

SMARTER, BETTER PARKING STRUCTURES

Let Parksmart lead the way

he world is rapidly changing, and so is the automotive industry. Around the globe we are seeing fewer outdated gas guzzlers, proven to pollute the air and contribute to global warming, in favour of smarter, cleaner passenger vehicles that run on renewable power systems.

To facilitate this green movement, parking structures are changing too. Frank Cavaliere, Managing Principal with RJC Engineers, is a wealth of knowledge when it comes to the steps needed to design and modernize these all-important facilities.

"Even though parking structures enable the use of passenger vehicles, considered one of the evils contributing to our current environmental condition, they remain a necessity," he says. "As such, they need to be designed to minimize their own carbon footprint while encouraging users to do the same."

This means offering things like sitegenerated renewable power systems, ample space for car share programs, and preferential spaces for carpooling and alternative fuel vehicles. In addition, it means traffic control systems to help minimize driving and queuing time, bikefriendly amenities, and easy access to public transportation.

Sound like something out of a futuristic movie? Cavaliere assures us it's not. In fact, these features are precisely what modern-day parking structures are equipped with; the components needed to meet today's bar.

The road forward

Leading the way is Parksmart, a voluntary certification program similar to LEED that uses a rating system to

measure and recognize high-performing, sustainable garages.

"Parksmart awards points for energy efficiency and sustainability of the design and construction, as well as operation," he explains. "It encourages the use of alternative fuel vehicles, carpooling, carsharing, and even public transportation and bicycle use."

Administered by Green Business Certification Inc. (GBCI), the Parksmart program also measures how operations are optimized to take advantage of different customer bases at different times of day, or different periods during the week. Furthermore, it looks at how the facility benefits the community by using open spaces for amenities like parks, sitting areas and markets.

Exploring the benefits

Offering a lifetime of returns for parking structures through reduced operational costs and lowered carbon footprint, Cavaliere says the rewards of Parksmart are as obvious as they are plentiful.

These include:

- Reduced operational costs
- Reduced environmental impact
- Increased energy efficiency
- Improved lighting and ventilation
- Enabling alternative modes of transportation and alternative fuel vehicle usage
- Strengthening community relationships Certification is open to both new and existing structured parking facilities, including commercial, university, municipal, hospital, retail and hospitality. Projects can be standalone, or a part of a mixed-use building. Only outdoor parking lots do not qualify. Projects have five years to complete certification and there

are four levels that may be achieved: new construction projects (or projects that were completed and commissioned within two years of registration) are eligible to achieve Bronze, Silver or Gold. Existing structures are eligible to apply for the Pioneer level.

Either way, RJC offers services to help guide parking facility owners in the right direction and to carry out the necessary steps.

"Many of our employees have extensive experience in parking structure design, protection, maintenance and repair, and also have the Parksmart Advisor designation," he says. "We can recommend design considerations to help owners attain any level of certification. We can also assess existing parking structures to ascertain whether the facility would qualify and make recommendations as to the measures needed to move forward."

For more information, contact **FCavaliere@rjc.ca** directly, or visit **www.rjc.ca**

