

# ENERGY STORAGE IS A BIG DEAL AT COLORADO CENTER

## Getting Charged Up

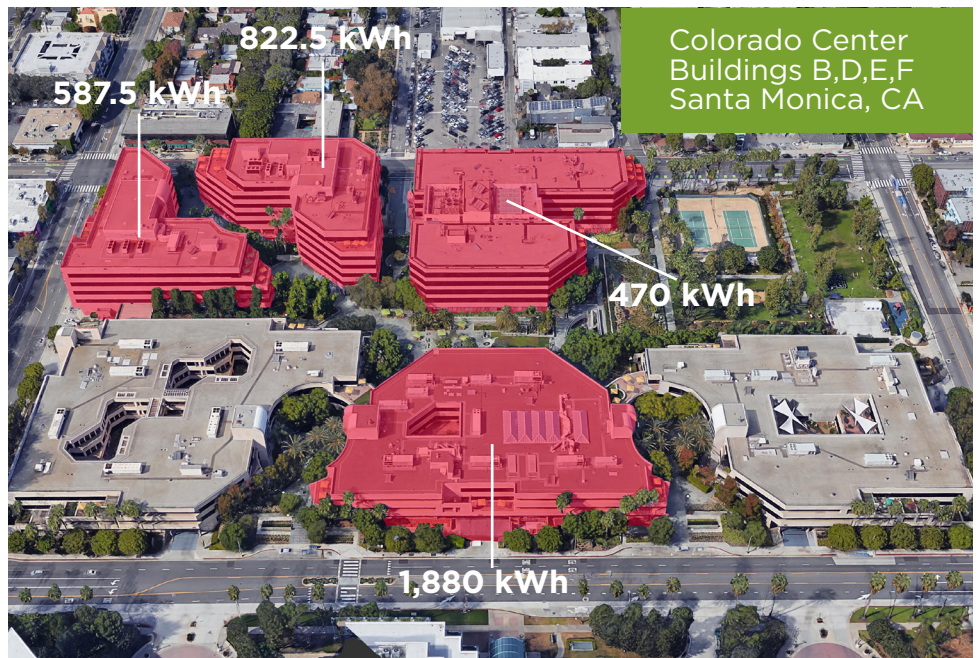
Boston Properties, together with Stem, is installing an indoor lithium-ion energy storage system at Colorado Center to save on energy costs and support sustainability in the community. This will be the largest installation of its kind in the United States. The batteries will store energy purchased during less expensive off-peak hours and will then dispatch stored energy during the more expensive peak hours. The process is known as “peak load shedding,” where an energy storage system is controlled to release energy strategically to reduce utility demand charges by shaving operational peaks, when energy costs are the highest. The system is controlled by Athena™, Stem’s proprietary artificial intelligence for energy storage. Athena uses machine learning and predictive analytics to make the best decisions about when to buy, store and deploy energy.

## Good Grid Citizenship

The Colorado Center energy storage project is representative of an energy revolution that is underway. Increasingly, commercial and residential customers, once passive consumers of energy, are becoming active energy system participants by implementing distributed energy resources such as energy storage and solar. The adoption of renewable energy and behind the meter storage, like the project at Colorado Center, will help grid operators manage congestion and peak demand requirements. This is particularly important in the densely populated Los Angeles Basin, where reliable electricity supply is a concern.

## A Low Carbon Energy Future

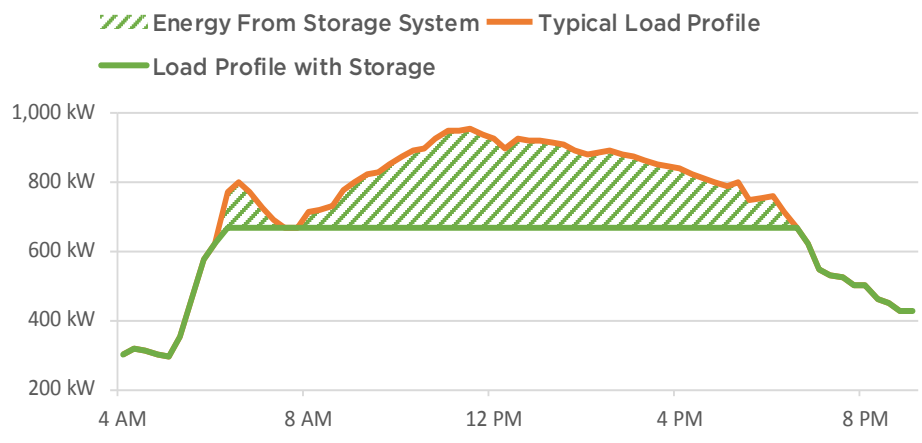
Storage will also facilitate the transition to a cleaner, more resilient grid as more renewable energy systems come online. Wind and solar systems generate power intermittently when the sun shines and the wind blows. Storage systems will create a buffer for excess renewable energy capacity, and offset demand that would otherwise be served by fossil fuel-based generation facilities. As part of our broader sustainability initiatives, Boston Properties is looking forward to commissioning our first energy storage project in April of 2019.



## Shared Savings

Since lithium-ion technology in commercial buildings is a new, cutting-edge technology, BXP chose to partner with Stem, which has built and operated these systems since 2012, to implement a shared savings contract model. In exchange for a complete energy storage system – financed, designed and installed by Stem – Boston Properties has agreed to host the systems and share peak load shed savings over a 10-year term. The 3.7 MWh system will create approximately \$200,000 of utility cost savings on an annual basis.

## Load and Savings Analysis Colorado Center: Sample Building



Facilities Related Demand Charges			
	Demand	Rate	Cost
Before	953 kW *	\$18.35	= \$17,484
After	671 kW *	\$18.35	= \$12,320
Savings	281 kW *	\$18.35	= \$5,164