



getting to zero national forum  
at the  
**2013 NASEO Annual Meeting**  
Framing the policies, programs and projects that will drive zero net energy buildings

# Getting to Zero

**Business Examples:**

**TD Bank – David Del Rossi**

**Walgreens – Jamie Meyers**

**Denver, CO - September 18, 2013**

---

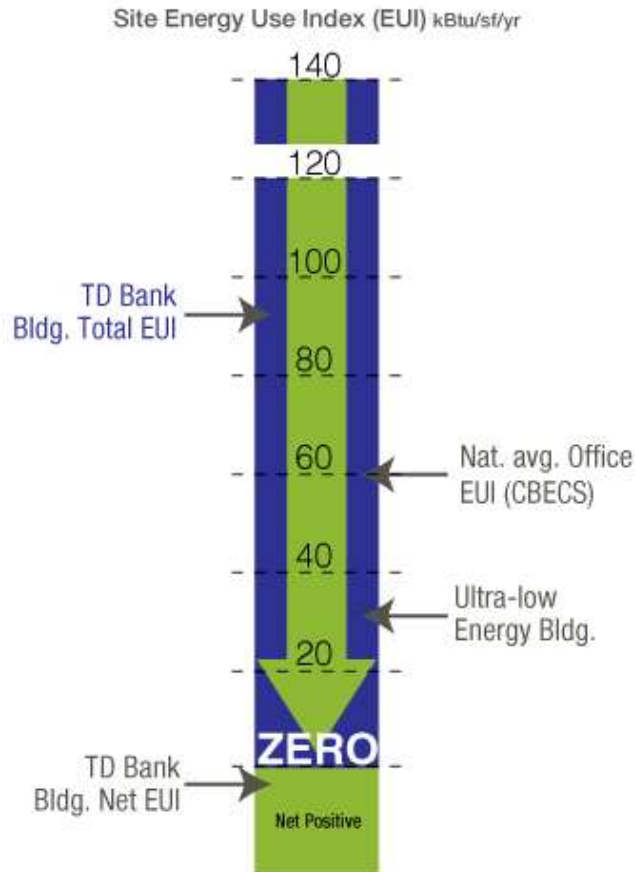
**nbi** new buildings  
institute

# TD Bank Branch - Ft. Lauderdale

## ZNE-Actual

$$92 - 96 = -4$$

BUILDING'S TOTAL EUI      RENEWABLE PRODUCTION EUI      BUILDING'S NET EUI



### Efficiency Measures:

- High efficiency variable refrigerant flow HVAC
- Split system modulating digital scroll compressors and hot gas compressors for dehumidification
- Air-to-air heat exchanger
- Fan coil system
- Daylighting & photo controls
- Attention to plug load management
- 86 kW of PVs

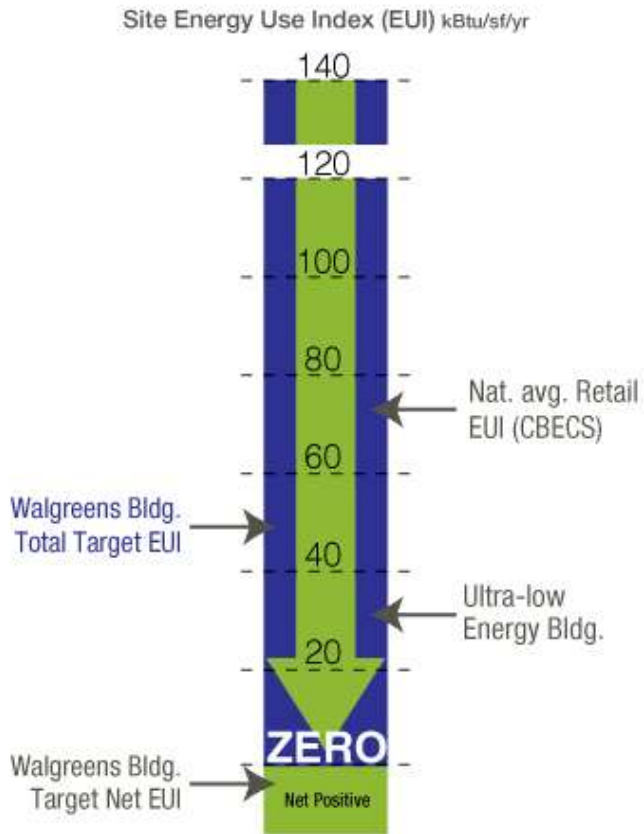


# Walgreens Evanston Store

## ZNE-Emerging

$$49 - 54 = -5$$

**49** BUILDING'S TOTAL EUI (ESTIMATE)  
**54** RENEWABLE PRODUCTION EUI (ESTIMATE)  
**-5** BUILDING'S NET EUI (ESTIMATE)



### Efficiency Measures:

- Building massing (geometry and orientation)
- Excellent insulation and windows
- Exterior shading, automated interior shades & operable windows
- Dedicated outside air ventilation system
- Demand ventilation controls
- All LED lighting
- Daylight harvesting controls
- Refrigerated case doors
- Heat recovery from refrigeration systems
- Ground source (geothermal) heat pump heating and cooling
- Natural (CO<sub>2</sub>) refrigerant
- Solar PV & Wind turbine