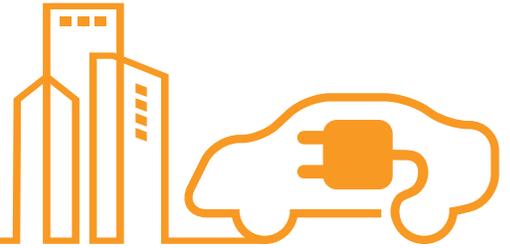


ELECTRIC VEHICLE WORKPLACE CHARGING POLICIES



Most electric vehicle (EV) drivers charge their vehicles at home, but there is increasing interest in the availability of workplace charging options. Workplace charging provides a great opportunity to increase the daily all-electric range of EVs, which can help increase EV adoption.

Benefits of Workplace Charging include:

- Supporting sustainability efforts and social responsibility
- Providing a valuable amenity to employees
- Encouraging EV adoption
- Gaining Leadership in Energy and Environmental Design (LEED) points



Workplace Charging Case Study - Biogen

Biogen is a biotechnology company that has a 550,000-square-foot facility in Research Triangle Park. They are committed to sustainability and continually evaluate ways to make their company more environmentally friendly. With over 850 employees, they researched how their employees were making an impact on the environment through their daily commute. They conducted an employee commuter survey and found that many employees expressed interest in purchasing a plug-in electric vehicle. To help make electric vehicles a viable option for all employees, they decided to install charging stations.

Biogen used available electrical supply to choose the location for their stations. They chose a parking deck on-site that had enough electrical supply to accommodate ten charging stations. They used an electrical contractor to install the charging stations according to code and requirements.

To promote their stations, Biogen hosted a dedication ceremony. Their vice president and general manager for the Research Triangle Park campus spoke about why the company decided to install charging stations and how

Employees who have access to workplace charging are

**6 TIMES
MORE LIKELY**

to drive an electric vehicle
than the average worker.

- Department of Energy's Workplace Charging Challenge

they aligned with Biogen's commitment to environmental sustainability and responsibility.

Biogen has received positive feedback from users of the charging stations. Biogen calculated that employees commuting to work averaged 24 miles round trip. Each commute, on average, equated to one gallon of gas and 20 pounds of carbon dioxide. All of their employees together use approximately 212,500 gallons of gasoline and emit 4,250,000 pounds of carbon dioxide annually. Targeting and encouraging cleaner commutes has had a significant effect on Biogen's environmental impact.

WORKPLACE CHARGING CHECKLIST

- Develop a Workplace Charging Strategy**
Identify short term and long term goals. Discuss budget considerations and funding. Determine a timeline for implementation.
- Identify a Project Champion**
Select an employee to oversee the workplace charging program development and implementation. Options may include a facilities representative, an electric vehicle driver or your sustainability manager. Choose someone who can dedicate time to researching and planning in order to make your electric vehicle charging program a success.
- Survey Employees**
Survey your employees to learn about current and possible future charging demand. Your survey results will help you plan for the number of charging stations to install.
- Review your Electrical Access**
Installation is less expensive if the equipment is close to the power supply. Determine if there is access to an electrical panel or circuit from the parking area or if any electrical upgrades will need to be made. Also, review options for metering the charging stations.
- Select Parking Spaces**
Select parking spaces based on the following criteria: availability of parking spaces, proximity to power source, ADA accessibility, and visibility.
- Select Charging Stations**
Select the charging power level that best fits your needs. Also, decide if there is a need to track and report charging usage, or to remotely check on charger status or availability. If there is, consider a station installed with network capabilities.
- Hire Contractor**
Hire a contractor, or electrician, to manage the installation process. Work with the contractor to develop a site plan and contact your utility. The electrician and the utility will help determine if any panel upgrades, service upgrades or new metering is required.
- Contact Permitting Office**
Contact your local permit office to see if there are any requirements regarding the permitting, installation and inspection of the stations. Work with your contractor to obtain necessary permits and ensure compliance with applicable codes such as ADA, zoning, and encroachment agreements.
- Install and Inspect Equipment**
Your contractor will handle this portion. To save money in the future, plan for charging expansion by installing conduit (and pulling power or communications wires if desired) for additional stations.
- Create a Policy**
Put together a policy to manage the use of the charging stations. A policy can include time limits, driver etiquette, charging fees, signage, enforcement and a plan for maintenance and evaluation.
- Promote the Charging Station**
Host a ribbon cutting or dedication ceremony, send a press release, or plan an electric vehicle showcase event to promote your new station. Also, consider becoming a member of Plug-in NC or the Department of Energy's Workplace Charging Challenge to further promote your charging program.



Connect with Dominion Energy by:

 (888) 366-8280
 dominionenergy.com



Connect with Advanced Energy by:

 (919) 857-9000
 moreinfo@advancedenergy.org
 @AEatWork