#### Electric Vehicles Workshop October 25 – 28, 2021

#### Register <u>here</u>

#### Monday, October 25 Day 1: BEV 101

This session aims to outline the current state of affairs for electric vehicles – they go farther, perform better, and are less expensive than even 5 years ago, so there is a lot of progress to share. An opening presentation will overview the electric vehicle landscape so that all participants have a shared knowledge base of the current available vehicles, technologies, costs, and capabilities. Subsequent sessions will introduce BEV technologies and consumer and regulatory considerations, including highlights of the related content in the recently published National Academies' report. The final session will examine EVs in the context of a decarbonized transportation system, including how they can contribute to decarbonization goals and possible co-benefits beyond emissions reductions, such as health impacts, V2G and energy storage, and resource and electricity planning.

1:00 PM ET	Introductory Remarks
	Steven Cliff, Acting Administrator, National Highway Traffic Safety Administration
1:10 PM ET	Welcome and Overview of the Electric Vehicle Landscape
	Gary Marchant, Arizona State University, moderator
1:30 PM ET	<b>Technical Talks and Q&amp;A</b> : Introduction to BEV Technologies <i>Nady Boules, NB Motors, LLC</i>
	Dee Strand, Wildcat Discovery Technologies
	Denise Gray, LG Chem
	AK Srouji, Romeo Power
2:40 PM ET	<b>Technical Talks and Q&amp;A</b> : Introduction to BEV Consumer and Regulatory Considerations
	Dave Cooke. Union of Concerned Scientists
	Alexander Edwards Strategic Vision
	Kate Whitefoot, Carnegie Mellon University
	Joshua Linn, University of Maryland

3:50 PM ET Break

4:00 PM ET **Technical Talks and Q&A**: Transportation Decarbonization Rachael Nealer, White House Council on Environmental Quality Patty Monahan, California Energy Commission Dan Sperling, University of California, Davis

5:00 PM ET ADJOURN

#### **Tuesday, October 26** Day 2: Vehicle Production and Lifecycle

This session will cover the EV lifecycle ecosystem, from material availability and manufacturing to end-of-life options. Adoption of EVs will have a profound impact on the automotive workforce and supply chain – the first session will examine existing labor markets and supplier subsectors that will face significant changes with wider EV adoption. The second session will explore new supply chain needs that are specific to BEVs. The third session will focus on end-of-life options including battery recycling and total lifecycle costs. The day will conclude with a panel discussion on policy and market options to mitigate potential disruptions in the automotive supply chain.

1:00 PM ET	Welcome
	Anna Stefanopoulou, University of Michigan, moderator
1:05 PM ET	Technical Talks and Q&A: Impacts to Existing Supply Chains
	Kristin Dziczek, Center for Automotive Research
	Brad Markell, AFL-CIO
	Zoe Lipman, BlueGreen Alliance
2:00 PM ET	Technical Talks and Q&A: New Supply Chain Needs Specific to BEVs
	Warren Day, United States Geological Survey
	David Klanecky, Piedmont Lithium
	Celina Mikolajczak, QuantumScape
3:00 PM ET	Break
3:15 PM ET	Technical Talks and Q&A: Vehicle End-of-Life Options
	Linda Gaines, Argonne National Laboratory
	Fan Dai, University of California, Berkeley
	Anna Stefanopoulou, University of Michigan
4:15 PM ET	Panel Discussion: Policy, Technical, and Market Options for Supply
	Chain and End-of-Life
	David Howell, DOE-VTO
	Renata Arsenault, Ford
	John Graham, Indiana University
5:15 PM ET	ADJOURN

#### Wednesday, October 27 Day 3: Electric System

This session will examine the impacts of mass-market electric vehicle charging on the U.S. electric system. Sessions 1-3 will be technical sessions. The first session will cover estimates of electricity demand for charging vehicles at mass market deployment, including the logistics of charging requirements by technology capability, and consumer needs such as location and charging time. The second session will detail the generation and load profiles expected from these needs. The third session will describe the concerns that arise from changing electricity distribution requirements, particularly local system loads. The final session will be a panel to discuss the policy, technical, and market options for addressing electricity system needs.

1:00 PM ET	Welcome
	Zhenhong Lin, Oak Ridge National Laboratory, moderator
1:05 PM ET	Technical Talks and Q&A: Electricity Demand for Charging at Mass
	Market EV Deployment
	Chris Nelder, The Energy Transition Show
	Matthew Cloud, National Grid
	Rohan Patel, Tesla
2:00 PM ET	<b>Technical Talks and Q&amp;A</b> : Electricity Generation and Load Profiles for EV Charging, and related impacts
	Michael Kintner-Meyer, Pacific Northwest National Laboratory
	Jeremy Michalek, Carnegie Mellon University
	Yamen Nanne, Los Angeles Department of Water and Power
3:00 PM ET	Break
3:10 PM ET	<b>Technical Talks and Q&amp;A</b> : Electricity Distribution System Loads for EV Charging
	Deepak Divan, Georgia Tech
	Eric Cutter, E3
	Karen Glitman, Center for Sustainable Energy
	Jason Hills, Los Angeles Department of Water and Power
4:15 PM ET	<b>Panel Discussion</b> : Policy, Technical, and Market Options for Electricity System Needs
	Sara Baldwin, Energy Innovation
	Maria Bocanegra, Illinois Commerce Commission

Daniel Bowermaster, Electric Power Research Institute Alan Jenn, University of California, Davis

5:15 PM ET ADJOURN

### Thursday, October 28 Day 4: Consumer Needs

This panel will cover consumer aspects of electric vehicle adoption. The first session will examine current trends in consumer adoption and use of EVs and consider how these might change in the future. The second session will focus on EV availability for all buyers, examining issues such as EVs in the used car market and equitable access for low-income drivers. The third session will explore the transportation needs of various consumers, including gasoline "superusers" and rural communities, and will consider how EVs can meet those needs. A concluding panel discussion will wrap up the entire workshop by evaluating policy, technical, and market strategies for removing barriers to EVs once cost parity has been reached.

<b>Welcome</b> Kate Whitefoot, Carnegie Mellon University, moderator
<b>Technical Talks and Q&amp;A</b> : What does the future of EV adoption look like from a consumer perspective? <i>Tyson Jominy, J.D. Power</i> <i>Ahmed Abdulla, Carleton University</i> <i>Shelley Francis, EV Noire</i>
<b>Technical Talks and Q&amp;A</b> : What is needed to make EVs available to all buyers, especially in the used market, and for low-income drivers? <i>Gil Tal, University of California, Davis Zhenhong Lin, Oak Ridge National Laboratory</i>
Break
<b>Technical Talks and Q&amp;A</b> : How can EVs meet the transportation needs of all drivers, including "super-users"? <i>Matthew Metz, Coltura Nick Millar, EV Connect Kelly Yearick, Forth</i>
<b>Panel Discussion</b> : Policy, Technical, and Market Options to Remove Barriers to EVs once Cost Parity has been reached Carla Bailo, Center for Automotive Research Britta Gross, Rocky Mountain Institute Sandra Wappelhorst, International Council on Clean Transportation Yan (Joann) Zhou, Argonne National Laboratory