

## 13 EV Chargers Are Coming – And It's Complicated

Many Auto makers are requiring dealers to invest in the installation of Electric Vehicle charging stations. For dealers, this transition into the EV world ushers in the need for on-site EV chargers to provide support for customer sales, vehicle delivery and service work. While many OEMs require a specific brand and unit the dealer needs to have, for other dealers you might have to do your own research on features, costs, needed facility upgrades and incentives – but one factor too often left out of the evaluation is the impact of EV chargers on long term operating costs.

### As you plan your EV charger purchase, consider the following:

EV chargers have varying capacities and charging speeds – an important factor when choosing what will work best for your needs. These choices will have potentially major effects on your energy usage – an issue that is often not discussed nor well-understood. OEMs typically offer technical assistance, but energy economics are highly local and driven by utility demand charges, which are a significant (and growing) component of total utility billing.

Demand charges are based on the highest kW demand during any 15-minute period each month. For example, under ConEd's rate EL-9, 100 kW of EV charging can result in \$2,944 in incremental demand charges for one summer month.

### Technology and third party ownership

The good news is that on-site technologies, such as solar and battery energy storage can mitigate these costs and put dealerships in a

stronger economic position going forward. Furthermore, integrated solutions can be financed and managed by 3rd parties who bring significant expertise, allowing dealers to stay focused on selling and servicing vehicles.

### Highlights include:

#### *Solar photovoltaic cells (PV) –*

- Solar reduces exposure to utility rate volatility
- Solar car canopies shelter inventory and enhance community profile

#### *Energy Storage*

- Match solar energy to your building's needs.
- Minimize demand cost when charging/discharging.
- Resiliency during power outages/brownouts

#### *Energy Efficiency:*

- Lighting, HVAC and building automation upgrades modernize your facility
- Service models support facility management with 24/7 oversight

#### *Financing:*

- Significant tax benefits attract 3rd party integrator investment and can provide a financing solution that caps costs.
- Turn-key, managed solutions provide peace of mind through performance and long-term maintenance

### Putting it all together

Making a sound decision on EV charging infrastructure requires assessing critical impacts on your long-term energy costs. These issues can seem daunting, but there are a few key things dealers can do to put themselves on the path to the right

solution:

- Reduce current energy use by installing energy efficient systems, e.g., HVAC, LED lighting, star energy efficient appliances, etc. – this is always the best and first investment to make
- Identify a vendor that can conduct an evaluation of your current capacity limitations with the electrical grid in your area and an assessment of the impacts of integrating solar generation and energy storage on grid constraints and long-term operating costs. Such assessments are available at no cost and will provide good food for thought
- When you are ready to consider implementing an EV charging infrastructure installation, engage with a knowledgeable integrator that can finance the installation and model, size and maintain the system to ensure that it performs at no risk to you.

Laying the proper groundwork for incorporating an EV charging infrastructure in your dealership depends on being able to locate the right resources and expertise – extra legwork that will pay off by positioning you for the best long-term outcomes.

For more on this topic, you can view the April 29, 2021 *Bagels with Bieber* webinar entitled *EV Charging Station Incentives For Dealers* featuring Maria Fields, President, JouleSmart Solutions, Dennis Quinn, ABOVEgrid Clean Energy Development, and Allison Kling, Project Specialist EV Charging, Con Edison at: <https://www.gnyada-covid19.com/webinars-1/ev-charging-station-incentives-for-dealers>