RePURERPVD Creating Buildings of the Future



birglanoitan







new buildings institute



challenge, please visit REPOWERPVD.COM.

About RePowerPVD

2017 Summary Repor

RepowerPVD is the City of Providence's voluntary energy challenge program, designed to help large buildings in the city conserve energy, save money, and gain recognition for their leadership and contributions to Mayor Elorza's goal to make Providence carbon neutral by 2050. The program is comprised of two tracks:

1. 20 percent reduction by 2025

Using a 2015 baseline, property owners may enter any building over 10,000 square feet by committing to reduce energy consumption - as measured by weather normalized Energy Use Intensity (EUI) - 20 percent by 2025.

2. Race to Zero

Property owners may also enter their buildings into the "race" to become the first Zero Energy Building (ZEB) in Providence.

2017 Summary Report

- Mary E. Fogarty Elementary School is the first winner, achieving a reduction of 26%.
- 1,737,156 Gross Square Feet enrolled and reported for the Energy Reduction Challenge.
- Through energy efficiency measures, these properties have generated a total energy savings of 17,769 MMBtu, \$345,000, and a reduction of 1042.5 Metric Tons CO₂e. This is equivalent to:
 - Taking 221 cars off the road for one year; or
 - 182 Homes' electricity use for one year



Race to Zero Participants

Truth Box, Inc.

Truth Box Inc. has three properties enrolled in the Race to Zero: a 30 unit multi-family property on Cranston Street, a 7 unit multi-family property on Westminster, and the new Urban Greens Co-op food cooperative.

Sheridan Small Homes by ONE Neighborhood builders The Sheridan Small Homes project (pictured above) air

The Sheridan Small Homes project (pictured above) aims to bring affordable, energy-efficient homes to the City of Providence. These prototypes offer 2 bedrooms, 2 bathrooms, are modeled to be clustered to maximize green space, and feature solar PV. The project is designed by students at the Rhode Island School of Design and developed by ONE Neighborhood Builders.

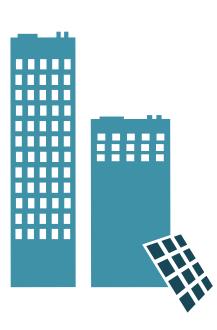
Roger Williams Park Zoo Education Center

The Roger Williams Park Zoo is developing a 15,000-square foot educational facility which will engage visitors in interactive exhibits, including information about conservation, sustainability and energy.





Energy Reduction by Building RePowerPVD Participant Weather Normalized Site EUI (kBtu/sf) Mary E. Fogarty Elementary School 180.0 Nathan Bishop Middle School 16% 160.0 Reservoir Avenue Elementary School 140.0 The Leviton Complex 120.0 Mount Pleasant High School 12% 100.0 George J. West Elementary School Branch Avenue Fire Station 0.08 **2015** Dr. Martin Luther King Elementary School **2017** 60.0 Department of Communications Regency Plaza Building 1 20.0 Branch Avenue Fire Station Regency Plaza Buildings 1 Providence Marriott Downtow Kilmartin Plaza P Regency Building 2% Regency Plaza Building 2 10% 15% 25% 30% 0% 5% 20%



Participant	2015 EUI (KBtu/sf)	2017 EUI (KBtu/sf)	Percent Reduction
Mount Pleasant HS	71.6	62.8	12.29
Leviton Complex	51.3	43.5	15.20
George J. West ES	74.5	66.1	11.28
Nathan Bishop MS	78.5	65.9	^{16.05} 25.96 %
Branch Avenue FS	84.4	75.6	10.43 reduction
Dr. Martin Luther King ES	61.2	55.2	9.80
Mary E. Fogarty ES	86.4	64.0	25.93
Reservoir Avenue ES	79.4	67.1	15.49
Alfred J. Mello Bldg	141.3	128.7	8.92
Doorley Building	96.0	91.4	4.79
Providence Marriott	186.8	178.5	4.44
Kilmartin Plaza_PHA	67.2	64.3	4.32
Regency Plaza Bldg 1	21.5	19.8	7.91
Regency Plaza Bldg 2	79.7	82.0	-
Regency Plaza Bldg 3	59.2	58.1	1.89

TOTAL ENERGY SAVINGS

17,769 MMBtu \$345,000

Reduction of 1042.5 Metric Tons CO2e



182 Homes' electricity use for

one year

