



Wesco Builds Turnkey Solar-Powered EV Charging Station Infrastructure

Challenge

At the beginning of the COVID pandemic, a municipality in Western Canada contacted Wesco to design and install a turnkey solar canopy and electric vehicle (EV) charging infrastructure to power a new fleet of EV vehicles. The customers' objectives were to reduce CO2 emissions, promote sustainable practices and minimize their fleet's carbon footprint while being environmentally friendly to the local ecosystem, including the natural vegetation and the migration and nesting of the great blue heron.

Solution

To optimize solar exposure in our solution design, the Wesco team analyzed the sunlight levels in the parking lot and determined the most suitable location and orientation for the solar canopy. Our renewable energy team worked with our OEM group and provided a comprehensive project design for approval. This solution included 105 Charge Point CPF Level 2 charging stations for the fleet, a built-in solar canopy that included modules, inverters and optimizers and a distribution kiosk to power the EV chargers.

Result

Despite facing pandemic-related supply chain disruptions and a temporary shutdown during the blue heron nesting season, Wesco was ultimately able to complete and deliver the project within budget. Today, the finished project generates approximately 53,566 kWh of electrical power back to the grid annually. In addition, the customer's positive response confirms that this award-winning outcome successfully integrated technologies to reduce the carbon footprint of the city's fleet and helped towards the city's goal of achieving carbon neutrality by 2040. The Wesco team demonstrated that we are more than just product sellers – we are solution providers committed to meeting our customers' needs.

Summary

- Finished project generates approximately 53,566 kWh of electrical power back to the grid annually
- Successfully integrated technologies to reduce the carbon footprint of the city's fleet and helped towards the city's goal of achieving carbon neutrality by 2040
- Provided a turnkey solar canopy, kiosk and EV charging that are environmentally friendly today and into the future
- Respected natural vegetation and avian wildlife during the build process

Learn more about our customizable renewable energy solutions at Wesco.com/renewable-canada.



Ingenuity delivered.

Wesco.com

230649S001 © 2023 Wesco International