

# Bank of Italy Building's Net Zero Energy Renovation: A Case Study

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## GENERATE ON-SITE RENEWABLE ENERGY



Location of on-site photovoltaic panels  
(Lumos Bifacial Modules)

The designation of Net-Zero Energy describes a building that meets all of its energy demand with on-site renewable energy generation. The Bank of Italy Building, in Downtown San Jose, California, is currently undergoing design-development to transform a landmark historical site into a modern, Net-Zero energy building. This study analyzes the project team's design approach, in light of the project's unique challenges as a historic landmark. In order to understand the economic rationale behind the project, the paper provides a financial analysis that compares the initial investment costs with the projected value of costs saved.

**Location:** 12 South First Street, San Jose, CA

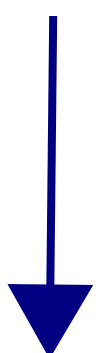
**Building Size:** 118,371 square feet

**Developer:** Kevin Bates, Sharp Development

**General Contractor:** Build Group, Inc.

## REDUCE DEMAND

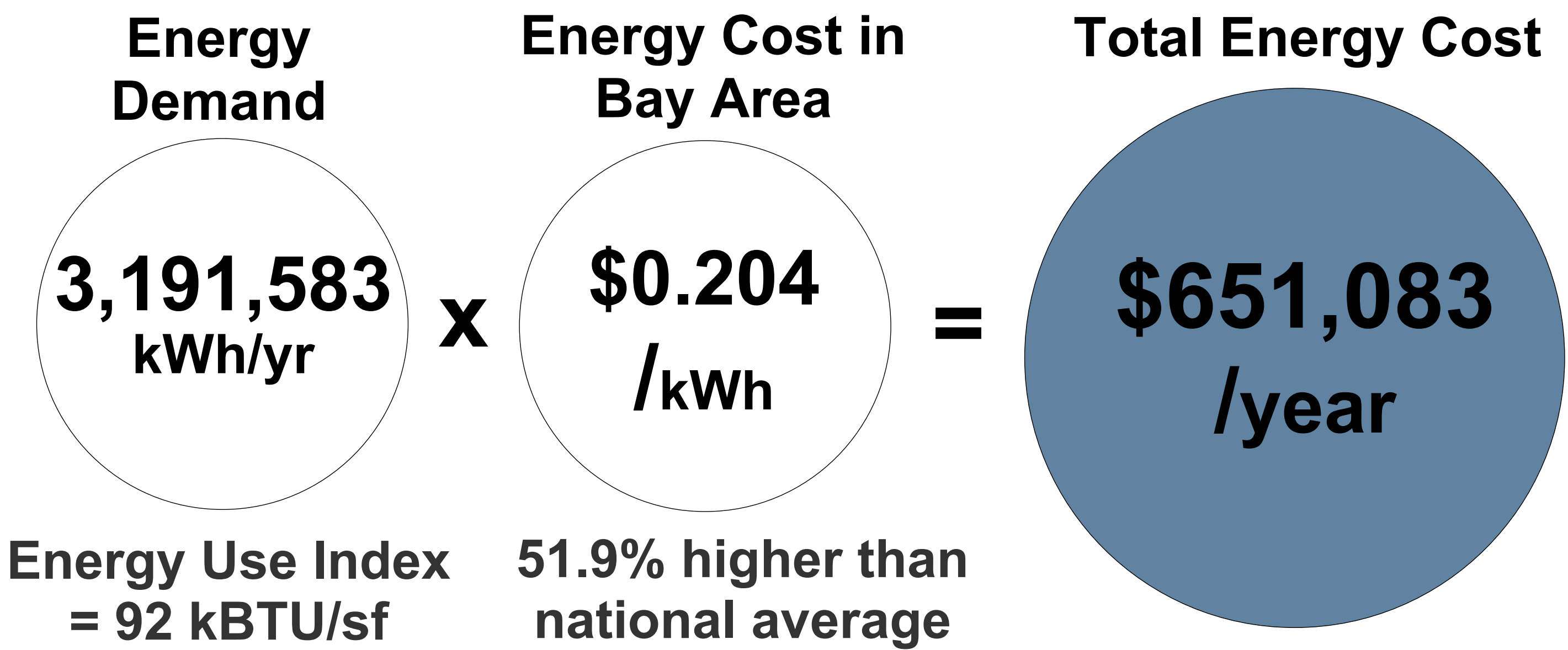
Building Management Software  
Exposed Concrete  
Electrochromic Windows  
High-Efficiency MEP System  
High-Performing Insulation



**Energy Use Index (EUI)**  
reduced from 92 kBTU/sf  
to 18 kBTU/sf

**Yearly Energy Demand**  
reduced from 3,191,583 kWh/yr  
to 624,440 kWh/yr

## ECONOMICS



## PAYBACK PERIOD

