

GREENING YOUR GARAGE



The positive effect on
your bottom line.

By Dennis A. Safford

Who knew doing the right thing for the planet could make you more money? Implementing sustainable initiatives in parking facilities that benefit the environment and society does not mean you need to sacrifice dollars. At face value, it would seem that the urban parking garage is the antithesis of sustainability, but forward-thinking leaders in the parking industry and the non-profit Green Parking Council (GPC) are working diligently to change that perception and its underlying reality. Still, property owners and managers often ask how sustainable parking initiatives help to positively affect profitability. Simply put, for sustainability to be sustainable, it has to make bottom-line sense.



“There are a multitude of initiatives that parking garage owners and managers deploy at their properties in order to not only facilitate increased profits, but reduce their operational impact on the environment,” explains Paul Wessel, executive director of the GPC. “What the Green Parking Council does so well is open pathways for these goals to be cost-effectively realized through our open-source collaboration, our working committees, and our Green Garage Certification program.”

New parking facilities are considerably less expensive to design and construct when they’re developed sustainably. For example, through aggressive design and bidding practices, the U.S. Department of Energy’s National Renewable Energy Laboratory’s 1,800-space “net zero” parking garage reported a construction cost of \$14,172 per parking space (see p. 26 for more on this garage). The cost for a typical parking space in comparable traditional parking facilities, according to some sources, is in the range of \$15,500 to \$24,500, demonstrating that the overall savings can be substantial depending on the size of the structure.

Real-World Examples

Canopy Airport Parking is a shining example of how sustainable practices employed at parking facilities can affect bottom line revenue. Canopy is a parking facility serving Denver International Airport and the recent recipient of the International Parking Institute’s (IPT’s) 2012 Award of Excellence in the category for sustainable parking and transportation (design) excellence.

This structure, created by Propark America, was constructed using sustainable materials including certified wood, 35 percent recycled steel, 25 percent recycled asphalt, and low-emitting adhesives, sealants, paints, and coatings; all of these sustainable materials and their usage levels meet the Leadership in Energy and Environmental Design (LEED) Gold standard. A variety of technologies was installed in the facility during construction that contributes to the operation’s low carbon footprint and energy efficiency. Onsite renewable energy is derived from a solar array, wind turbine field, and geothermal technologies, resulting in a 75 percent reduction in

energy costs when compared to traditional like-sized parking facilities. Energy-efficient LED lighting, lighting controls, and a comprehensive plan in place for reduction in water use not only helps the planet, but boosts the facility’s bottom line in the form of lower utility expenses.

Canopy doesn’t just look good on paper: it works in the marketplace. The facility’s occupancy rates have been on a steady upward trend since it opened in November 2010. According to its investors, the facility has outperformed both occupancy and revenue projections.

In addition to Canopy Airport Parking, Santa Monica’s Civic Center parking structure, the University of North Texas’ Highland Street Garage, and Duke University’s Research Drive parking facility have all earned LEED certification for their sustainable design, but that recognition and standard is no longer available to freestanding garages. As of mid-2011, LEED has stopped offering its certification for structures that dedicate more than 75 percent of their floor area to parking and circulation of cars or trucks.

The GPC now offers the parking industry’s only universally-accepted standard for sustainable designation through its Green Garage Certification program, which will be available to all in the spring of 2013.

Lighting

Upgrading facility lighting to energy-efficient options is perhaps the most cost-effective sustainability improvement a garage can make. Many property owners have upgraded their existing lighting and realized significant savings with more environmentally-friendly LEDs, induction lamps, and fluorescents. The illumination is comparable to or better than older forms of lighting, and numerous companies cost-effectively specialize in these retrofit projects. The savings on electricity charges flows directly to the bottom-line profitability for these facilities.

The GPC’s partnership with the Department of Energy, the Building Owners and Managers Association (BOMA), and the International Facility Management Association (IFMA), with regards to the Lighting Energy Efficiency in Parking (LEEP) Campaign, helps accelerate the adoption of high-performance,

New parking facilities are considerably less expensive to design and construct when they’re developed sustainably.

energy efficient lighting technologies. The GPC is working closely with these organizations and major building owners to provide detailed calculations of the return on investment, engineering documentation of future light levels and assisting in rebate and grant applications, which often results in a net-zero capital investment.

“Sustainability, when employed and marketed correctly, can not only drive business to a parking facility, but it can generate substantial savings in energy expenses,” says Trevyr Meade, staff associate at the GPC. “There’s potential for not only financial return on investment, but social return on investment by employing technologies and practices that are good for business and good for the planet.”

EVs

As automobile manufacturers continue rolling out electric vehicles (EVs) into showrooms, one of the most common barriers to widespread acceptance is charging station infrastructure, or more specifically, the lack thereof. This is commonly referred to as “range anxiety.” As these vehicles begin to hit the road in greater numbers, the parking facilities that employ charging stations immediately put themselves in a position of competitive advantage.

In today’s world of mobile technology, there are apps that allow the user to locate EV charging stations at local or destination parking facilities. Drivers of EVs will flock to these parking facilities, or as a colleague of mine once put it, EV charging stations in parking facilities will drive these vehicles in like bees to honey. Even the property owners who offer free charging end up on the side of profitability, as the parking charge that the patron incurs vastly outweighs the modest utility expense of a single vehicle charge. Brookfield Properties aspires to have electric vehicle charging stations in every city in which it operates. Brookfield has creatively deferred the cost of the units by selling advertising space on the façades of the charging stations themselves.

“While it’s certainly not expected that all vehicles on the road in 20 years will be electric vehicles, there is definitely going to be a large segment of cars in use that will need a place to charge during the day,” says Gretchen Brown, staff associate at the GPC. “Those parking facility owners and operators that get ahead of the curve are going to reap the rewards while their competitors try to catch up. It’s really a matter of which side of the fence you want to be on when that time comes.”



BUSING GREEN

With about 1.4 million miles per year, 80 biodiesel-fueled buses strong, and providing an average of 45,000 rides daily, transit is a top priority.

SAVING TREES – PRETTY PARKING

New technology and our determination to do the right thing preserved 73 majestic live oak trees through required renovations of Lot 61. So, even parking can be green, and beautiful, and shady. How nice.



GIVING YOU THE GREEN LIGHT

Lighting fixtures in all five campus parking garages have been retrofitted to cut energy consumption in half. Of course, the lights are still bright white but they’re running on green.



Implementing sustainable initiatives in parking facilities that benefit the environment and society does not mean you need to sacrifice dollars.

Other Green Options

Sustainability and its benefits are not only accomplished through technologies such as LED lighting and EV charging stations, but also through premium service offerings that may not on the surface be immediately recognized as being green.

Offering free or inexpensive bicycle parking not only encourages more environmentally-aware modes of transportation, but provides for marketing opportunities for your facility that might not otherwise be realized. Those who take advantage of complimentary or discounted bicycle parking will establish a pattern of behavior and may choose to patronize your facility when driving a motor vehicle. Positive word of mouth with initiatives such as this are additional benefits of instituting sustainable practices. Typically, bicycle parking areas are located in portions of the parking facility that do not take up actual revenue-generating parking spaces, so there is no opportunity cost in the vast majority of instances for bicycle parking programs.

Tire inflation stations are another way to provide a service that is not only convenient, but also good for the environment. Properly inflated tires yield an increase in gasoline efficiency when compared to vehicles with underinflated tires. While there is really no potential for monetary return on investment (unless offering a coin-operated unit), the social return on investment, through consumer loyalty building and word of mouth potential, is worth it in the long run.

As we continue into the 21st century, it's important that we adjust to the times and look forward to the future. Those of us who anticipate where our industry is going will ultimately be the ones to reap the true rewards. The GPC Demonstrator Site program is an opportunity for garages to exhibit sustainability initiatives and become recognized. The next step—the Green Garage Certification program—will establish the accepted standard and give parking facilities the opportunity to quantify sustainability levels, all while becoming more profitable.



DENNIS A. SAFFORD is director of marketing for Propark, Inc. He can be reached at dennis.safford@propark.com or 860.527.2378.



CONNECTING DRIVERS AND RIDERS

Our free Ride Share program from Transportation Services matches Aggies with wheels with those needing a lift, near or far.

BIKE ON

We added more than 200 new bike racks this year. We now provide more than 12,000 spaces on campus and growing.

MAROON GOES GREEN. HOW TIMELY.

Texas A&M Transportation Services is serious about green initiatives and dedicated to conserving our resources and protecting the environment.

At Transportation Services, we bleed maroon but we think green. Just look at our services and performance and you'll feel great about taking advantage of what we have to offer. By joining in wherever you can, you'll help advance the green cause, and why not? Every little bit really does help.

From green initiatives to advanced location technology and a range of free and convenient services, Transportation Services is doing everything possible to make getting around campus and beyond a great experience for you, and a green experience for Aggieland.

IT'S TIME FOR



TRANSPORTATION SERVICES

Moving Forward for You.

transport.tamu.edu

TEXAS A&M
UNIVERSITY