BD ELECTRICAL
& SOLAR

Arlington Brewing
15 Ryder St, Arlington, MA 02476, USA

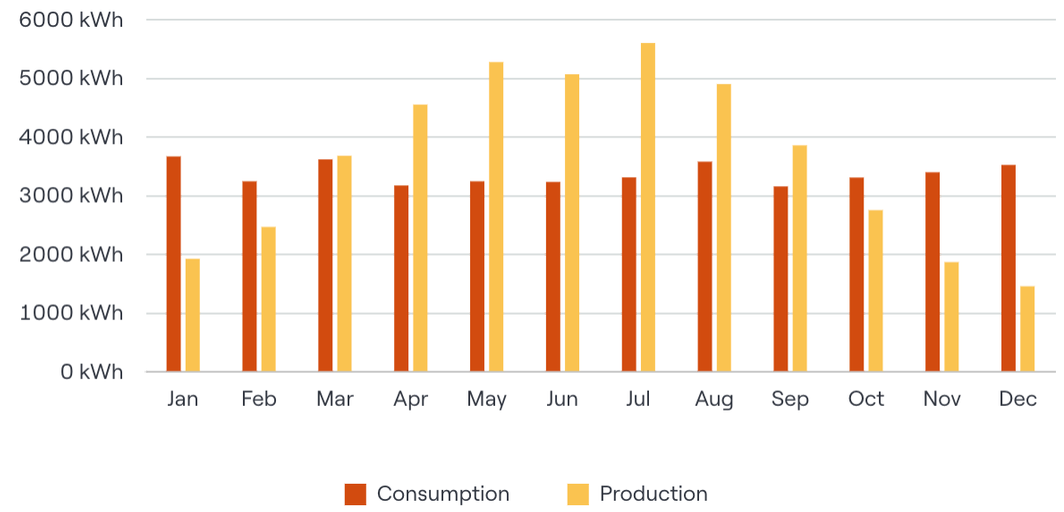
System Size (DC) 35.88 kW

System

SIL-520 QM Silfab Solar	Modules	Qty: 69
Sunny Tripower X 30-US SMA Solar Technology AG	Inverters	Qty: 4
TS4-A-O (700W) Tigo Energy Inc.	DC optimizers	Qty: 69

Your System Details

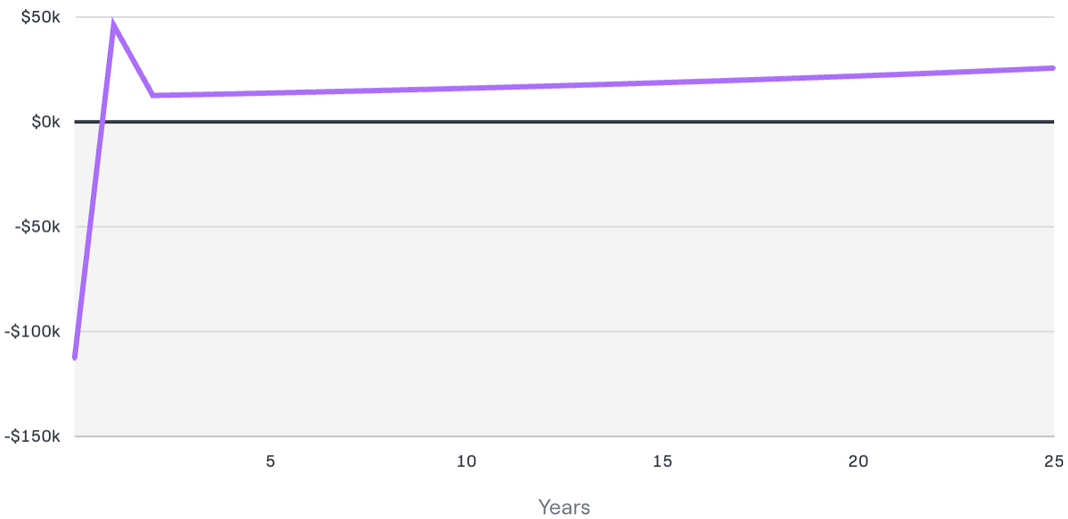
Electric consumption:	40,528 kWh
Utility Rate Escalation:	3.50%
System Size:	35.88 kW
System Annual Production:	43,473 kWh
Energy Offset %:	107%
Total System Cost:	$113,022.00



Your Investment Details

Upfront Cost	$113,022.00
Federal Tax Credit	$32,923.80
Year 1 Electric savings	$10,489.53
Breakeven:	**6 years**
Lifetime Incentives:	$77,379.15
Lifetime Electric savings:	$372,922.77

This does NOT include MACRS Depreciation!



Your Annual Breakdown

Year	Annual Bill Pre Solar	Annual Bill Post Solar	Annual Cashflows	Cumulative Cashflows
0	$11,365.73	$876.20	-$113,022.00	-$113,022.00
1	$11,757.23	$900.57	$46,135.03	-$66,886.97
2	$12,162.43	$925.79	$12,595.56	-$54,291.41
3	$12,581.82	$951.89	$12,975.55	-$41,315.86
4	$13,015.88	$978.91	$13,368.83	-$27,947.03
5	$13,465.14	$1,006.87	$13,775.88	-$14,171.15
6	$13,930.12	$1,035.81	$14,197.17	$26.02
7	$14,411.37	$1,065.76	$14,633.21	$14,659.23
8	$14,909.47	$1,096.76	$15,084.51	$29,743.74
9	$15,425.00	$1,128.85	$15,551.61	$45,295.35
10	$15,958.57	$1,162.06	$16,035.05	$61,330.40
11	$16,510.82	$1,196.43	$16,535.42	$77,865.82
12	$17,082.40	$1,232.01	$17,053.30	$94,919.12
13	$17,673.99	$1,268.83	$17,589.30	$112,508.42
14	$18,286.28	$1,306.94	$18,144.06	$130,652.48
15	$18,920.00	$1,346.38	$18,718.24	$149,370.72
16	$19,575.90	$1,387.20	$19,312.52	$168,683.24
17	$20,254.75	$1,429.45	$19,927.60	$188,610.84
18	$20,957.37	$1,473.18	$20,564.20	$209,175.04
19	$21,684.58	$1,518.45	$21,223.09	$230,398.13
20	$22,437.24	$1,565.29	$21,905.03	$252,303.16
21	$23,216.24	$1,613.78	$22,610.85	$274,914.01
22	$24,022.51	$1,663.96	$23,341.37	$298,255.38
23	$24,857.00	$1,715.90	$24,097.45	$322,352.83
24	$25,720.69	$1,769.65	$24,880.00	$347,232.83

Your Incentives

Investment Tax Credit (ITC) - 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. The IRA extended the carryback period to 3 years, and the carryforward period to 22 years, in cases where the tax credit exceeds a customer's tax liability in the 'placed-in-service' year. For PV projects greater than 1 MW AC in size, the IRA established prevailing wage and apprenticeship requirements in order to qualify for the full 30% "increased rate", rather than a "base rate" which would only qualify for a 6% ITC. Projects with an output of less than 1 megawatt qualify for the "increased rate" irrespective of if prevailing wage or apprenticeship requirements are met.

REC Incentive

Renewable Energy Credits (RECs) are tradable certificates that represent the environmental benefits of generating one megawatt-hour (MWh) of electricity from a renewable energy source, such as solar power. In the context of residential solar systems, RECs serve as a way for homeowners to gain recognition for the clean energy their solar panels produce. RECs are a valuable aspect of residential solar energy systems, providing a means for homeowners to benefit financially while contributing to the broader goal of increasing renewable energy use.

MACRS Depreciation

MACRS (Modified Accelerated Cost Recovery System) depreciation is a tax incentive mechanism used in the United States that allows businesses to recover the cost of certain assets, including renewable energy projects like solar installations, through accelerated depreciation over a defined period.

As with all incentives, be sure to consult with your tax advisor!

Our Goals

At BD Electrical and Solar, we are committed to empowering communities in Eastern Massachusetts by providing locally-owned, sustainable solar energy solutions. Our mission is to ensure that ownership and benefits of clean energy remain within the towns we serve, fostering economic growth, environmental stewardship, and energy independence in the places we call home.

The mission of BD Electrical and Solar is to apply our expertise and deliver a full array of electrical services to our commercial, residential and solar customers. We are committed to using only high quality, state-of-the-art electrical and solar components, and completing projects on time, on budget with dependable results. At BD Electrical Services we embrace the new technologies that bring energy efficiency to homes and businesses, and we are confident in our capacity to implement complex electrical system designs into mainstream energy platforms.

ABC Beer Inc
15 Ryder St EDR Special Permit Application

Solar Exemption

The project to bring a brewery and taproom to 15 Ryder St is exempt from section 6.4 of the zoning bylaws for the following reasons:

1. Per section 3.4.2, this EDR application is submitted for a change in use alone. The primary Restaurant use, as well as the accessory brewery use trigger EDR because they are combined into one space and are classified as mixed-use.

2. The alterations to the facade of the structure do not affect the architectural integrity of the building. While we are adding features to improve the energy efficiency of the building, the design maintains the industrial character of the building and retains key features such as windows, doors, masonry-style finish and overall visual impression.