

#### **INDUSTRY**



#### **GOALS**

- + Support Brookfield's commitment to improving the sustainability profile of its parking facilities and office properties
- + Encourage drivers to cycle quickly through charging stations so as many people as possible can use them
- + Stand out in a highly competitive market by making it easy for business tenants to offer free EV charging to their valued employees

#### **IMPLEMENTATION**

- Installed 40 Level 2 ChargePoint® charging locations in multiple Brookfield locations across Washington, California, Colorado and Texas
- + Connected to ChargePoint's intelligent, open, and highly scalable network
- Developed a creative pricing strategy to encourage drivers to use free charging and promptly move their cars when they're done

#### **RESULTS**

- Reduced greenhouse gas emissions by approximately 103,611 kg (and counting)
- + Successfully optimized charging station usage over two years, going from 24 to 40 stations while increasing average daily charging sessions by 13 times
- + Improved tenant satisfaction by allowing them to offer free EV charging to their customers and employees

# Leading Office Property Owner Meets Sustainability Goals While Making Tenants Even Happier

Brookfield Office Properties is a global office property company that owns, manages, and develops upscale office buildings. A big part of Brookfield's corporate mission is to lead by example in the ownership and operation of sustainable real estate. When electric vehicles began hitting the road in greater numbers, Brookfield's management looked at installing EV charging stations in their parking facilities as a way to promote the use of hybrid and fully electric vehicles and allow their business tenants to offer EV charging to their employees.

### The Challenge

In 2011, Brookfield decided it was time to expand their sustainability initiative to parking garages. As part of this effort, they designed a "Green Garage Program" to add sustainable features like EV charging, bike racks, and LED light fixtures to their parking garages. They developed their Green Garage standards in partnership with the Green Parking Council (GPC), a national nonprofit dedicated to promoting tomorrow's more convenient, sustainable, and energy efficient parking garage.

They chose their Houston, TX property to be their pilot site for EV charging stations, and then they began looking for the right EV charging solution. Their requirements included:

- + Comprehensive driver support. To make sure their tenants would have a good experience, they wanted charging stations that came with driver support, including a mobile app that would allow drivers to schedule sessions and notify them when sessions are complete.
- Flexible pricing options. They also wanted charging stations that would allow them to use financial incentives to encourage drivers to move their cars once they are charged.
- \* Attractive station design. The charging stations needed to look at home in Brookfield's upscale office locations.
- \* Flexible management & reporting software. They needed back-end software capable of capturing EV charging data and producing a variety of reports for sustainability certification as well as property- and business-wide energy management.

### The Solution

Brookfield chose ChargePoint to install level 2 charging stations in their Houston, TX office property. The program was so popular with tenants that Brookfield expanded it new locations in California, Colorado, Texas, and Washington, for a total of 40 level 2 ChargePoint charging stations.

ChargePoint's flexible, cloud-based services was key to the success of the program. It allowed Brookfield to vary costs by driver groups—in this case, giving tenants a better rate than visitors.

At most of their locations, Brookfield decided to offer free charging for the first four hours and then set an hourly fee going forward. This pricing model gives drivers a financial incentive to use their stations and then move their cars once they're charged.

Because ChargePoint provides comprehensive driver support, Brookfield was able to offer EV charging to its tenants without having to train their property managers or hire new staff. In addition, Brookfield uses ChargePoint's reporting and analysis tools to monitor greenhouse gas savings, station utilization, duration of daily sessions, and number of unique drivers. This data allows them to plan for future EV charging and electrical capacity requirements.



Bank of America Plaza, Los Angeles, CA

"Brookfield is firmly committed to the continuous improvement of energy performance and the sustainability profile of its 80-million square feet global office portfolio. Our properties attract high quality tenants who expect the highest caliber of services. ChargePoint has given us the ability to provide a seamless EV driving experience for all of our customers. With ChargePoint, our tenants have access to the largest EV charging network with the most advanced hardware, and we have the ability to easily scale our EV charging program across our portfolio."

Laura Longsworth Vice President, National Parking Operations

### The Result

Adding EV charging in conjunction with other sustainability features to their parking structures allowed Brookfield to achieve—and surpass—their "Green Garage" initiative goals. They used ChargePoint's rich reporting and analysis to provide key data to the GPC, which designated multiple Brookfield parking facilities as demonstrator sites. These data also helped Brookfield provide substantiation needed to win the National Association of Real Estate Investment Trusts' "Leader in the Light" award in 2012 for its pioneering efforts in sustainability and energy efficiency.

At the same time, Brookfield introduced a valuable new service to its tenants, allowing them to offer free EV charging to their employees. Moreover, they accomplished this using a limited number of charging stations, because ChargePoint's software makes it possible to implement effective pricing policies that give drivers an incentive to vacate stations once they are done charging.

For example, at Brookfield's Los Angeles Bank of America Plaza location, the first four hours of charging are free; every subsequent hour costs \$5. On average, charging sessions at this location are approximately three hours and twenty minutes. Because drivers willingly moving their vehicles, this location logs an average of 2.3 charging sessions per day per port, or about 5 cars per dual-port station.

## Exponential Increase in Charging Sessions Across Brookfield Locations Sessions Accumulated 20.000 40,000 15,000 30,000 10,000 20,000 5,000 10,000

Through these incentive-based pricing policies, Brookfield was able to optimize station usage. Over two years, they scaled from 24 to 40 locations while increasing average daily charging sessions by 13 times.

2012

2013

2014

Free EV charging combined with 24X7 driver support and navigation made easy through the ChargePoint mobile application has allowed Brookfield to make their tenants even happier. It's also helped them to stand out in today's competitive commercial real estate market. The bottom line? EV charging has helped Brookfield improve its sustainability profile and grow its business: a real win-win.



Allen Center, Houston, TX