

## BEST PRACTICES

- Private/Equity investment financing
- Tax equity

Project Name:

# JOE-4-SUN ASHLAND

Community solar project mitigates toxic superfund site, lowers project costs, and benefits LMI subscribers

Size:

5.7 MW<sub>DC</sub>

Location:

50 MBTA Access Road, Ashland, MA 01721

# of LMI customers:

625

Project Website:

<https://www.citizensenergy.com/joe4sun-ma>



## Overview

JOE-4-SUN: Ashland, MA (JOE-4-SUN) is operated by [Citizens Energy Corporation](#) (Citizens), serving customers in the [Eversource](#) utility service territory. The project is located in Ashland, Massachusetts, on the site of the EPA Nyanza superfund site. Starting operations on January 1, 2020, 50% of the power generated by the project is allocated to LMI subscribers, and 50% allocated to Brandeis University as an anchor subscriber.

JOE-4-SUN, launched by former U.S. Representative Joseph P. Kennedy II, the founder and chairman of Citizens Energy, is a low-income community shared solar program that offers solar energy at a deep discount to families in need. To be eligible for the program, low-income ratepayers must demonstrate either a residential assistance discount rate or live at a service address in a Massachusetts Environmental Justice Zone. The JOE-4-SUN program provides subscribers with energy credits produced by ground-mounted, utility-scale solar arrays, as well as discounted energy rates. The program is implemented under the [Solar Massachusetts Renewable Target](#) (SMART) initiative.

The JOE-4-SUN model eliminates common barriers to accessing solar power such as home ownership, upfront costs, installation fees, or credit checks. Customers who would not otherwise be able to opt for solar power on their own can buy into an existing installation.





## Innovative Approaches

- **Access for LMI households.** Subscriptions to the JOE-4-SUN Ashland project are available only to Eversource customers. Low-income ratepayers must demonstrate either a residential assistance discount rate, or a service address in a Massachusetts Environmental Justice Zone. Subscribers receive a discounted rate for electricity (roughly 25%), as well as a net 50% of the bill credits doled out by the utility, implemented via a “double billing” system. Subscribers must reconfirm income eligibility annually to remain in the program. Applicants to the program are kept on a waiting list, and are rotated in bi-annually. An example Eversource bill is shown below.
- **Brownfield to greenfield.** Citizens specializes in developing solar installations on landfills. The JOE-4-SUN project is a source of pride for the Ashland community — effectively transforming a toxic EPA superfund site into an economic asset by generating substantial tax revenues for the town.
- **Needed infrastructure provided.** Citizens’ approach-

es and structures yield successful community solar implementations — as a non-profit, it can access financing and invest with low-overhead to deliver lower cost projects. Projects in the JOE-4-SUN program utilize customer service infrastructure needed to execute on subscriber management: call teams, payment systems, and subscriber recruitment marketing.

## Lessons Learned

- The billing protocol (described as “double billing”), mandated by the SMART program, is confusing to subscribers. A coalition of advocates in Massachusetts and New York are working to improve their respective state programs by implementing consolidated (or unified) billing.
- Trust needed to be built between the developers and the Ashland community before developing the Nyanza site. Between five and eight years were spent on creating a foundation of trust. There were justified fears about disturbing the site, which might release toxins into the environment. This was mitigated by working closely with Massachusetts EPA and federal

personnel during the envisioning and eventual construction at the site. The integrity of the “cap” for the landfill had to be maintained during construction.

- The project was financed by Citizens’ capital (equity), debt and tax equity. With utility backing from Eversource and/or National Grid within the SMART program, perceived financing risk and financing premiums are lower.

## Example Eversource Bill

This billing protocol (described as “double billing”) is mandated by the SMART program.

### EVERSOURCE

Account Number: 000 000 000  
 Customer name key:  
 Statement Date: 05/18/20  
 Service Provided To:  
 JOHN SMITH

Svc Addr: SAMPLE BILL

Rate A2 R2 RESIDENTIAL ASST Cycle 11  
 Service from 04/15/20 - 05/14/20 29 Days  
 Next read date on or about: Jun 16, 2020

Meter Number	Current Read	Previous Read	Current Usage	Reading Type
SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE

#### Monthly kWh Use

May	Jun	Jul	Aug	Sep	Oct	Nov
Dec	Jan	Feb	Mar	Apr	May	

#### Contact Information

Emergency: 800-592-2000  
 www.eversource.com  
 CustomerServiceMA@eversource.com

Amount Due

**\$10.00**

#### Electric Account Summary

Amount Due On 05/11/20	\$42.50
Last Payment Received On 05/11/20	-\$42.50
Balance Forward	\$0.00
Current Charges/Credits	
Electric Supply Services	\$85.00
Delivery Services	\$5.00
Other Charges or Credits	-\$80.00
Total Current Charges	\$10.00
<b>Total Amount Due</b>	<b>\$10.00</b>

#### Total Charges for Electricity

##### Supplier

Meter	
Generation Service Charge	\$85.00
Subtotal Supplier Services	\$85.00

##### Delivery

(Rate A2 R2 RESIDENTIAL ASST)	
Meter	
Customer Charge	\$7.00



**LIFT**  
by Groundswell

This case study is a part of the LIFT Toolkit initiative. To explore more case studies and best practices visit [LIFT.Groundswell.org](https://LIFT.Groundswell.org) [research@groundswell.org](mailto:research@groundswell.org)