# Green Hotels Association

GREENING NEWSLETTER

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Comfort Inn & Suites Boston Logan adds mobile device charging

Comfort Inn & Suites Boston Logan International Airport now offers guests portable mobile device charging from **Kube Systems**. By simply leaving a credit card or drivers' license at the front desk, one of five charging Kubes can be taken to a guest's room or the hotel's lobby, function space, breakfast area, indoor swimming pool, restaurant, outdoor patio or onsite laundry to power up.
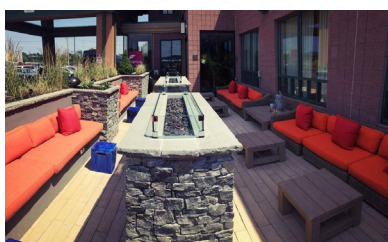
"At the Comfort Inn & Suites Boston, we are always striving to do something extraordinary that will help make our guests' trips more seamless, memorable and stress free," GM Meredith White said. "Making our customers happy and comfortable is extremely important, especially since most are staying for a quick airport layover. With guests frequently asking front desk staff if they can borrow a charging cord, we went on a search to find a product that all guests can use despite the type of device they want to power."

The **Kube 5** is sold as a set of five portable units and a recharging tray. Kubes can be strategically placed throughout the hotel or they can be made available individually to guests. Each Kube can be programmed with a variable timeout function to limit user time and avoid power squatting. The charging Kubes feature three built-in connectors, two USB ports and comes with Qi wireless charging that enables guests to simply rest or "drop and charge" their mobile devices. Each provides up to nine hours of charge time at speeds comparable to those from wall outlets.

The Kube 5 portable is kept behind the front desk at the Comfort Inn & Suites Boston. When a guest requests a charging cord, front desk staff offers a charging Kube in exchange for collateral. On average, guests ask to use a Kube seven to 10 times a day, and each Kube is in use for approximately two hours and then returned.

http://www.hotelmanagement.net/tech/comfort-inn-and-suites-boston-logan-adds-mobile-device-charging, April 18, 2017

Wi-Fi helps hotels catch bed bugs early

A new Wi-Fi-enabled system promises to help hotels find and eliminate bed bugs without the help of exterminators.

AIM, a product developed by a company named **Delta Five**, promises a 99% success rate. It monitors a bedroom using internal cameras and, as insects are lured to an embedded trap, it uses Wi-Fi connectivity to alert smartphones and provide real-time views of the bugs.

It sounds gross, but this sort of technology could be huge for the hotel industry, especially if it helps with early detection of bed bugs before they spread to other rooms. Typically, hotels need to hire human inspectors or dogs to hunt down bed bugs.

Delta Five says AIM will cost 1/900th of typical solutions, just pennies per room to roll out. The 3-inch detector can be stowed out of sight so guests won't even know there's a bed bug detector hiding in their room, and can easily be disposed of when bugs are detected and trapped.

Delta Five hopes its tech is used in homes, assisted living facilities, hotels, cruise ships, call centers and other places where bed bugs appear.

Haselton, Todd, This new system uses Wi-Fi to help hotels catch bed bugs early, cnbc.com/2017/04/13/delta-five-aim-helps-hotels-catch-bed-bugs-early.html, April 13, 2017

Travel experiences shouldn't include mismatched outlets

While there is an abundance of hot topics that are abuzz in the hospitality technology community—namely data security and disruptive technologies—there are also many small and important details to consider when you are designing a new-build or working on upgrades. This came to my attention recently while having a conversation with HFTP International Hospitality Hall of Fame inductee Fraser Hickox, who is the managing director at The Conceptual Group and former group general manager of research and technology for The Peninsula Hotels.

He brought to light some of the vital technology considerations when his team works on outfitting a guestroom. At the top of the list is incorporating electrical outlets—how many and where—and also the conundrum of the electrical plug itself.

There are 15 different kinds of electrical outlet plugs in common use today across the globe. The variety expanded as countries decided to develop a unique plug type, initially in the interest of designing a safer version from the original 1945 US standard. Each type, determined by national standards set by the country, are primarily grouped by region and in some regions, multiple types are used.

Voltage ranges between 110 volts and 250 volts. Conveniently, plug types are regional, and residents and regional travelers do not encounter day-to-day issues: It is basically plug and go without a thought about whether your plug will fit. But travel a little further and an adapter is required. In some cases, you might need a voltage converter, although some appliances have a switch that allows the device to adjust the voltage

between 90v and 250v.

Why It Is Important

In an era where multiple personal electronics are part of a traveler's arsenal, the international traveler might also need multiple, matching adapters so their electronics can be in use simultaneously. A concern is that some of these adapters are in fact more dangerous and subject to fire risk if thin conductors become overheated. Hickox said that it all comes down to a massive inconvenience for guests. While varying regional socket types are established, the travel industry has made some steps toward universal sockets that can accommodate different plugs.

One solution has come from the airlines, which offer a **multi-pin power outlet** that can provide for all pin configurations, eliminating the need for an adapter. However, this outlet is **illegal to use in a stationary environment**. So while mobile environments such as US-registered airplanes and cruise ships can bypass regional standards, stationary buildings where our hotels are housed cannot install this style of electrical outlet, which comes across as an unfair advantage. This is not unique to the US and in fact most authorities will not accept these sockets even though they are produced for mobile environments in various countries.

Gradually though, these sockets are now finding their way into hotels around the Middle East and some Asian cities. Hickox received approval to use them at the Peninsula Tokyo, but he said it took 12 months to obtain approval from the authorities. Acceptance is slowly coming, but not without a lot of effort from the hotels' side.

Mobile Phones

Another workaround for mobile phone charging that is gaining ground is **induction charging** for mobile devices. This is a wireless method where one can place a device on or near the charger. Mobile phone companies are now accommodating for this type of charge, and recently even Apple has reverted to the Qi protocol, an open interface standard, along with Asus, Samsung, LG Electronics, Sony and others. By providing an induction charger in rooms for guests, the need for a plug and adapter is eliminated (at least for some of the traveler's personal electronics).

The boundaries between regions are fading, but there are still differences that require attention. While the point of travel is to experience the unique characteristics of an area, a different outlet type shouldn't be something our guests need to embrace. As hospitality technologists, we can take advantage of tools available to make a stay in our hotels an easy experience and direct our guests' attention toward the adventure they are looking for in their travels.

Wolfe, Frank, Travel experiences shouldn't include mismatched outlets, hotelmanagement. net/tech/travel-experiences-shouldn-t-include-mismatched-outlets, April 11, 2017

A Possible Solution to Office Thermostat Wars

New technologies are giving individual office workers more control over the climate around them

Wars over office temperature may be coming to a thaw. Thanks to advances in workplace architecture and new sensor and app technologies, individual workers are getting more control over the climate around them, which has long been a battleground for office workers. Some of the new technologies seem straight out of science fiction. One building under renovation in Italy is going to provide workers with their own

"thermal bubbles" that can follow them around the building, so workers will each have their own climate-controlled zone. Elsewhere, smartphone apps such as **Comfy** let workers order a 10-minute blast of hot or cold air. Users click on either "cool my space" or "warm my space" functions on the app, which connects to a building's ventilation system, says Erica Eaton, Comfy's director of strategy.
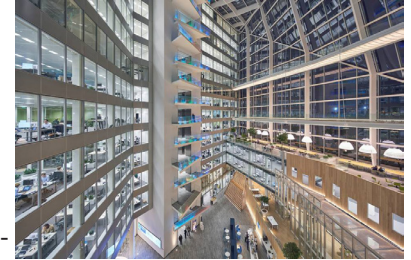
The headquarters for the Agnelli Foundation in Turin, Italy, is being equipped with thousands of sensors that measure things like temperature, light levels and occupancy levels, and can make adjustments to temperature and lighting throughout the building in real time, says Carlo Ratti, who heads the eponymous architecture firm that designed the renovation of the more than 100-year-old building. Employees can set their preferred workplace temperatures on an app. Then, heating and cooling units located in the ceilings can be activated by their phones, allowing a "thermal bubble" to follow them around the building. When an occupant leaves a particular space, it will return to an energy-saving "standby mode," like a computer, says Mr. Ratti, also a professor at the Massachusetts Institute of Technology.

If two employees in proximity have conflicting preferences, the system will average them out, "without any thermostat wars," he says. "Our aim is to shift the focus from heating or cooling spaces, to heating or cooling people and the space they are occupying."

At the Edge, the Amsterdam office of professional-services firm Deloitte that opened in December 2014, workers can provide their heating, cooling and lighting preferences and make subtle adjustments to temperature via their smartphones, after downloading a special building app, says Dave Sie, a strategy and operations executive at Deloitte Real Estate Consulting. The 14-story building's 28,000 sensors collect anonymized data about workers' temperature and lighting adjustments, eventually learning aggregated users' preferences.

The headquarters for the Agnelli Foundation in Turin will be equipped with thousands of sensors to measure things like temperature, light and occupancy levels.

Architecture firm NBBJ, which has designed headquarters for firms such as Amazon.com Inc., is experimenting with new temperature, lighting, movement and sound-tracking sensors it calls **Goldilocks**, says Ryan Mullenix, an NBBJ design partner in Seattle. Last year NBBJ placed about 50 of the sensors in its New York office. The sensors generate heat maps that workers can track on their phones, helping them to choose workspaces in the office based on their heating, light and sound preferences, which might change throughout the day, Mr. Mullenix says. NBBJ hopes that the data collected by Goldilocks about its employees' climate preferences can help the firm design more thoughtful solutions to office climate battles.

"When six people are in one room and they all want six different things regarding climate and light, how do you come to the right consensus? That is the next challenge," Mr. Mullenix says.

Silverman, Rachel Emma, wsj.com/articles/at-last-a-possible-solution-to-officethermostat-wars-1489166854, The Wall Street Journal, March 12, 2017

Focusing on Acoustics
Can Improve Guests' Comfort

Your guests' ears never rest, not even when they're sleeping. Throughout the night, guests are likely to hear off-and-on HVAC systems, TVs in adjacent rooms and luggage carts in hallways.

"When humans were still sleeping in caves, we needed to hear twigs snap when predators approached," explains Jeff Loether, founder of Electro-Media Design, which provides acoustical and audio visual guidance for various hotel flags. "When man moved from caves to hotel rooms, he brought his hearing acuity with him." And while hungry predators are no longer a problem, sounds that go bump in the night are.

Old hotels are apt to have the biggest sound challenges when it comes to providing rooms with true sound privacy. Rebranded hotels also struggle against an inheritance of old sound-seeping problems from original construction. "They don't build them like they used to—and that's a good thing," says Paul Battaglia, architect and professor of architectural acoustics at the University at Buffalo.

The undesirable legacy of some older properties includes insufficient sound-absorbing insulation within guestroom wall cavities. Battaglia says rebranding architects often eschew demolition and the opening of existing walls, leaving them with a sound transmission classification (STC) lower than that found in newer hotels. "They may rate at STC-40, whereas today's luxury hotels are rated at STC-54 and above," he notes.

Why does it matter? "Twenty years ago, when most hotel brands' standards for design and construction were written, rooms had 27-inch tube TVs with $2 speakers and 1-watt amplifiers," Loether says. As manager of audio visuals and acoustics at Marriott for 10 years before starting his own consulting firm, Loether knows the audible footprint of most standard guestroom equipment. He says changing technology introduced a new level of sound bombardment. Today's rooms boast iPod-enabled clock radios with multiple amplifiers and flat-screen TVs with 100-watt stereo speakers.

The easiest way to combat the extra noise pollution, and increase a room's STC without costly demolition, is to adhere an extra layer of gypsum board to one side of a partition using viscoelastic sound-dampening adhesive, Battaglia says. "That type of adhesive is crucial. It can take a wall from STC-40 to STC-52."

Even with thicker walls, pathways through which sound escapes can defeat construction. Unsealed recessed electrical outlets are a common example. "I know a hotel with walls constructed to STC-60, but they performed at only STC-42 because the outlets weren't sealed," Battaglia says. "Yet, the fix was simple. Preformed acoustic seals were installed by the maintenance crew between guests. The results were nothing short of remarkable."

Sometimes high-end design elements—marble floors, stone walls—are culprits in the battle against sound fatigue, adds Ko Kuperus, general manager of Hunter Douglas Specialty Products. Kuperus is the sound expert behind the company's patented acoustic ceiling tiles capable of absorbing 85% of the sounds on corridor or lobby ceilings. The tiles also can be applied on top of drywall to absorb 70% of wall sounds and printed on to simulate wood grain, concrete, marble, leather, or any solid color, Kuperus says. "That's unique. They bring design luxury to the ceiling—that 'fifth wall' so often overlooked by interior designers."

Loether lists one more challenge to the sound conundrum: Rooms that are simply too quiet. "Several hotel flags have ordered the 'quietest possible' HVAC systems and got exactly what they requested. Too bad. They should have asked for systems that would provide the best guest experience," he says. "Pink noise" provided by consistently whirring fans is an acoustical blessing, Loether says; it masks less desirable sounds. "If a room is too quiet, you can hear your own carotid artery pushing blood," he quips. Battaglia says that's why some hotels now install sound-consistent HVAC systems that turn on right from the reception desk at check-in and switch off only at checkout.

Properties considering remodeling or new construction would be wise to address acoustics in initial planning phases. "Prevention is so much easier and cost-effective than treatment," Loether says. Meanwhile, existing lodging should investigate cost-effective fixes as described by Battaglia, as well as sound-absorbing products to keep environmental roars to a whisper.

"If all else fails, provide earplugs," Loether jokes. After all, those slumbering ears are always listening.

Newitt, Valerie Neff, http://lodgingmagazine.com/focusing-on-acoustics-can-improve-guests-comfort/, August 20, 2014

Focus on these areas to
control costs at your hotel

For hoteliers who want to maximize their revenues and return on investment, controlling costs are top of mind. And, fortunately, every nook and cranny of the hotel and its departments offers opportunities to do so.

"On the revenue side, you can increase your RevPAR (revenue per available room) and ADR (average daily rate) to have the best chance of producing flow-through to the bottom line," said Gerry Chase, president and COO of New Castle Hotels & Resorts. "We spend time maximizing how to spend our money." Chase said there are three major areas that hoteliers can execute better in an effort to control costs: labor, direct expenses and overhead expenses.

LABOR: Labor is one of the biggest controllable expenses, according to Farrah Adams, SVP of hospitality at LBA Hospitality. For example, hoteliers can look at the time it takes housekeepers to clean stay-over rooms versus check-outs. Determine how many minutes it takes to clean each type of room, and then plan staffing accordingly to help control labor costs.

Multibranded properties also have a greater opportunity to share resources such as employees, Adams said. "Sometimes we see shared management or a shared department head," she said. "If you're looking to cut costs or the market is softening, you can start sharing some of those resources."

Forecasting plays a huge role in controlling labor costs, Chase said. Associates can be scheduled based on an accurate forecast to better manage service expectations with the right number of staff.

Beau Benton, president of LBA, agreed. "You have to start out with a good model and understand what the numbers should be and hold steady to that, with a model that can flex and move with occupancy and demand," he said. "But it's hard to manage something if you don't know what it should be."

Additionally, Chase said cross-training is key as it not only helps team members grow in their careers, but it also can facilitate cost control. Employees can assist in and out of shoulder and peak periods, leading to a more efficient staff with fewer people needed during slower times.

Benton agreed that cross-training can be a boon to cost-control efforts, especially when it comes to food and beverage. For example, in certain brands, a front-desk agent can be trained to make coffee or handle grab-and-go food orders. This type of cross-training can cut down on labor expenses because only one employee is needed to handle both tasks.

FOOD AND BEVERAGE: Sources said that the F&B department offers many opportunities to control costs at properties, particularly when it comes to food sourcing. "Make sure that you're working with the least number of vendors to source all of the food, and pay attention to drop sizes to make a huge difference in cost," Adams said.

She said different food vendors have different allocations. If the F&B department is ordering once a day versus once a week, it will see some major cost differences. Each drop can incur up to $200, so the fewer, the better.

Chase said that controlling F&B costs can come by simple observation and menu audit. New Castle does menu management on a quarterly basis to keep operations in check.

"I always tell the kitchen to take a look at what comes back to the kitchen," he said. "Are we plating properly and have the right portions for what the customer wants and needs?"

OTHER OPPORTUNITIES: Many other facets of the hotel provide opportunities to control costs, from real estate taxes to energy management. A few worth noting, according to sources, include:

• Real estate taxes: Hiring an expert who understands market valuation changes can help save hoteliers on taxes, especially if a property hasn't been appraised for several years.

• Partnering with a purchasing conglomerate for national pricing on things hoteliers buy every day can save between 5% and 20% right off the top.

• Negotiating service costs: This can include things like finding the right waste-hauling company that offers the right-size dumpster with the right number of pickups per week.

• Furniture, fixtures and equipment: Several brands have their own packages that allow for a lower cost than custom designs due to the volume buy. If hoteliers want to have a custom design, they need to make sure that the hotel's market can support the cost from an ADR standpoint.

• Insurance premiums: Don't assume this should be an auto-

mated process. Shop around and find savings that can lead to a 10% to 20% flow to the bottom line.

• Energy management: Turning off lights when not in use cannot be overstated. Hoteliers should look to putting in efficient lighting that lasts longer and requires less labor to change out in addition to saving energy. The payback on energy-management programs usually happens within a three-year period, so they are worth the investment.

How Technology Is Making Expense Reporting Easier

New tools are removing one of the biggest headaches business travelers endure: expense paperwork

With the right app, business travelers can record travel expenses by simply speaking into a smartphone.

Good news for road warriors: Keeping track of travel expenses is getting a whole lot easier. From mobile apps with voice recognition to online travel-booking sites, new technology is allowing employees to record and create expense reports on the fly as they travel, so they don't have to spend as much time after the fact tallying up their costs.

The innovations are reducing one of the biggest headaches business travelers face: keeping track of receipts, submitting expense reports on time and facing questions about the legitimacy of certain charges. "I am so glad the days of having to carry around and protect receipts are over," says Michael Jacobs, chief procurement officer for office-supply company Staples Inc., which uses expense-processing technology from **Coupa Software**.

A win-win
In addition to streamlining expense reporting, the tools are helping organizations save money by making it easier for employees to comply with company travel policies.

Reviewing expenses as a manager is "significantly easier," says Lisa Brauch, manager of accounting operations at Garmin International, a GPS navigation and wearable-technology company. She says she would have had to hire an additional employee in her accounts-payable department to help process travel-reimbursement claims had Garmin not started using an expense-management system from **Certify**.

US firms have a vested interest in keeping a close eye on their travel costs: They are projected to spend a collective $296.1 billion on travel and entertainment in 2017, a 4.4% increase from last year, according to the Global Business Travel Association. Many companies budget 10% or more of their annual revenue for travel-and-entertainment spending, according to the Aberdeen Group, a research firm.

Expense processing started to get easier about five years ago when many companies began allowing employees to snap photos of receipts instead of collecting paper copies. Since then, voice recognition and GPS data have simplified the process even further. "Now I can just speak into my cellphone

and say 'breakfast at Starbucks for $5.25,' and forget about that expense," says Mr. Jacobs.

He simply opens the **Coupa** app on his smartphone, clicks on the microphone icon and announces the item. The app then automatically creates an expense line in an existing expense report under the correct category—in this case "meals."

Coupa also offers an <u>automatic mileage calculator</u>, called "**Smarter Trip**," which keeps track of a traveler's miles and allows creation of an expense line in the report for that. If the user decides to stop for a burger, the app will automatically detect the food vendor and ask if the user wants to create another line item for the meal.

Travel-booking sites, meanwhile, are helping organizations rein in expenses before their employees even hit the road. These tools can be customized to reflect a company's travel policy and prompt employees to select the lowest fare for a given work trip.

It "looks and feels like a leisure booking site, so our employees like using it," Cathy Sharpe, the director of global travel-and-expense management at Illinois Tool Works, says of **Concur Technologies**' travel-booking and expense tool. "But it can be configured for every country we operate in." The tool also translates currency automatically and gives managers who need to approve expense reports the option of reading them in the language of their choice.

The technology offered by **Concur, a unit of SAP SE**, has helped Illinois Tool Works, an industrial-equipment manufacturer operating in 58 countries, gain a better view of its employees' travel and the company's spending. Ms. Sharpe says that today, 89% of the company's travel is booked online, and the company has saved $1 million annually in back-office processing fees as a result.

Ms. Sharpe says employees like that Concur allows them to book rides through **Uber** and automatically submit those expenses. While on a recent business trip to China, she discovered a new app in the Concur suite called **TripLingo**. "It provides unlimited phone dialing wherever you can get Wi-Fi, or I can take an image of something on a menu and it translates it into English," she says.

Concur recently rolled out another application, a virtual travel-planning assistant called **Hello Hipmunk**. A manager preparing for a business trip can e-mail his or her group, and copy the Hello Hipmunk bot with a question such as, "We're looking to fly nonstop to San Francisco on March 30 through April 6. What are our options?" The bot then scours several travel sites and e-mails the group with flight and hotel options.

Setting parameters
Because the tools have made it easier to book and record travel expenses, companies such as Exotic Metals Forming Co. have seen an uptick in employees willing to travel.

Before the company began using Certify's expense-processing system, it would take two weeks to a month for employees to be reimbursed for travel costs, says Veray Fugere, a payroll specialist at the firm. Now they get a check or direct payment three days after submitting an expense.

"It has really encouraged people to travel, because they know they don't have to wait too long for the funds afterward," she says. "It also gives us a full view of the total expenses so we can track top spenders and see who is excessive."

MasterCard, meanwhile, has developed a payment tool to stop improper travel spending even earlier—either as it's happening or before it even starts. With MasterCard's **In Control** service, a manager can set parameters and choose to receive an e-mail or text alert if an employee uses the corporate card after a certain hour or tries to use the card at an unapproved merchant. "It's easier to set spending parameters beforehand rather than disciplining employees afterward for trying to charge a large hotel bar bill or an extravagant dinner," says Clive Cornelius, a senior director at travel-management company Carlson Wagonlit.

McConnon, Aili, How Technology Is Making Expense Reporting Easier, wsj.com/articles/how-technology-is-making-expense-reporting-easier-1489372005, March 14, 2017

Study: Cruise Industry Supports Sustainability

Because of the many jobs it supports on ships and in local ports of call, the cruise industry is well known for its economic benefits. As it turns out, however, it may also have an environmental upside. So finds a new report published by Cruise Lines International Association (CLIA).

The first-ever, wide-ranging analysis of the cruise industry's environmental practices and performance by independent maritime environmental experts, the report was prepared for CLIA by Energy and Environmental Research Associates (EERA), which analyzed a variety of research and data sources and also evaluated CLIA members' global fleet of nearly 300 ocean-going cruise ships. Although cruise ships represent less than 1% of commercial vessels on the sea, EERA concluded, they are leading the maritime community with regard to environmental stewardship.

"Our technical analysis of the cruise industry's leadership and performance in working to protect the environment found that CLIA's ocean-going member cruise lines often go beyond the protective environmental measures required by regulation," said James Corbett, a professor with the University of Delaware School of Marine and Science Policy, and one of the authors of the study. "The cruise industry also demonstrates continued leadership in the development of responsible environmental policies and investment in technological innovations to further protect oceans and air."

In the United States and Europe, the world's largest cruise markets, cruise ships account for only 3% and 1.2%, respectively, of all at-berth emissions generated in ports that cruise ships visit, EERA found. Additionally, it concluded, CLIA members meet or exceed international air emission requirements and are leaders in adopting cleaner fuels, controlling air emissions, and preparing vessels to connect to shore-based energy systems.

EERA also studied cruise ships' wastewater treatment practices and concluded that CLIA members' ocean liners meet or exceed international standards. In particular, it reported, CLIA's mandatory wastewater discharge policy (which prohibits cruise ships from discharging untreated sewage anywhere in the sea) goes well beyond international wastewater regulations, which allow commercial vessels to discharge untreated sewage as long as they are far from shore. CLIA members likewise are leaders in developing and deploying advanced wastewater treatment systems, reported EERA, which said 50% of new cruise ships over the next decade will utilize such systems.

"I am proud of the performance of CLIA cruise line members and their commitment to the protection of the environment. Safe-guarding and preserving the world's precious natural resources is not only the right thing to do, but it is essential to the cruise experience for generations to come," said CLIA President and CEO Cindy D'Aoust. "CLIA cruise line members take environmental commitment very seriously, and this research provides not only the first-ever authoritative baseline of the cruise industry's environmental performance, but it also provides a foundation for CLIA and our cruise line members as we continually focus on improvement and measuring the outcomes of best practices and policies."

Alderton, Matt, Study: Cruise Industry Supports Sustainability, successful meetings.com/News/Research-and-White-Papers/Cruise-Lines-International-Association-Study-Cruise-Ships-Environmental-Sustainability

Greening the fleet:
Uber eyes EV-only service in London

Uber is the latest transportation tech giant to evaluate the opportunity for EVs (electric vehicles) in ridesharing.

Getting up in the middle of the night to charge your car. Being forced to terminate a ride halfway to your passenger's destination. Missing out on lucrative long-distance rides because you're worried about losing charge. These are just some issues Uber drivers reported during a six-month study into the feasibility of driving an all-electric taxi in London.

More than 60% of Uber rides in London already take place in hybrid cars, but with politicians cracking down on air pollution and the impending rollout of the new ultra low-emission black cab, Uber is feeling the pressure to cut the carbon impact of its fleet even further.

In August it commissioned The Energy Savings Trust to investigate how easy it would be for a driver to go all-electric on the streets of London. Some 50 Uber drivers used a fully electric EV between August and January. While a small proportion of drivers used their own Tesla Model S cars, most leased a Nissan LEAF or BYD e6 at a reduced rate for the duration of the study.

Over the course of the study more than 35,000 riders took trips in the electric Ubers, and drivers covered more than 220,000 miles in their EVs. Drivers reported some significant benefits to driving electric cars. Passengers were intrigued by the EV and were impressed with smoothness and quietness of the ride. In fact, in focus groups some drivers "felt they had, in effect, sold electric vehicles from the journeys they had given," the report noted. The drivers also were motivated by the environmental benefits of the EVs—many said they had chosen to participate in the trial for precisely this reason.

**60% of Uber rides in London
already take place in hybrid cars.**

And they benefited from significantly lower refueling costs, with EVs costing around 10 cents a mile to run using public charge points compared to 11 cents for a hybrid and 16 cents for a diesel car. The report also noted that costs for EVs fall below 5 cents per mile if drivers can charge at home, but relatively few Londoners have access to the off-street parking that makes home charging viable. However, for all the upsides of EV use, the availability of charge points and the nagging problem of range anxiety proved a major issue for drivers in the study.

All drivers (except those behind the wheel of the 230-mile range Tesla) reported turning down journeys to airports or said they only turn on comforts such as heating or air conditioning when passengers were in the car, in order to conserve battery power. Half declined a journey at least once a week, and many said they were turning down business at least once a day due to battery concerns. Tracking devices attached to a selection of the trial cars confirmed the Ubers stuck to trips in a much narrower geographic area than a standard Uber usually would does.

The time needed to charge an EV during a shift also had a significant impact on the amount of hours drivers were able to work—and therefore a toll on their earnings potential. Only three publicly available rapid charge points are in central London, which take around 40 minutes to deliver an 80% charge, while the next speed down—fast charging—takes up to four hours for a full recharge.

The majority of drivers said they would have worked an extra 10 hours a week had they not had to spend time finding and using a charge point, and many reported arranging their daily lives around the need to charge their cars—including 30-minute walks to the nearest charge points to pick their car up after an overnight session or getting up in the middle of the night to plug in.

Drivers participating in the study received favorable leasing rates for their EVs—putting the costs in line with hybrid models—and in some cases cheaper recharging rates from selected charge points. The study noted that without these, the lost earnings from forced charging time and the opportunity cost of foregoing trips for fear of dwindling charge means driving an all-electric EV would not currently be economically feasible for Uber drivers.
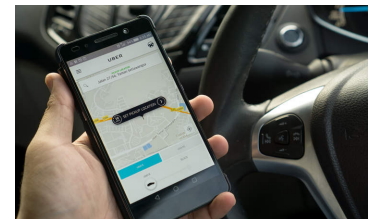
Charging cars can be costly for drivers, and there's a serious lack of rapid charging points.

"If electric private-hire vehicles are to be adopted by private-hire drivers at scale, the cost (both time and financial) and convenience of charging and running an electric vehicle must reach near parity with non-electric options," the study concluded. "This trial has shown that although there is cause for optimism with regard to both riders' and drivers' readiness to embrace electric vehicles, even with financial support through incentives such as below-market vehicle rental costs, this parity remains a distance away."

The good news is that TfL (Transport for London) plans to install 150 rapid charge points across London by 2018, and 300 by 2020. Even if a number of these will be placed in dedicated black cab rest stops to help smooth the way for the new plug-in, range-extended TX5 black cab, drivers soon will have access to many more charge points.

Meanwhile, the range of EVs is improving all the time, prompting BMW CEO Harald Krüger to declare recently that soon "range will no longer be a differentiating factor" for EVs. Uber drivers who operate EVs will not have to turn down long-distance fares for much longer.

Moreover, Uber is taking matters into its own hands in a bid to accelerate the shift to lower emission vehicles. Earlier this week the company announced plans to develop a network of

Uber-branded rapid chargers in central London only available for use by drivers using the Uber app. An update to the Uber app also will enable drivers to set a preferred destination for a trip so they will be taken in the direction of a rapid charging point when necessary.

Uber also said it plans to offer 100 more Nissan Leafs to drivers at reduced leasing prices over the next year, in a bid to further investigate the barriers to EV adoption in the private-hire transport sector. "We believe that new technology can help tackle the challenge of air pollution in the capital. Londoners already associate Uber with hybrid cars, but we want to go even further with more drivers switching to fully electric ones," an Uber representative said.

"Our vision is for mass adoption of fully electric cars as private-hire vehicles, but there are some really big challenges we need to overcome. Charging cars can be costly for drivers and there's a serious lack of rapid charging points in central London. We hope the mayor's forthcoming transport strategy will lead to more chargers which private-hire drivers can use. In the meantime, we're determined to make progress with a further 100 Nissan Leafs and plans for a network of chargers for drivers who use Uber."

London's black cabs may be going green, but without a more comprehensive charging network and longer ranges for mass market vehicles, it seems the rest of the city's taxi fleet won't be moving to the fast lane of EV adoption quite as quickly.

Cuff, Madeleine, Greening the fleet: Uber eyes EV-only service in London, greenbiz.com/article/greening-fleet-uber-eyes-ev-only-service-london, April 5, 2017

SHOULD YOU TAKE OFF YOUR SHOES?

Removing one's shoes when entering a home isn't as commonplace in the US as in some other countries. While going shoeless is considered polite for guests in Japan or Finland, hosts in the States risk catching visitors by surprise with the request. But it turns out taking your shoes off indoors isn't just good manners. It's good hygiene, too.

Shoes are a menagerie of microorganisms, sometimes carrying dangerous bacteria, says Kevin W. Garey, chairman of the department of pharmacy practice and traditional research at the University of Houston. Bacteria can be very hardy—hanging around in some cases for years—but so are most people.

People run little risk of falling ill because of germs clinging to their shoes unless they already suffer from an underlying condition that makes them vulnerable. The elderly and the young are also more susceptible.

But avoiding pathogenic bacteria that can cause illnesses from diarrhea to meningitis is easy, Mr. Garey says. Just take your shoes off. "It's amazing how far humans travel during the day, and all that walking drags in germs and bugs," he says.

Mr. Garey was among a group of researchers who published a study this year focusing on the prevalence of a specific bacterium, Clostridium difficile, also known as C. diff. It was responsible for nearly a half-million infections in the US that resulted in some 29,000 deaths in 2011, according to the Centers for Disease Control and Prevention.

Over two years, Mr. Garey's study tested for C. diff in more than 2,500 samples collected around Houston. Among samples collected in homes, 26.4% of shoe soles tested positive for C. Diff, about three times the number found on bathroom and kitchen surfaces.

And that's just one bacterium. In an earlier investigation, Mr. Garey examined past studies to learn if "shoe soles are a vector for infectious pathogens." The answer was a resounding yes. Among the studies: Austrian researchers found at least 40% of shoes carried Listeria monocytogenes in 2015.   And a 2014 German study found that over a quarter of boots used on farms carried E.coli.

"Essentially, when you wear your shoes in a house, you are bringing in everything you stepped in during the day," says Jonathan Sexton, a laboratory manager at the Mel & Enid Zuckerman College of Public Health at the University of Arizona.

Wiping your feet, however vigorously, on a welcome mat, provides only limited help, he says. "It will remove some of the dirt, but you have to think of the person who wiped their feet before. You might be picking up stuff they left behind."

Minaya, Ezequiel, Should You Take Off Your Shoes?, The Wall Street Journal, April 10, 2017

Why hotels and home rentals are moving forward together

When the likes of **Airbnb** and **HomeAway** first made inroads into the travel industry, they created two distinct clubs; established hotels on one side and home rentals on the other. Now, the lines between the two are blurring as the wider travel industry evolves to cater for the move towards local experiences and unique stays.

AccorHotels is looking to add **Travel Keys**, a travel broker for high-end villas into its portfolio after last year snapping up London-based **Onefinestay** to expand its reach into the luxury-serviced homes market. The hotel giant has also bought a 30% stake in **Oasis Collection**—which bills itself as home-meets-hotels platform catering to both leisure and business travelers—and invested in **SquareBreak**, another digital platform offering premium accommodation in resort locations.

"We have seen hotel operators expand in traditional hotel segments through M&A," says Ben Smith, Vice President, Global M&A at JLL Hotels and Hospitality. "Platforms like Airbnb are an extension of what traditional hotel companies have been doing all along, and in one view not so dissimilar to apartment hotel operators. It is not overly surprising that hotel operators would also be interested in acquiring home rental platforms. **Accor** now has 8,500 addresses in the luxury private rental market."

Travel companies too are keen for a slice of the action—and revenue—of these alternative accommodation platforms. **Expedia** acquired **HomeAway** in November in 2015, and last year opened an Asian office in Singapore as part of its growth plans in the region.

Collaboration and consolidation ahead
It's not just a case of global players buying up the market disrupters—collaboration is also another way to go. Luxury collection, **Châteaux & Hôtels**, for example, announced a joint initiative with **Airbnb** in 2016 whereby it would offer culinary experiences as part of **Airbnb's Trips** venture and put its rooms up on the website. Such "creative partnerships" between hotel companies and alternative accommodation platforms could also be a way for the latter to grow beyond their existing business models.

Recent research from JLL suggests that home rental sites and the alternative accommodations market account for approximately 10% of hotel room bookings in the top global gateway markets such as New York, London and Paris. However, the number of rooms offered by these online platforms is showing some signs of slowing or plateauing growth in urban gateway cities due to the regulatory environment and the number of willing hosts reaching a structural cap.

This may be one reason why Airbnb splashed out on **Luxury Retreats** to build its presence in the high-end home rental and service sector. And there could well be more consolidation between home rental platforms.

"The lodging industry is still one of the most fragmented consumer industries and there are clear economies of scale, so it is likely that there will be further consolidation going forward. M&A will continue between traditional hotel companies, but will likely also involve home rental and online distribution platforms," adds Smith.

Evolving with the times
As the vacation home rental market matures, it's also driving innovation among the hotel groups to stay ahead of the curve. **Marriott International** is targeting travelling families and groups of friends by creating communal spaces such as a kitchen and lounge area outside rooms in its **Element** brand.

New hybrids are also springing up, such as the **Ovolo group**'s **Mojo Nomad** where guests can live and work at selected Ovolo hotels in Hong Kong and Sydney. **Zoku**, a new hotel in Amsterdam, which is dubbed as "a combination between **Airbnb** and a **WeWork** coworking space," already has plans to expand internationally despite being less than a year old.

While disruption from home rental sites and alternative accommodations remains relatively small in the grand scheme of the global lodging sector, change is rippling through the sector. As the sharing economy continues to develop, more innovative products and new business models will help to meet the evolving needs of modern travelers and in turn, shape the future of the industry.

Lim, Serene, Why hotels and home rentals are moving forward together, sjllrealviews.com/industries/why-hotels-and-home-rentals-are-moving-forward-together/, April 4,2017

Hilton Garden Inn donates pillows to animals in need

The Hilton Garden Inn Exton/West Chester, PA, offers more than just comfortable accommodations to its guests. The hotel recently donated more than 100 pillows to the Brandywine Valley SPCA in West Chester. The pillows are used to provide the animals a comfortable bed during their time at the shelter. "The pillows are very beneficial to the animals here," said Andrew Haman, shelter manager at the Brandywine Valley SPCA. "It makes them comfy and very relaxed."

 "This is a win-win-win situation," states David Hirsch, general manager. "Our guests continue to enjoy the newest Hilton Garden Inn pillows because they are regularly replaced, the animals at the SPCA are made much more comfortable during their own stays, and all of these used pillows do not end up in a landfill, in keeping with our green practices."

http://www.dailylocal.com/general-news/20170326/hilton-garden-inn-donates-pillows-to-animals-in-need

GREEN IDEA!

Toilet Bowl Cleaner: Drop partially-used bar soap in toilet tanks. You'll be surprised at how clean it helps keep toilet bowls!

FINAL WORDS . . .

Let us settle ourselves, and work and wedge our feet downward through the mud and slush of opinion, and prejudice, and tradition, and delusion, and appearance, that alluvion which covers the globe . . . till we come to a hard bottom and rocks in place, which we can call reality, and say, This is . . .

Henry David Thoreau, *Walden*