EV Charging Infrastructure Summit North America East

January 28-29, 2025 • Atlanta

Program Schedule *(subject to change)*

Tuesday, January 28, 2025

8.00 – 9.00 Continental breakfast and registration

9.00 – 9.30 **Opening Address**
- Amith Kota, Global Chief Technology Officer, Landis+Gyr

9.30 -10.00 **EV Charging in the U.S. – Market Drivers, Opportunities and Challenges**
- Michael Sheppard, CEO, PTR

10.00-10.30 **Scaling EV Charging Networks: Lessons from the Field**
- Raphael Declercq, CEO, PowerFlex

This session delves into the challenges and successes of scaling EV charging infrastructure in the U.S. Raphael Declercq will share insights from PowerFlex's extensive experience in developing large-scale networks, addressing key hurdles like site selection, regulatory compliance, and technology adoption. The session will highlight innovative approaches to network expansion and customer engagement, focusing on long-term sustainability.

Key Learning Points:

- Strategies for overcoming network expansion challenges
- Regulatory insights for large-scale EV infrastructure
- Leveraging technology for efficient scaling
- Customer engagement and satisfaction in network growth

10.30 – 11.00 Networking Coffee Break

11.00 – 12.15 **Fleet EV Charging Solutions and Energy Management**
- Ross Malme, President and CEO, Malme Energy Consulting LLC (moderator)
- Austin Chambers VP of Market Development at Kitu Systems
- Tim Echols, Commissioner, Georgia Public Utilities Commission
- Savas Tsitiridis, President, United Taxi Management Group

The transformation of the commercial transportation sector from ICE to EVs will be one of the most critical aspects of decarbonization of the transportation sector. This panel will discuss the strategic, economic, technical and regulatory aspects of that transformation. Panelists include GA PUC Commissioner Tim Echols, who is leading the charge for electrification of the transportation sector in Georgia, Savas Tsitirdis, CEO of one of the oldest taxi cab companies in NYC, who is in the process of electrifying their entire fleet, and Austin Chambers, VP of Market Development of Kitu Systems, a leading provider of software and communications technology for transportation electrification.

12.15-1.15 Lunch Break

1.15-1.45 **Keynote Address**
- Greg Chafee, Partner at Thomson Hines

1.45-2.45 **Electric Vehicles: Driving the Customer Experience**
- Nathan Shannon, President & CEO, Smart Energy Consumer Collaborative (moderator)
- Lincoln Wood, Clean Transportation Manager, Southern Company
- Tim Jarrell, Vice President, Power Supply and Planning, Cobb EMC
- Asher Dozier, E-Mobility Engagement Lead, University of Georgia

As the electric vehicle (EV) market moves from early adopters to the mainstream, electric utilities will play a crucial role in helping consumers navigate the shift to electric transportation. This session will leverage national consumer research to illustrate how utilities can better educate residential customers about EVs, tackle concerns related to EV charging, promote EV-specific rates and programs, and enhance the overall customer experience with EVs. We will also showcase successful EV programs currently in the field, offering a blueprint for other utilities to follow.

Key Takeaways:

- Consumers' preferences around public and home charging
- The impact of financial concerns on EV adoption
- EV programs that are improving the customer experience

2.45-3.15 Networking Coffee Break

3.15-4.30 *Session information TBA*

4.30-5.00 **Understanding the Dynamics of EV Adoption and the Implications for Charging Infrastructure**
Ryan D. James, PhD, Associate Director, Guidehouse

There has been a growing literature focused on understanding the factors which influence EV adoption by consumers. In this body of work, an understanding of EV adoption follows a diffusion model typical of new product and technology adoption, in which consumer demographics and economic factors play a key role. This presentation takes a deeper look at the dynamics of EV adoption growth, using real-world vehicle registration, demographic, and changing location data within a spatial econometrics framework. Under this framework, the research yields insights that are relevant to how local social constructs and policies can directly influence EV adoption. Understanding these adoption rates is critical for developing successful plans for EV charging infrastructure deployment.

5.00 – 6.30 Drink Reception

Wednesday, January 29, 2025

8.00 – 9.00 Continental breakfast

9.00 – 9.30 **Accelerating EV Adoption: Leveraging Hydrogen for Sustainable Charging Infrastructure**
- Alex Ivanenko, CEO & Founder, HyWatts

The global shift to electric vehicles is booming, with the U.S. aiming for 50% of new vehicle sales to be electric by 2030. This surge demands a massive expansion of EV charging infrastructure, posing challenges to the existing electrical grid. This session will explore innovative "Power-plant-in-a-box" strategies for meeting this challenge, utilizing solar-powered, hydrogen-based fuel cell technology, thereby reducing grid dependence and benefiting power-intensive industries. We will explore hydrogen's crucial role in a decarbonized future, emphasizing Long Duration Energy Storage (LDES) technologies and strategies to cut hydrogen production costs.

9.30-10.30 **Creating More Connected, Efficient Fleets: Optimizing School Bus Charging Interoperability**
- Kevin Matthews, Head of Electrification, First Student
- Alise Crippen, Lead Project Manager, Electric School Buses, CALSTART (moderator)
- Van D. Wilkins Jr., EVP Growth & Co-founder, InCharge Energy
- *Additional panelist TBA*

The electrification of school buses is gaining momentum, driven by federal and state funding, but its success ultimately hinges on school districts effectively navigating this complex transition. With limited time and resources, many schools find the shift to electrification to be a significant challenge. Interoperability between buses and chargers adds another layer of complexity for districts, and if not guaranteed could remain a barrier to harnessing the potential of V2G and microgrid technologies. In this session, we will explore the current landscape of school bus charging interoperability and discuss how industry can improve this aspect of electrification to create more connected, efficient fleets.

10.30-11.00 Networking Coffee Break

11.00-12.00 **EVPPs: Leveraging EV Charging Flexibility for Grid Reliability**
- *Representative from WeaveGrid and additional panelist TBA*

Electric vehicles are rapidly evolving from transportation modes to critical assets for grid resiliency. We will delve into the technical, economic, and policy frameworks necessary to unlock the full potential of VPPs, ultimately reducing energy system costs. The session will highlight how collaboration across the value chain can accelerate the integration of EVs into the grid, providing tangible benefits to both EV owners and the broader energy ecosystem.

12.00-1.00 Lunch

1.00-1.30 **Powering Fleet Electrification with Resilient, Sustainable Microgrids**
- Alok Singhania, Senior Partner, Gridscape Solutions

Microgrids, as sustainable local power plants, provide the only reliable, cost-effective solution for fleet electrification. Solar energy is essential, but not enough on its own -- battery storage and other components are required to ensure continuous energy availability. While future technologies like hydrogen may emerge, businesses need immediate solutions as EV adoption accelerates.

This session examines how modular, product-based microgrid systems can allow for integration of additional energy sources, ensuring flexibility and scalability. When paired with AI-driven machine learning, such systems are designed to optimize energy distribution in real-time, improving efficiency, reducing costs, and enhancing resilience. Case studies of such microgrid-centric EV charging deployments will be discussed.

1.30-2.00 *Session Information TBA*

2.00-2.30 **National Lab Update on Driving EV Charging: Recent Activities, Capabilities, and a Smart Charging Management Project Case Study**
- Yan (Joann) Zhou, Principal Transportation Systems Analyst and Group Leader for Vehicle and Energy Technology & Mobility Analysis, Argonne National Laboratory

2.30-2.45 Coffee break

2.45-3.15 **The Electric School Bus Initiative and Opportunities for VGI**
- Jessica Wang, Manager, Electric School Bus Initiative, World Resources Institute

3.15-3.45 **Evaluation of Transition to 100% Electric Vehicles (EVs) by 2052 in the United States**
- Pravin Sankhwar, Independent Scholar and Electrical Engineering Consultant, WSP

According to various studies, petroleum resources for ICE vehicle fuel will last until approximately 2052. Utilizing the US Federal Highway Administration (FHWA) published data on the number of registered vehicles by each state, a profile of vehicles by 2052 was developed using a time series, including the total number of EVs by that date. Based on available fuel economy data published by the US Department of Energy, the average energy consumption per mile (kWh/mile) for each vehicle type was factored into the energy demand calculation for 100% electrification by 2052. This presentation uses the results of these forecasts and calculations to discuss the types of EV charging infrastructure that will be required by 2052 to meet the projected growth. We will examine EV fleet profiles and projections for the near future, as well as utility plans for meeting EV growth, including additional fast chargers (Level 3) at existing gasoline stations. Additionally, the potential of rooftop solar-based charging systems will be discussed as part of an overall solution strategy.