

Sustainable Real Estate Development

- Leadership
- Transformation
- Innovation
- Vision - *Moving to Net Positive*



“Buildings and communities will regenerate and sustain the health and vitality of all life within a generation”

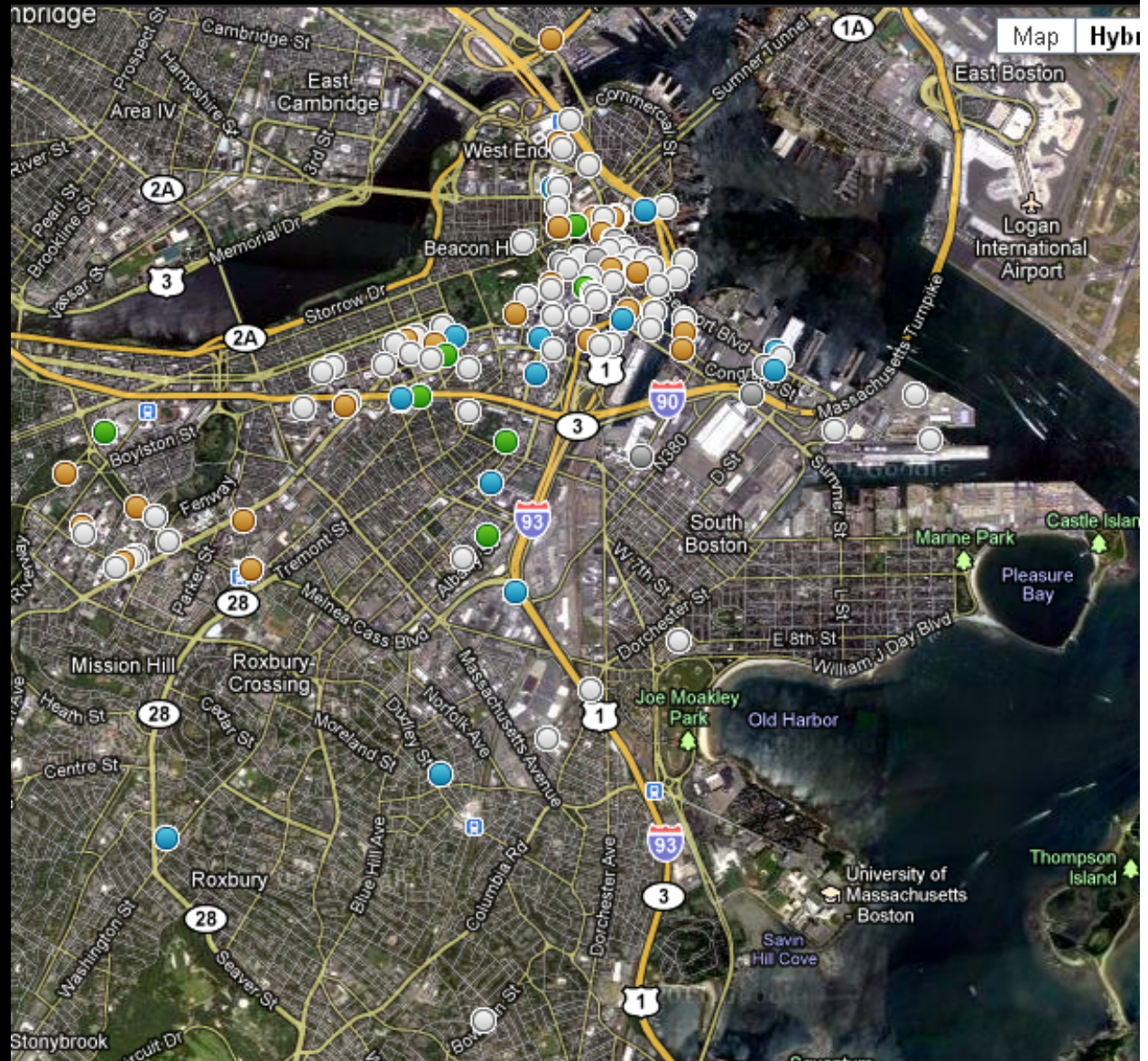
Boston Green Building Zoning – Today

Massachusetts is
5th in the Nation for
LEED Buildings

USGBC LEED Certified
233+ Buildings & Projects
59.7 M+ Square Feet
6% Platinum
51% Gold
27% Silver
14% Certified Projects

USGBC LEED Registered
100's Projects

USGBC: GBIG.org
Excludes LEED H and ND



E+ Green Buildings



Platinum
Marcella St, Roxbury
Completed Fall 2013



E+ Green Buildings

Energy Positive



8,140 kWh
Energy Positive

Sensing & Control in Every Room

Sign up for product updates:

E+ BUILDING DASHBOARD

Welcome to the City of Boston's E+ Green Building Program. Over the course of a year an energy positive building (i.e. E+) will produce more electricity than it consumes. This is achieved through innovative design, a well-constructed building envelope, and use of high-efficiency windows and heating/cooling systems. Rooftop solar panels and solar thermal water heaters provide electricity and hot water for building occupants.

PERFORMANCE MONITORING

Through a grant from the Massachusetts Clean Energy Center, Embue has installed its sensors and systems in these innovative buildings. For the next three years Embue will track electricity consumption, production, and occupant comfort in each of these model homes. Performance information for each building is provided for the public and can be found in the sections below.

MARCELLA STREET

A four-unit multifamily townhouse building totalling 7,900 square feet. Predicted annual electricity production of 44,400 kWh, consumption of 36,900 kWh, net electricity production of 12,600 kWh.

Photo credit Sam Oberter.

TOTAL ELECTRICITY PRODUCTION

Lifetime	8,140 kWh
Year to Date	-1,409 kWh
Last 30 Days	-2,360 kWh

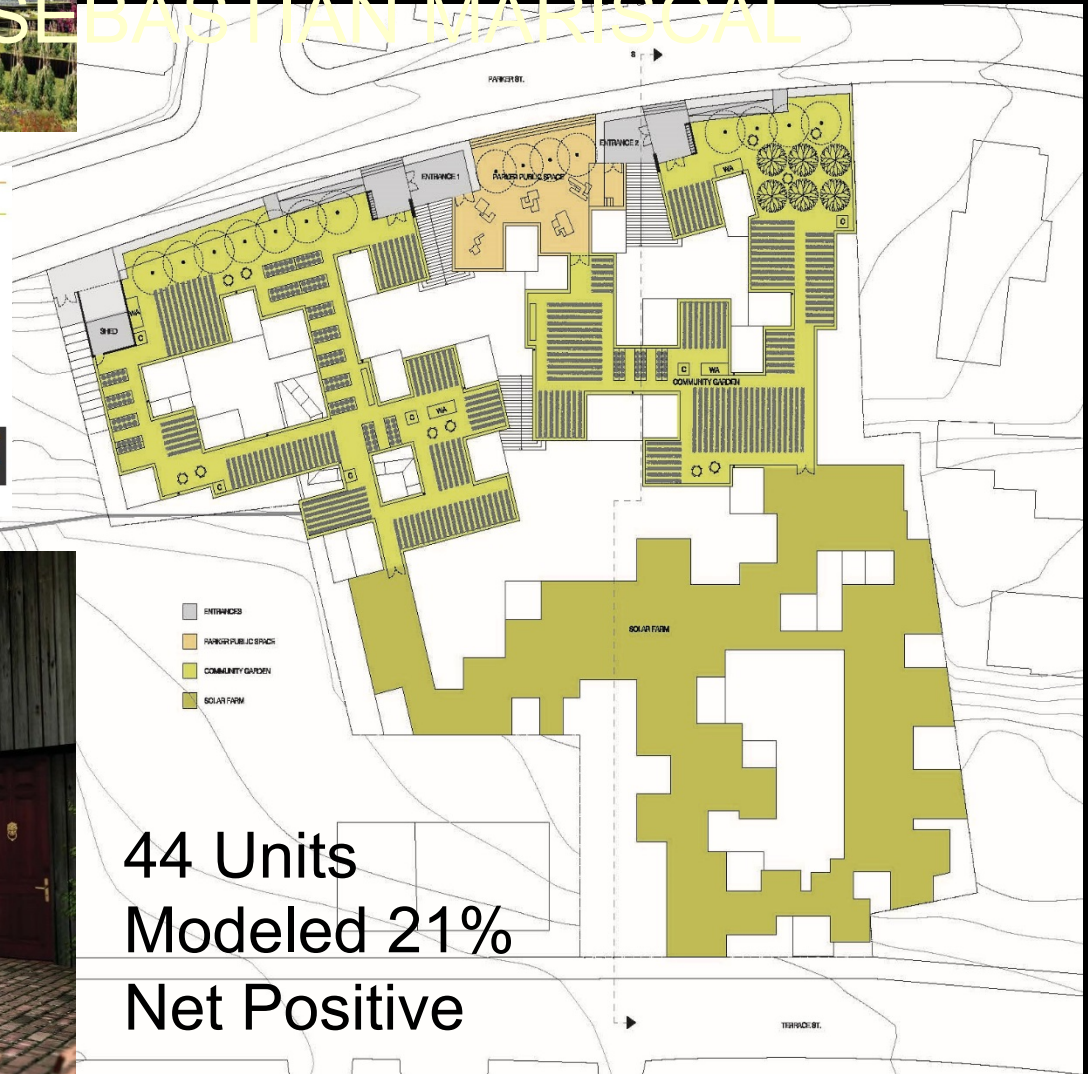
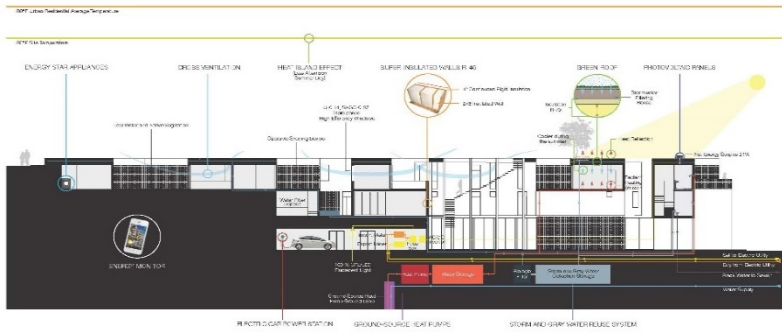
DAILY PRODUCTION & CONSUMPTION

This chart provides daily whole-building performance data for Marcella Street. On days when the green line is above zero, the building is energy positive for that day. For privacy reasons, the most recent two weeks of data are not displayed.

■ Total Consumption
 ■ Total Production
 ■ Net Production

E+ Green Communities

SEBASTIAN MARISCAL



44 Units
Modeled 21%
Net Positive

E+ Green Communities

Proposed

E+
PARKER
TERRACE



E+ Green Communities

Proposed

E+
PARKER
TERRACE



1 SITE + CONTEXT



E+ Green Buildings – Public Leadership

Public / Net Zero Energy - Completed

Cronin Field Headquarters, Westborough (completed)

Massachusetts Division of Fisheries & Wildlife / Architerra



E+ Green Buildings – Institutional Market Impact

Private E+ / Net Zero Energy Projects - Permitted

Artists for Humanity Addition, Boston (proposed)

AfH Boston / BEHNISCH Architekten

