



Making the Business Case and Getting Buy-In for Building Energy Benchmarking

June 17, 2021

ENERGY STAR Learn From the Best Webinar
Series



Partner of the Year Award

- ✓ Excellence in Energy Management
 - Robust energy management practices & program
 - Address all areas of the ENERGY STAR Guidelines for Energy Management
 - Help define best practices
- ✓ Leverage ENERGY STAR tools
- ✓ Excellent internal & external communications
- ✓ Active in the Partner community
- ✓ Strong energy performance
- ✓ Awarded annually



[Energystar.gov/awards](https://energystar.gov/awards)

2021 Award Winner Webinars

- September 9 @ 1 PM EDT **Benchmarking Energy Use and Assessing Energy and GHG Performance During A Pandemic**
- November 9 @ 1PM EST **Dive into water and waste savings strategies from BOMA's W2 Challenge Champions**
- December 9 @ 1 PM EST **Working Together to Save Energy: Employee Engagement Strategies**

Register here: https://www.energystar.gov/buildings/training/learn_best

Today's Speakers



- **Josh Schubert** – Director of Energy Engineering, Goby



- **Jason McIntyre** – Director of Real Estate Operations and Sustainability, USAA Real Estate



Building the Business Case
for Benchmarking



Josh Schubert
Director of Energy Engineering

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About Goby

- ✓ ENERGY STAR Partner of the Year Award 2014 – 2021
- ✓ A leading commercial building ENERGY STAR Award service provider
- ✓ Goby completes 10% of all ENERGY STARs
- ✓ ULI GreenPrint strategic partner
- ✓ 1st GRESB Data Partner
- ✓ 2019 – Submitted 43 GRESB Funds
- ✓ 2020 – Submitted 57 GRESB Funds
- ✓ 100% of clients saw an increase in 2019 GRESB Score and received a Green Star

150+ client accounts across 52 countries



Benchmarking and CRE



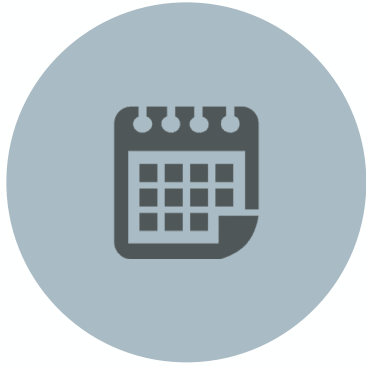
What is Utility Benchmarking?

Utility benchmarking is the practice of measuring how much energy and water a building consumes and comparing that against other, similar buildings. This allows owners and occupants to understand their buildings' energy performances relative to similar buildings and helps identify opportunities to cut waste.

Motivations

- Direct Comparisons: How are we doing?
- Regulatory Requirements: Let's not get fined!
- Voluntary ESG Program Participation: Can we highlight great things we are doing and attract investors?

Data benchmarking & submission



12 months of
whole bldg.
data



Basic
building info



Local
requirements

Direct comparison



- ENERGY STAR Portfolio Manager

To raise the score by 4 points, reduce usage by 14%, need to save \$232,000 in annual consumption



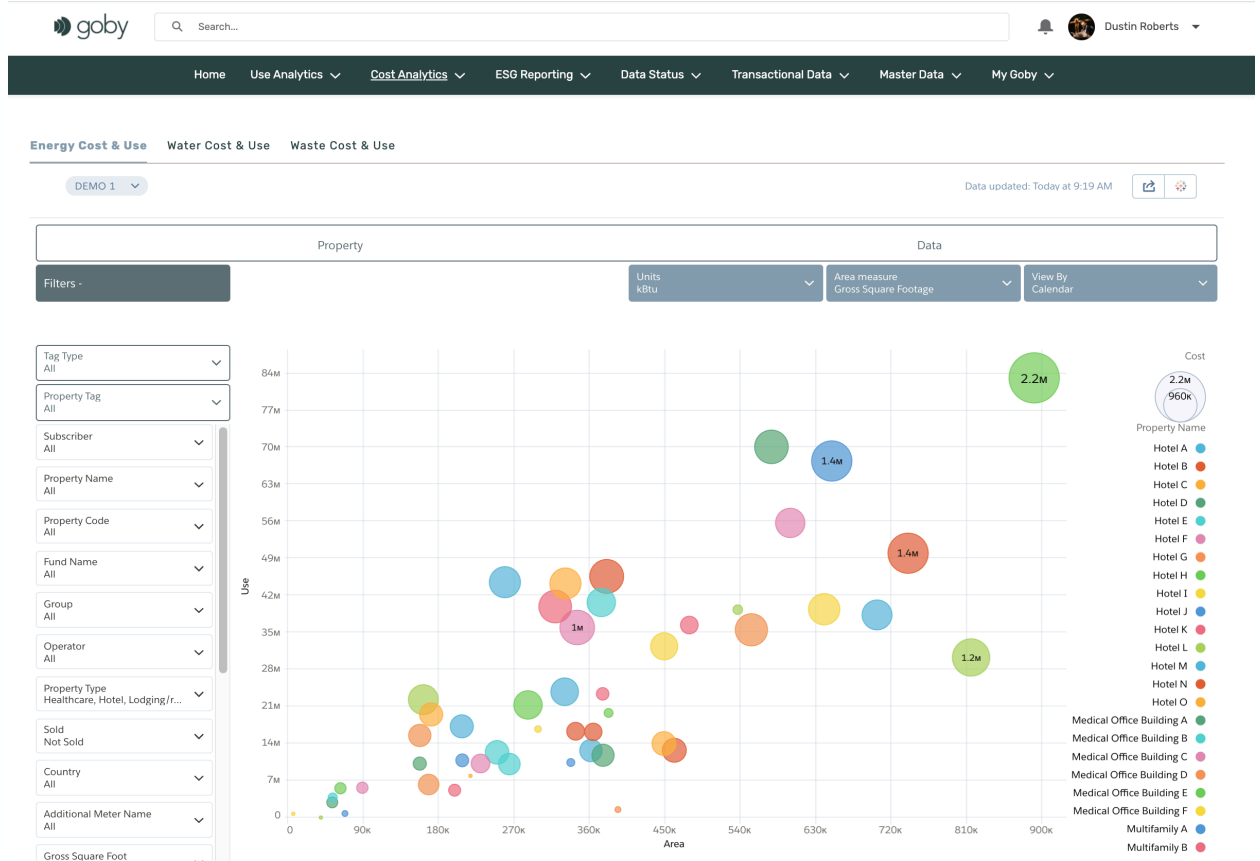
Metrics Comparison for Your Property & Your Target [Change Time Period](#)

Metric	Dec 31 2014 (Energy Baseline)	Mar 31 2020 (undefined)	Target*	Median Property*
ENERGY STAR score(1-100)	92	90	94	50
Source EUI(kBtu/ft²)	88.6	94.3	81.3	195.5
Site EUI(kBtu/ft²)	31.7	41.8	36.1	86.7
Source Energy Use(kBtu)	70193440.7	74647297.8	64418710.5	154835719.7
Site Energy Use(kBtu)	25069086.0	33110012.0	28573093.0	68677801.5
Energy Cost(\$)	1274366.03	1695186.55	1462902.59	3516208.49
Total GHG Emissions(Metric Tons CO2e)	1661.9	2196.2	1895.2	4555.3

* To compute the metrics at the target and median levels of performance, we will use the fuel mix associated with your property's current energy use.

Data tools

Analytics








Data tools

ENERGY STAR list of certified buildings

263 Results representing 167,412,989 square feet (Does not include Data Centers) [Map](#) [List](#)

Sort By

[Export to Excel](#) [Print Results](#)

	33 NORTH LASALLE STREET 33 North LaSalle Street Chicago, IL 60602 Owner JBC Funds 33 North LaSalle LLC Property Manager The John Buck Company 9 Years Certified 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018	Office
	33 WEST MONROE 33 W. Monroe Street Chicago, IL 60603 Owner 33 West Monroe Associates, LLC Property Manager AmTrust Realty Corp. 2 Years Certified 2017, 2018	Office
	333 NORTH MICHIGAN 333 North Michigan Ave Chicago, IL 60601 Owner 333 Building Corporation Property Manager MB Real Estate 6 Years Certified 2013, 2014, 2015, 2016, 2017, 2018	Office
	333 SOUTH WABASH 333 S. Wabash Chicago, IL 60604 Owner DF 333 Wabash Propco LLC 1 Years Certified 2020	Office
	333 WEST WACKER 333 West Wacker Drive Chicago, IL 60606 Owner BIT Holdings Seventy-Six, Inc.	Office

1 2 [→](#)



Find Products

Save at Home

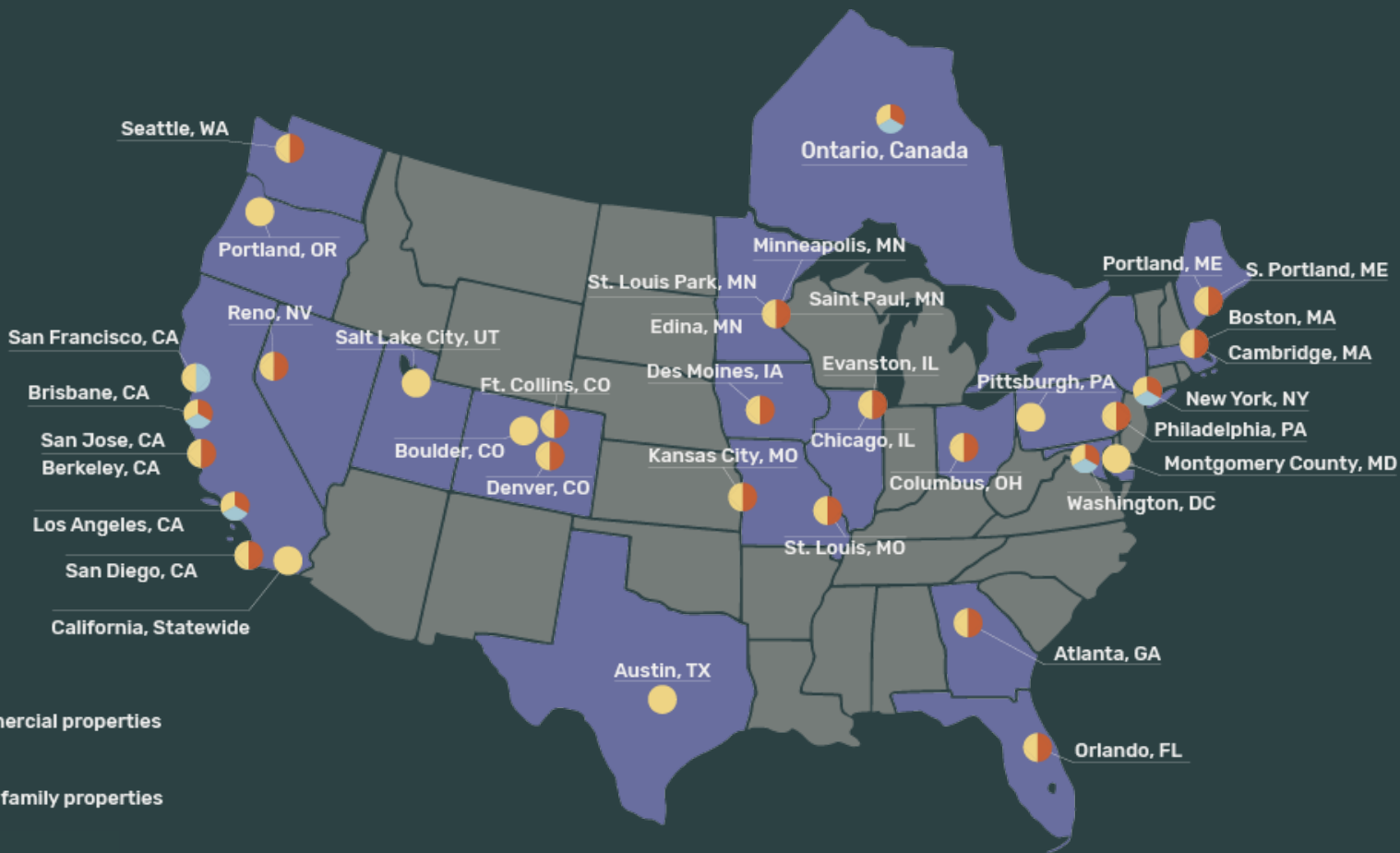
About

Recursos en Español



Regulatory compliance

- Mandated energy disclosures from city, state/province, and mortgage lenders
- Sometimes includes water consumption
- Common tool to submit for compliance: ENERGY STAR Portfolio Manager



- Commercial properties
- Multi-family properties
- Industrial properties

Data tools

- Local city database

Table Preview View Data Create Visualization

Data ...	ID	Prop...	Adc ↑	ZIP C...	Com...	Prim...	Gros...	Year ...	# of ...	ENER...	Elect...	Nat
2017	238554	336 Welli...	336 W W...	60657	LAKE VIEW	Multifami...	135,081	1967	1	72	2,286,525	12,2
2017	159646	339 W. Ba...	337-339 ...	60657	LAKE VIEW	Multifami...	118,000	1967	1	26	2,988,591	9,6
2017	103317	(IL504) - 3...	33 E. Ced...	60611	NEAR NO...	Multifami...	162,398	1958	1	74	2,400,533	8,8
2017	103743	33 N. Dea...	33 N. Dea...	60602	LOOP	Office	372,137	1966	1	92	8,443,697	13,9
2017	103641	33 North ...	33 North ...	60602	LOOP	Office	477,171	1929	1	82	15,473,659	21,4
2017	156854	(IL277) - 33 North LaSalle Street	33 North LaSalle Street	60610	NEAR NO...	Multifami...	148,938	1985	1	15	8,740,892	3,4
2017	103278	33 W. Hur...	33 W. Hur...	60654	NEAR NO...	Multifami...	185,571	1998	1	99	2,427,802	4,9
2017	158426	Hampton...	33 W Illin...	60654	NEAR NO...	Hotel	160,000	1999	1	16	8,533,965	16,1
2017	158184	33 West ...	33 W. Mo...	60603	LOOP	Office	1,085,869	1980	1	77	61,656,819	
2017	160293	Millenni...	33 W Ont...	60654	NEAR NO...	Multifami...	1,043,204	2003	1	73	24,604,434	29,3
2017	254101	3400 Lak...	3400 Lak...	60657	Lake View	Multifami...	193,567	1921	1	94	3,515,063	7,4
2017	101420	Chicago A...	3400 N A...	60634	DUNNING	K-12 Scho...	250,844	1934	1	66	6,205,773	16,9
2017	251310	03501-W...	3400 N. ...	60618	NORTH C...	Superma...	55,600	2002	1	79	8,789,530	3,4
2017	136830	Chevy Ch...	3400 S. In...	60616	DOUGLAS	Senior Ca...	72,844	1977	1	5	5,093,806	12,5

< Previous Next > Showing Buildings 1,331 to 1,344 out of 2,797



Requirements Vary

California – AB802

Due 6/1/2021

Buildings 50,000+ sq ft

Energy data only

They reserve the right to fine, but not currently listed

Chicago

Due 6/1/2021

Buildings 50,000+ sq ft, commercial and multifamily

Energy data only

\$100 for 1st violation plus daily \$25.

Los Angeles – currently suspended until further notice

Due 6/1/2021

Buildings 20,000+ sq ft, commercial, industrial and multifamily

Energy and water data

\$202 fine for non-compliance

Requires Energy Audit and Retro-Commissioning reports submitted every 5 years

New York

Due 5/1/2021, extended to 6/1/2021

Buildings 25,000+ sq ft, commercial, industrial, and multifamily

Energy and Water data

\$500 first deadline, \$500 each additional quarter up to \$2000

Requires Energy Audit and Retro-Commissioning reports submitted every 10 years

San Francisco

Due 4/1/2021

Buildings 10,000+ sq ft

Energy data only

Various fines per day up to \$1500 or \$2500

Energy audit every 5 years (Level 1 audit up to 50,000 sq ft, Level 2 audit for 50,000+ sq ft)

Des Moines

Due 7/1/2021

Buildings 25,000+ sq ft commercial and multifamily

Energy and water data

\$50 late fee



Your pathways to compliance



DIY



Appoint a team
member



3rd party

Beyond benchmarking best practices



Identify
opportunities

Measure
efficiency

Increase
asset value

ENERGY STAR award



ENERGY STAR Score



ENERGY STAR's Portfolio Manager assigns buildings a score between 1 and 100, comparing building performance among peers, between national averages, and across years. A score of 50 represents the median of energy performance; a score of 75 or above indicates that the building is a top performer and makes the building eligible to apply for ENERGY STAR certification.

75+

ENERGY STAR Certification

After achieving an ENERGY STAR score of 75 or higher, a building becomes eligible to apply for ENERGY STAR certification. Whether required or voluntary, achieving an ENERGY STAR certification recognizes and celebrates a building's commitment to reducing energy use and greenhouse gas emissions.



Best practices for higher scores



- Gross Square Footage is the largest value of indoor area inclusive of stairwells and mechanical rooms, larger the better
- Account for parking if the parking lighting is on the building utility account, also a pool if one is present
- Correct units on energy
- Accurate counts on occupants, computers, etc

ESG Programs and Recognition

- Benchmarking plays a role in many ESG programs such as
 - LEED, GRESB, SASB, CDP and many others
 - See <https://www.gobyinc.com/esg-solutions/the-esg-reporting-matrix/>
- Need the energy data to be able to participate effectively
- Relate to stakeholders such as Property Management, Asset Management, and Investor Relations for public and private companies

Streamline with Goby ESG



Thank you!

Josh Schubert
Director of Energy Engineering

jschubert@gobyinc.com



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Jason McIntyre, LEED AP, FMP

Director | Sustainability and Real Estate Operations



High Performance Sustainable Real Estate

USAA Real Estate is driving the business case for sustainable, energy efficient operations by saving more than we spend to execute the strategy.

With this focus, we lower operational costs, improve operational and energy efficiency, and accomplish higher building occupancy and rental rates.



Business Case Approach to Energy Benchmarking & Efficiency

Clear Value Proposition = Buy In

- Reduce Energy Expenses & Consumption
- Improve Transparency, Awareness & Accountability
- Partner with our Tenants, Investors, & Community in their respective goals and objectives



Clear Value Proposition = Buy In

LISTEN to your stakeholder's main goals, strategy, and levers.

Example:

Real Estate

- Risk Adjusted Returns
- Capital Raising & Investor Engagement
- Tenant Retention and Attraction
- Asset Liquidity at time of sale

Incorporating the Value Proposition & Levers

- Benchmarking Ordinances & Efficiency Regulations
- Portfolio Energy Efficiency Status
- Tenant and Investor Engagement and Demands
- Communication & Differentiation

Building Performance Report: 2020 COVID Period

- USAA Consumption: **20.2%** below 2019 baseline
- Above InSite Portfolio Median of **16.6%**
- Savings: **\$1.49 Million**

Weather Normalized **Actuals**

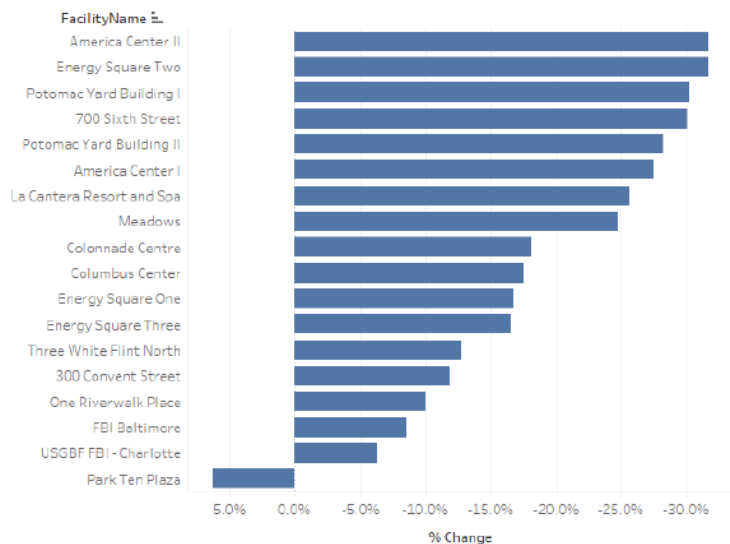
FacilityName

(Multiple values)

Weather Normalized

FacilityName	kWh Change	% Change	\$ Change
America Center II	-578,203	-31.7%	(\$129,518)
Energy Square Two	-1,666,420	-31.7%	(\$111,977)
Potomac Yard Building I	-1,411,278	-30.3%	(\$141,128)
700 Sixth Street	-1,023,625	-30.1%	(\$122,835)
Potomac Yard Building II	-1,232,253	-28.2%	(\$108,438)
America Center I	-820,674	-27.5%	(\$154,287)
La Cantera Resort and S...	-2,643,205	-25.7%	(\$235,245)
Meadows	-531,546	-24.8%	(\$47,914)
Colonnade Centre	-387,341	-18.1%	(\$38,734)
Columbus Center	-624,290	-17.6%	(\$62,429)
Energy Square One	-663,386	-16.8%	(\$48,986)
Energy Square Three	-590,067	-16.6%	(\$45,435)
Three White Flint North	-739,866	-12.7%	(\$112,460)
300 Convent Street	-856,530	-11.9%	(\$71,949)
One Riverwalk Place	-305,654	-10.0%	(\$27,203)
FBI Baltimore	-259,008	-8.6%	(\$28,491)
USGBF FBI - Charlotte	-171,324	-6.2%	(\$14,220)
Park Ten Plaza	91,112	6.3%	\$7,562
Grand Total	-14,413,559	-20.2%	(\$1,493,687)

Graph



Recent Success: 300 Convent – San Antonio

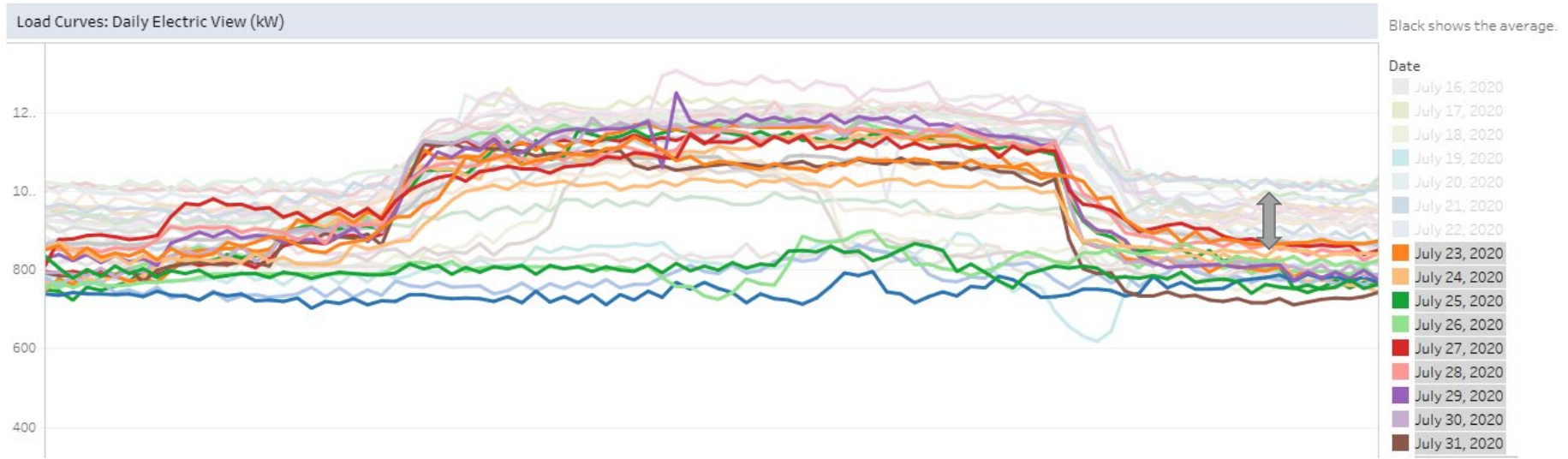
Consumption: Reduced by 9% overnight!

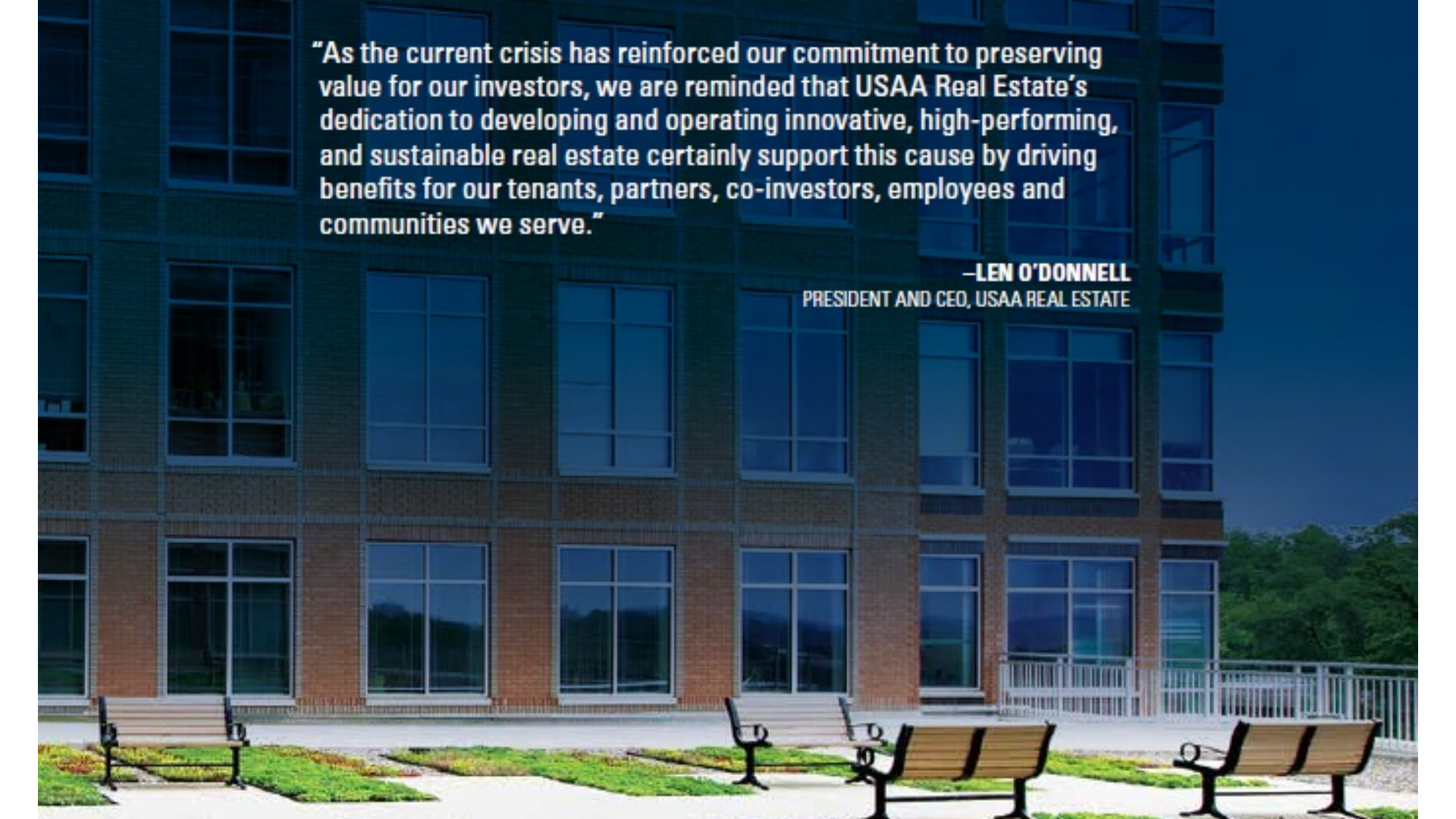
Make selections to run this report:

Site: Year Month:

Load Curve Analytics

Weekday(s): Local Hour: Metric:



A photograph of a modern, multi-story brick building with large windows. The building is the central focus, with a courtyard in the foreground featuring several wooden benches and small landscaped areas. The sky is clear and blue. The text is overlaid on the upper left portion of the image.

“As the current crisis has reinforced our commitment to preserving value for our investors, we are reminded that USAA Real Estate’s dedication to developing and operating innovative, high-performing, and sustainable real estate certainly support this cause by driving benefits for our tenants, partners, co-investors, employees and communities we serve.”

—LEN O’DONNELL

PRESIDENT AND CEO, USAA REAL ESTATE

Thank You!



Jason McIntyre, LEED AP, FMP

Director | Sustainability and Real Estate Operations

Questions / Comments

- Please use the chat box to ask questions or share comments.

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Working Together to Save Energy: Employee Engagement Strategies

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Questions?

