



A Culture of Corporate Stewardship: Global Leader Encourages Sustainability

Pentair's Commitment to Plug-in Electric Vehicles
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From energy efficiency to longer-lasting materials and products, Pentair, a global leader in pool and spa innovation, is seeking new directions in corporate environmental stewardship. The company has adopted a sustainability culture supporting innovative solutions to today's environmental challenges. When approached by employees at Pentair's manufacturing facility in Sanford, N.C. with the idea of providing plug-in electric vehicle (PEV) charging stations for employee use, Pentair embraced the idea and demonstrated that employees, even those with longer-than-average commutes, could contribute to emissions reductions and decreased petroleum use through use of electric fuel.

MOTIVATORS

Pentair, a world leader in innovative and dependable swimming pool and spa equipment, utilizes green manufacturing practices in the creation of their pool and spa equipment, highlighting sustainability by offering eco-friendly ENERGY STAR® pumps, heaters and LED lighting technology. Always looking for opportunities to further stewardship efforts, Pentair's employees expressed interest in PEVs and vehicle charging at the workplace. Pentair's Sanford location is unique in that the average employee commute is more than 30 miles (one-way).

Round-trip travel to work and back using current battery technology could prove challenging to the majority of the Pentair employees. Overcoming this challenge would be necessary to support employee adoption of PEVs as a means to reduce vehicle emissions and minimize petroleum dependence.



Example of charging station installed at Pentair's Sanford, N.C. manufacturing facility.

A CULTURE OF SUSTAINABILITY

Pentair's North Carolina manufacturing facility is nestled in the Sandhills region between the technology-giant Research Triangle Park and U. S. Army Installation, Fort Bragg. The rare ecosystem and beauty of the Sandhills area lends to the region's ingrained culture of sustainable land-use and a philosophy of materials, energy and transportation efficiency that touches government, industry and educational institutions throughout the area. As part of this regional sustainability



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culture, Pentair embraced employees' request for work place charging at the Sanford location. Surveys conducted by the executive management team determined that providing work place charging for employees, visitors and potential customers driving PEVs would promote good corporate stewardship, contribute toward reducing regional emissions and lower dependency on petroleum fuels. As the project moved forward, funding was an initial hurdle, until Pentair was connected with the Blues Skies Initiative through consultation with Advanced Energy.

ENABLING CHANGE

Through grant funding made available by the U.S. Department of Energy (DOE) and coordinated by the Triangle Clean Cities Coalition and Triangle J Council of Governments, Pentair was able to qualify for charging station installation subsidies that allowed for the deployment of two dual-cord electric vehicle charging stations. The charging stations allow simultaneous charging of up to four PEVs. Pentair joins Biogen Idec and North Carolina State University's Centennial Campus in encouraging and supporting the transition to electricity as an alternative fuel through the DOE Blue Skies Initiative grant funding.

THE PROCESS

Technical assistance provided by Advanced Energy noted several locations suitable for charging station placement. Select spaces were chosen for compliance with the Americans with Disabilities Act (ADA) considerations, ease of access, avoidance of pedestrian conflicts, power availability, lighting and overall appearance. Although not an initial consideration at the time of installation, the charging stations were sited so that their appearance is prominent, potential employees, customers, and visitors can visually recognize Pentair's commitment to sustainable technology and the environment.

COST AND EQUIPMENT

Pentair's executive management team made the decision on equipment selection based on inputs from internal research, employee survey and consultation with Advanced Energy. Pentair chose Hubbell PEP charging stations based on the data reporting capability, physical features and local availability of the stations. The estimated cost was roughly \$40,000 for the site analysis, equipment purchase, installation, and follow-up training. Pentair received approximately \$20,000 in subsidies to offset the cost of installation.

LESSONS LEARNED

The selected installation site was important for visibility and accessibility. Pentair invested the time necessary to consider various locations and multiple locations for the charging stations. Equipment selection was primarily driven by the need for remote monitoring and usage reporting. The equipment was easy to install and is easy to operate.

EMPLOYEE EDUCATION

Employee training was provided by Advanced Energy during an event held to dedicate the charging stations on January 22, 2013.



ABOUT ADVANCED ENERGY

Advanced Energy, headquartered in Raleigh, N.C., serves as a national resource, focusing on Transportation, Renewables, Motors and Drives, Industrial and Buildings, creating economic, environmental and societal benefits through innovative and market-based approaches to energy issues.

Advanced Energy's Transportation Initiatives team is working to assist communities in understanding, planning for and implementing electric transportation initiatives. An established figure in the development and deployment of plug-in electric vehicle technologies, Advanced Energy successfully facilitated the creation of the world's first commercially available plug-in hybrid vehicle in 2007. Advanced Energy also works with municipalities, electric utilities and National Laboratories monitoring and evaluating the performance of numerous fleets of plug-in hybrid vehicles across the country, including the Plug-in Hybrid Electric School Bus program.

Advanced Energy currently manages the NC Get Ready and the NC PEV Taskforce programs to accelerate the adoption of electrified transportation in North Carolina – two of the key initiatives in the nation making a true commitment to the widespread acceptance of electrified transportation. For more information, visit www.advancedenergy.org.

