

SHERATON GRAND

Impact at a Glance

- **20% energy reduction** from baseline achieved in 2016
- **40.6% reduction of carbon emissions** in 2022 compared to 2011 (data via ENERGY STAR Portfolio Manager)
- **45.2% water use reduction** in 2022 compared to 2011 (data via ENERGY STAR Portfolio Manager)

Building Stats

- **Year Built:** 1992
- **Neighborhood:** River North
- **Architect:** SOM
- **Use:** Hotel and Conference Facility
- **Square Footage:** 1,273,000

The Sheraton Grand Chicago Riverwalk is one of the Midwest's largest event venues. Built in 1992, the Sheraton contains 1,218 guest rooms and 120,000 square feet of flexible meeting space, including a 40,000 square foot ballroom. Starting in 2010, the Sheraton Grand began implementing energy conservation measures that would establish the hotel as a leader in sustainability.

The Sheraton Grand was one of the first hotels to sign up as part of the Retrofit Chicago Energy Challenge and reached the 20% energy reduction commitment in 2018.

Spotlight on Energy Efficiency Investments



- Multiple lighting studies and retrofits of the front-of-house, back-of-house, ballroom, and guest rooms
- Installation of a building automation system including added optimization software
- Steam trap audit and replacement
- Installation of autonomous, self-adjusting kitchen hood exhaust systems for kitchen, bakery, and restaurant
- Replacement of permanent split capacitor motors with high efficiency electronically commutated motors in of approximately 1,300 guest room fan coil units
- Installation of variable speed drives and compatible motors to equipment serving corridors, guest room exhaust fans, chilled water pumps, and condenser water pumps
- New chillers and steam boilers



Retrofit Chicago provided the initial energy walkthrough, accountability, and city leadership that helped large commercial participants achieve significant energy savings. The Sheraton saves an estimated \$373,000 annually from energy conservation measures.

Building on the success of the Sheraton Grand's energy conservation measures implemented in 2010 to 2013, a road map was created to meet the 20% to energy use reduction goal set by Retrofit Chicago. The Road Map was written by the Chicago Metropolitan Agency for Planning with support from the United States Department of Energy and prepared by PositivEnergy Practice. Multiple ComEd and People's Gas incentives were identified during the development of the Road Map.

The Road Map identified key energy conservation measures (ECMs) and divided them into three phases by cost savings and payback period. A 10-year internal rate of return (IRR) has been used to evaluate all ECMs, appropriately characterizing the period of financial return required by many property investors. Phase 1 consisted of measures with a 42.2% IRR and a simple payback of 2.3 years. Phases 2 included ECMs with standard payback periods that would be evaluated and implemented on a case-by-case basis. Phase 3 ECMs with longer paybacks would be planned for when the existing equipment is ready for replacement.

In addition to energy savings, benefits included enhancing the **guest experience**, improving **building reliability**, and **maximizing performance** of existing assets.

About Retrofit Chicago

The Retrofit Chicago Energy Challenge encourages, promotes, and celebrates voluntary energy efficiency leadership. Together, participating building owners, facility managers, engineers, and policymakers are demonstrating that energy efficiency is a winning proposition for Chicago's real estate industry as well as the environment.



The Key to Success for The Sheraton Grand

“ Be able to have answers to key questions: what will it cost, what will it save, and what is the ROI? **Prioritize the low-hanging fruit.**”

Heather Bolton

Executive Vice President,
Tishman Hotel Corporation



The Sheraton Grand has been a conference mainstay in Chicago, containing the Midwest's largest ballroom.