



## FAST FACTS

### COMPANY

Porsche Cars North America is the exclusive importer of Porsche sports cars and sports utility vehicles for the U.S.

### INDUSTRY

Automotive

### CHALLENGES

- Minimize environmental impact
- Maximize energy savings
- Serve dealers and concentrated customer base more efficiently in the northeast
- Reduce logistics costs and shipment delivery times

### RESULTS

- Class A facility awarded LEED Gold Certification
- 44% more energy efficient than a baseline building as defined by LEED
- 60% more energy efficient than ASHRAE standards
- Project completed under budget and seven weeks ahead of schedule

## THE CLIENT CHALLENGE »

Porsche Cars North America, Inc. (PCNA), based in Atlanta, Georgia, is the exclusive importer of Porsche sports cars and sport utility vehicles for the United States. Like Porsche, its iconic parent company, PCNA has always been concerned about their environmental impact, not just from the cars they manufacture and sell but also from the facilities they operate. When company officials decided to build a new distribution and training facility to better serve dealers and customers in the northeastern U.S., they made environmental friendliness and energy efficiency high priorities.

In looking for a site for the facility, PCNA stressed the importance of minimizing vehicle miles for outbound and inbound logistics while maintaining exemplary customer service. After an exhaustive search, they selected a site in Palmer Township, Pennsylvania that proved to be ideal — both in terms of location and adaptability to environmental standards. The company's choice of IDI, a leading developer of industrial build-to-suit projects, was also sound. From day one, IDI balanced sustainable needs with short- and long-term project costs, doing cost/benefit analyses on every "green" enhancement. "We were 100% committed to delivering a model

of sustainability,” said Dave Thomas, IDI’s Vice President of Development, “but it had to make economic sense for PCNA.” Rob Nemchik, general manager of Porsche Logistics Service, LLC, agrees. “IDI came to the table with the best plan,” he said. “I think the plan coupled with the design and the individuals we met really sealed the deal.”

In addition to addressing environmental issues, IDI worked hand in hand with PCNA to ensure employees’ functional needs were met. The lighting system, for example, was custom designed to provide the required light for specific tasks in each work area. The training center lobby simulates a dealership floor so corporate employees, salespeople and mechanics can all be trained onsite. To achieve optimal office temperatures and indoor air quality, a PC-based building automation system (BAS) was installed in conjunction with a sophisticated HVAC system.

## THE IDI APPROACH »

When the idea of building a LEED® (Leadership in Energy and Environmental Design) certified facility was raised early in the planning process, PCNA and IDI agreed it was a worthwhile goal. The 13-acre site was pre-disturbed (or pre-developed), which is an important factor weighed by the United States Green Building Council (USGBC) when rewarding LEED certification points. To further ensure the completed building would meet certification standards, eight LEED accredited professionals – including engineers, building and landscape architects and a member of the IDI development team – were involved in design and construction.

The IDI team left no stone unturned as they looked for ways to maximize the facility’s energy efficiency and minimize environmental impact. They analyzed 11 different models for lighting and insulation, the biggest determinants of energy efficiency; used only low emission paints and adhesives; installed



*The facility’s custom motion detector T5 lighting system makes it 60% more energy efficient than a standard building. Combined with the natural lighting of clerestory windows, these lighting components reduce consumption while maintaining quality.*



*While 40% of the 14-acre site was left relatively undisturbed, the latest water recycling techniques of smart water management allow for the return of 15 million gallons of clean water back to the ground every year.*

high-performance low-e glass in windows and minimum R-19 insulation in office walls; and chose a roof made of highly reflective white thermoplastic polyolefin (TPO) membranes. Waterless urinals, hand-washing faucets, and showerheads with aerators were used to reduce potable water demand compared to normal baseline standards. The HVAC system is equipped with high efficiency filters and carbon dioxide monitors. The building is cleaned using a low environmental impact housekeeping program.

Outside, IDI's landscape engineers planted more than 70 trees, 400 shrubs and perennials, and native and adaptive plants to eliminate the need for a permanent irrigation system. They left more than 40 percent of the site as vegetated open space to minimize disturbing the existing ecosystem and designed curb breaks to allow runoff from impervious areas to flow through grassed areas for cleansing, velocity reduction and temperature reduction before reaching the underground storm water system. A series of storm water best practices created a retention system that returns about 15 million gallons of water back into the ground every year. Even the construction and demolition debris was treated responsibly, with 79 percent of materials diverted from the landfill and recycled.

## **THE RESULTS »**

The 130,000-square-foot PCNA Northeast Retail Support Center opened in October 2009, slightly more than five months after breaking ground and seven weeks ahead of schedule. It houses the 106,000-square-foot Northeast Parts Distribution Center, 9,000-square-foot Area Offices and 15,000-square-foot Porsche Academy Training Center.

IDI helped PCNA achieve its environmental objective by delivering a high-performing facility and a model of environmental sustainability. The building was awarded the LEED Gold Certification for New Construction by the USGBC, earning the maximum possible points for energy savings. It is 44 percent more energy efficient than a LEED baseline building and 60 percent more energy efficient than American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards. The total building energy savings of approximately 660,000 kWh per year are enough to power 60 typical American homes for 12 months.

The IDI and PCNA team's dedication to efficiency and performance not only uncovered new ways to achieve sustainable design, it serves as a model process by which both companies can achieve sustainability goals and shape new facilities for years to come. "In my opinion, the success of this project was due in part to IDI and Porsche committing to a shared vision," said Rob Nimchek. "Everybody was focused; everything we did paid off."

*The Porsche Northeastern Retail Support Center's state-of-the-art distribution and training facility better serves dealers and customers with an enriched car-buying experience.*

