	\$ 3,548,710
\$ (158,395)	\$ (196,049)	\$ (354,444)	\$ 268,042	\$ 3,816,752
\$ (166,314)	\$ (196,049)	\$ (362,363)	\$ 272,175	\$ 4,088,927
\$ (174,630)	\$ (196,049)	\$ (370,679)	\$ 276,146	\$ 4,365,073
\$ (183,361)	\$ (196,049)	\$ (379,411)	\$ 279,938	\$ 4,645,011
\$ (192,530)	\$ (196,049)	\$ (388,579)	\$ 283,537	\$ 4,928,548
\$ (202,156)	\$ (196,049)	\$ (398,205)	\$ 286,924	\$ 5,215,472
\$ (212,264)	\$ -	\$ (212,264)	\$ 486,131	\$ 5,701,603
\$ (222,877)	\$ -	\$ (222,877)	\$ 489,041	\$ 6,190,644
\$ (234,021)	\$ -	\$ (234,021)	\$ 491,681	\$ 6,682,326
\$ (245,722)	\$ -	\$ (245,722)	\$ 494,032	\$ 7,176,357
\$ (258,008)	\$ -	\$ (258,008)	\$ 496,069	\$ 7,672,427



Owning a Solar Project versus Leasing as a Municipality

Primary Drivers:

1. Leasing

There are three main reasons that municipalities have chosen to receive Land Lease payments for solar power projects versus Owning solar power projects.

- a. The primary reason is that the Tax Credits associated with solar power projects were previously only available to legal entities with a Federal Tax liability. Non Profits - like municipalities - were locked out of the 30% to 50% Tax Credits, greatly increasing the effective price of a solar power project.
- b. The second reason is that oftentimes municipalities don't want to get into the "solar business" the absolute costs of these systems - which in the case of this landfill project will be over \$2 million for the solar, and maybe half that amount for batteries. With a lease you put no money down and there is no financial risk, this is beneficial especially with a landfill because the land has little value. The value a lease would offer is immediate revenue for the city with no upfront costs.
- c. Third, the municipality isn't responsible for Operations & Maintenance, DAS Tracking, etc. The maintenance is a responsibility of the 3rd party who owns the system as well as the decommissioning/recycling of the system.

2. Ownership

There are three main reasons for a municipality to own a system instead of leasing out the array.

- a. The long term revenue is much greater with owning the system. The financial structure with any solar lease is for the Lessee to pay the Lessor a percentage - roughly 15-25% - of the solar revenue. With ownership the town would retain 100% of the solar revenue.
- b. The tax credits for ownership are also another reason to own. Over the past several years, with the Inflation Reduction ACT, the 30-50% Federal Tax Credit for solar has become "Direct Pay". This allows for a municipality to receive a check direct from the federal government. This allows for a quicker payback of around 5-years on a system with a 30-year lifespan.
- c. Lastly, After the system is paid back after ~5-years, 100% of the revenue being produced will be for the Town.

www.CommercialSolarGuy.com

508-4999-SUN (786)

CSG Developers LLC, dba Commercial Solar Guy

1213 Purchase Street, #2, New Bedford, Massachusetts 02740



	Key Factor	Leasing the Solar System (Truro, MA)	Owning the Solar System (Truro, MA)
1	Upfront Costs	No upfront costs; a solar developer funds the project	Higher upfront cost; grants and state funding may be available
2	Long-Term Financial Benefits	Lower long-term financial benefits; lease payments continue for 20-25 years	Higher long-term financial benefits; no payments after break-even (5-6 years)
3	Revenue Generation	Truro receives lease payments from the solar developer	Truro keeps all energy cost savings and revenue from selling electricity
4	Access to Incentives (Tax Credits, SMART, SRECs)	Developer claims all tax credits; Truro does not directly benefit from incentives	Truro may qualify for grants but must partner with a private entity to benefit from tax credits
5	Maintenance Responsibility	Developer handles maintenance; Truro has no upkeep responsibility	Truro responsible for minimal maintenance over the system's lifespan
6	Control Over System & Energy Use	Limited control; developer dictates system use and potential buyout options	Full control over system, energy use, and revenue distribution
7	Liability & Risk	Low risk; developer is responsible for system performance and liability	Higher risk; Truro must ensure system performance and insurance coverage
8	Electricity Cost Savings	Truro may save on electricity if using a PPA, depending on negotiated rates	After break-even, Truro gets free electricity, reducing municipal energy costs
9	Potential for Energy Resilience (e.g., Battery Storage)	Limited—Truro cannot directly use the solar power in emergencies	High—Truro can pair the array with battery storage for backup power
10	Ease of Implementation	Faster implementation; no need for town funding or bond approval	More complex; requires securing financing, permitting, and project management

www.CommercialSolarGuy.com
508-4999-SUN (786)

CSG Developers LLC, dba Commercial Solar Guy
1213 Purchase Street, #2, New Bedford, Massachusetts 02740