

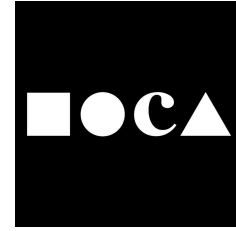
CASE STUDY

Museum of Contemporary Art



2018

Energy Efficiency Project of the Year



6699 MOCA appreciates the support of LABBC and is honored to receive this award. We are proud of the successful outcome of our HVAC retrofit upgrade project and achieving much greater energy efficiency, lower utility costs, and gaining much tighter temperature and humidity controls for our museum environment.

Woodburn Schofield
Director of Operations
The Museum of Contemporary Art,
Los Angeles

Property Description

The Museum of Contemporary Art on Grand Avenue hosts MOCA's main galleries, a café, the MOCA Store, and staff offices. MOCA houses one of the most compelling collections of contemporary art in the world, comprising 7,000 objects, and have a diverse history of ground-breaking, historically-significant exhibitions.

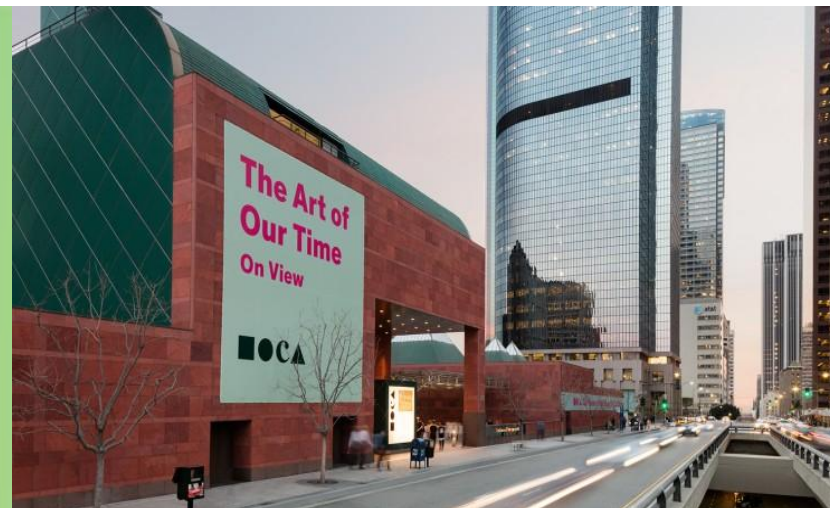
Project Innovation

Utilizing a complex bypass and energy management control scheme, MOCA replaced all 10 air conditioning units with modern equipment, added a new Digital Energy Management System, and replaced all lighting with LED fixtures without shutting down the museum or varying temperature or humidity by more than 1%. Six months following completion, the museum has reduced its electrical consumption by >50%.



35.7%
Reduction in 2017

741k kWh
Reduction in 2017



Property Specifications

Address: 250 S Grand Ave
Square Feet: 90,085
moca.org

Project Background

At their Grand Avenue location, MOCA replaced all 10 air conditioning units with modern equipment, added a new Digital Energy Management System, and replaced all the lighting with LED fixtures.



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“Projects like MOCA are crucial examples of what’s possible – they serve as a model for others to follow. Museums throughout the country should be looking to MOCA as they plan to upgrade and modernize their galleries.”

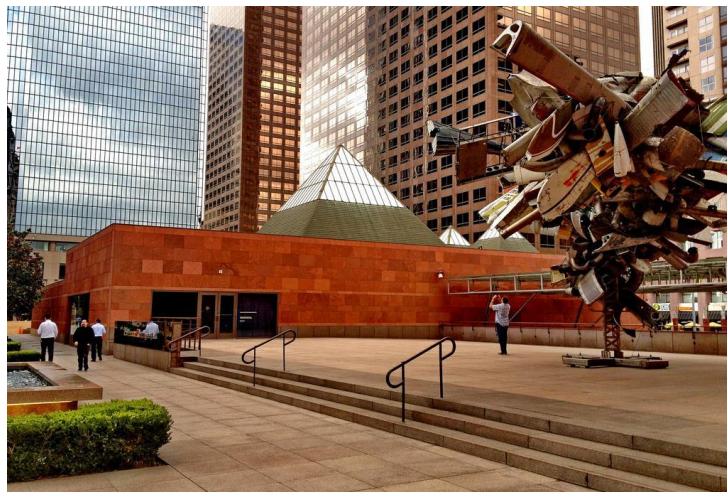
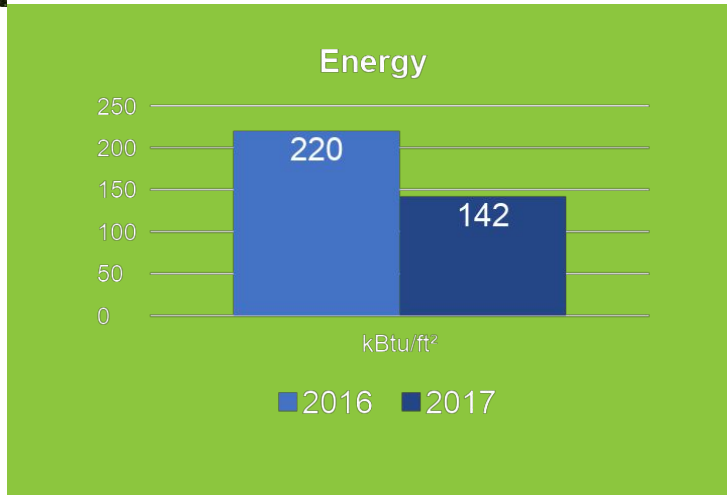
David Hodgins
Executive Director
Los Angeles Better Buildings Challenge

Projects Completed

- HVAC upgrade project completed as of May 1, 2017. Included in LADWP's Custom Performance Program.
- As part of the HVAC upgrade project, anticipated water savings with new humidification system. Included in LADWP water program.
- LED retrofit in all gallery spaces. Included in LADWP's CLIP program.
- LED retrofit in all non-gallery spaces at the MOCA Grand Avenue building. Participant in LADWP's Commercial Direct Install Program. Installment completed December 22, 2017.

Stakeholder Engagement

MOCA worked closely with Executive Staff, Board of Trustees, and curatorial staff, in order to gain buy-in and support across each phase of the upgrades. For example, to ensure the suitability of the LED system, curatorial staff agreed to review light samples from various manufacturers to determine which best aligned with the visual aspect of prior halogen lighting that had been used for many years.



Rebate

\$79,078.05

Energy efficiency
rebate value



Pro-Tip

The key to the success of the MOCA project was to start with any conservation measures that could be achieved right away. Once the cooling loads were reduced by installing LEDs and resetting the outside air and fan schedules, we found that there was enough excess capacity to start sharing the loads among units. MOCA found it worthwhile to run some calculations to see if the project would work, and this is a strategy that could be applied to other buildings that need retrofitting.