The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Speaker Biographies

DAY ONE

Session 1

Gary Marchant, Arizona State University

Gary Marchant is Regents' Professor and Faculty Director of the Center for Law, Science & Innovation, at the Sandra Day O'Connor College of Law, Arizona State University (ASU). His degrees include a Ph.D. in genetics (University of British Columbia), a J.D. in law (Harvard Law School), and a M.P.P. in public policy (Kennedy School of Government). He teaches, researches and speaks about the governance of a variety of emerging technologies, including biotechnology, genomics, neuroscience, nanotechnology, artificial intelligence and blockchain. He is an elected lifetime member of the American Law Institute and Fellow of the Association for the Advancement of Science. He has served on six National Academy of Sciences study committees, and is currently Chair of the IEEE P2863 Working Group developing a standard for the governance of AI by entities.

Session 2

Nady Boules, NB Motors, LLC

Dr. Nady Boules is the president of NB Motors, a private consultancy firm he founded after retiring from General Motors in September 2013. His career with the automotive industry spanned over 32 years with General Motors and Delphi, including 14 years as director of R&D and Innovation. In his most recent capacity as director of GM's Research & Development's Electrical & Control Systems Research Lab from 2007-2013, he was responsible for the development of advanced electrical systems and components for electrified, connected, and automated vehicles to enhance vehicle safety, comfort and efficiency. He has also led all GM's R&D activities in areas of electronics and control software globally. Dr. Boules received his doctorate of engineering degree in 1978 from the Technical University of Braunschweig, Germany. He is a Life fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the recipient of the 2011 IEEE Nikola Tesla Award for his work on permanent magnet motors. He is the author of numerous patents, technical and invited papers. He has also served as a member of the board of directors of Intelligent Transportation Society of America (ITS-A), and served on several National Academies' committees on advanced automotive technologies and their impact on fuel economy.

Dee Strand, Wildcat Discovery Technologies

Dr. Deidre Strand is Chief Scientific Officer at Wildcat Discovery Technologies. Dr. Strand has over twenty five years of experience in materials research, development, and commercialization, primarily in the areas of energy storage (lithium ion batteries) and electronic applications. Prior to joining Wildcat in 2012, Dr. Strand served as a Research Fellow at Dow Chemical, where she was the technical lead in Dow Energy Materials, as well as the Principal Investigator on external research programs with universities and national labs on battery materials. Dr. Strand also has extensive experience in patent analysis and technical due diligence of new technologies. Dr.

Strand completed her Ph.D. in Analytical Chemistry at the University of Wisconsin-Madison, under the supervision of Professor John Schrag. Her Ph.D. research focused on rheology and birefringence of polymeric solutions. Dr. Strand also holds a Master of Science degree in Chemistry from the California Institute of Technology and a Bachelor of Science degree in Chemistry from North Dakota State University.

Denise Gray, LG Chem
Denise Gray is President of LG Energy Solution Michigan Inc. Tech Center, the North American subsidiary of LG Chem (LGC), South Korea. In this position, her team provides battery solutions for automotive and non-automotive applications. Denise holds several board or director positions: LG Energy Solution Michigan Inc., Tenneco Automotive, Canadian National Railway, Board on Energy and Environmental Systems, and Original Equipment Supplier Association. Recently, Denise was appointed to the U.S. Department of Energy, Secretary of Energy Advisory Board. Prior to her current position at LG, Denise held automotive leadership positions with AVL List in Graz, Austria and Atieva in Redwood City, California. The vast majority of her professional career (30 years) was with General Motors, where she spearheaded efforts in vehicle electrical and powertrain systems controls and software, including battery systems. Denise holds a BSEE degree from Kettering University and a MSES from Rensselaer Polytechnic Institute.

AK Srouji, Romeo Power
AK Srouji is the Chief Technology Officer at Romeo Power, an energy technology and manufacturing company, building the highest energy density battery packs for electric vehicles. He directs all technical and technological developments, including IP strategy, roadmaps, and product development, internally and in collaboration with strategic partners. Previously, Dr. Srouji was developing advanced physico-chemical battery models at Robert Bosch's Research & Technology Center in Silicon Valley. He also worked on novel battery component development, spanning from next-gen lithium ion to all solid-state batteries. Throughout his energy storage technology career he has successfully brought to market multiple programs funded by the US Department of Energy. He holds an MS degree in Mechanical Engineering, and a PhD in Energy & Mineral Engineering with a focus on electrochemistry from The Pennsylvania State University.

Session 3
Dave Cooke, Union of Concerned Scientists
Dave Cooke is a senior vehicles analyst in the Clean Transportation Program, specializing in both light- and heavy-duty fuel economy. He conducts research on fuel efficiency technologies and the implications for oil consumption and greenhouse gas emissions across the transportation sector. Before joining UCS, Dr. Cooke was a Mirzayan Science and Technology Policy Fellow and associate program officer with the National Academies' National Research Council, where his work with the Board on Energy and Environmental Systems focused on automotive technologies, including peer-reviewed consensus studies on the development of advanced technology vehicles by 2050 and the barriers facing electric vehicle deployment. Dr. Cooke received his Ph.D. in condensed matter physics in 2010 from the University of California,

Berkeley, where his dissertation focused on the fundamental science behind modern hard drive technology, exploring the electronic and magnetic properties of these novel material systems through microcalorimetry. Prior to this, he received his BS in physics from Harvey Mudd College in 2002 and his MS in physics from the University of California, San Diego in 2004.

Alexander Edwards, Strategic Vision
In addition to the overall course and direction of Strategic Vision, Alexander Edwards is a key architect of tools and software which measures decision-making, human behavior, attitudes and perceptions. He directs operations and provides support for advanced clinical qualitative and quantitative studies. This includes large quantitative studies like the Mobility Experience Study (MxS) and parts such as the New Vehicle Experience Study (NVES). Launched in 1994, NVES is the largest new vehicle owner study in the US with an average of 250,000 new vehicle owners participating on an annual basis. In addition to understanding the consumer's experience with the vehicle, NVES also covers who the customer is (from demographics to personal priorities and values) to how and why they considered, purchased and rejected the vehicles that interested them.

Kate Whitefoot, Carnegie Mellon University
Dr. Kate Whitefoot is an Assistant Professor of Mechanical Engineering, and Engineering and Public Policy at Carnegie Mellon University. She is a thrust leader of Technology Commercialization for the NextManufacturing Center and a Faculty Affiliate at the Carnegie Mellon Scott Institute for Energy Innovation. Prior to her current position, she served as a Senior Program Officer and the Robert A. Pritzker fellow at the National Academies of Sciences, Engineering, and Medicine where she directed the Academies' Manufacturing, Design, and Innovation program. Professor Whitefoot's research bridges engineering design theory and analysis with that of economics to study the design and manufacture of energy efficient and low-carbon products and processes and their adoption in the marketplace. Her areas of expertise include vehicle fuel efficiency, consumer choice, design and adoption of green products, energy-efficient and productive manufacturing, and energy and environmental policies. Professor Whitefoot has gained recognition nationally and internationally for her research and teaching. She served on the National Academies Committee on the Review of the National Institute of Standards and Technology (NIST) Engineering Laboratory. Her research is featured in the Washington Post, Popular Mechanics, Bloomberg Business, and Business Insider, and referenced in the 2017-2025 Corporate Average Fuel Economy rulemaking. She has worked with several companies in automotive, aerospace, and high-tech industries, and has been invited to present briefings at the White House, Capitol Hill, the Department of Commerce, and the Environmental Protection Agency. Dr. Whitefoot earned three degrees from the University of Michigan: a B.S. and M.S. in Mechanical Engineering, and a Ph.D. in Design Science—a multidisciplinary program where she concentrated in Mechanical Engineering and Economics, completing course sequences and having an advisory committee across both disciplines.

Joshua Linn, University of Maryland
Dr. Joshua Linn is an Associate Professor at the University of Maryland and a Senior Fellow at Resources for the Future (RFF). Linn's research centers on the effect of environmental regulation and market incentives on technology, with particular focus on the electricity sector and markets

for new vehicles. His work on the electricity sector has compared the effectiveness of cap and trade and alternative policy instruments in promoting new technology, including renewable electricity technologies. Studies on new vehicles markets investigate the effect of CAFE standards and fuel prices on new vehicle characteristics, technology, consumer well-being, and manufacturer profits. He has published in leading general interest and field journals in environmental, energy, and health economics. Linn, who joined the University of Maryland in 2018, joined RFF in March 2010, was an assistant professor in the economics department at the University of Illinois at Chicago and a research scientist at MIT. Linn holds a PhD in economics from Massachusetts Institute of Technology and a BA in Astronomy and physics from Yale University.

Session 4

Rachael Nealer, White House Council on Environmental Quality

Rachael Nealer is the Deputy Director Transportation Technology and Policy where she advises and coordinates the execution of the Biden-Harris Administration's transportation priorities. She also is the chair of the Transportation Research Board Alternative Fuels and Technologies Committee. Throughout her career, she has focused on researching transportation as a system of systems and developing strategy around how to decarbonize transportation through technology development in concert with supporting policies. Dr. Nealer has previously held various roles at the Department of Energy, most recently, the Senior Advisor to the three transportation offices: Bioenergy, Hydrogen and Fuel Cell, and Vehicle Technologies Offices. She has also worked in the non-profit sector the Union of Concerned Scientists researching the environmental impacts of electric vehicles compared to gasoline vehicles over their life. Prior to UCS she worked at the Environmental Protection Agency in the Renewable Fuels Standard office and she received her joint PhD in Civil and Environmental Engineering and Engineering and Public Policy from Carnegie Mellon University where she specialized in lifecycle environmental impacts of transportation. As a former Chief of Staff, a personal passion of hers is ensuring the federal government is recruiting and retaining high quality talent. In her personal time, she also enjoys watching professional tennis, running and walking along the Anacostia River Trail, and camping and hiking with her family on the weekends.

Dan Sperling, University of California, Davis

Dr. Daniel Sperling is Distinguished Blue Planet Prize Professor of Civil Engineering and Environmental Science and Policy, and founding Director of the Institute of Transportation Studies at the University of California, Davis (ITS-Davis). He has held the transportation seat on the California Air Resources Board since 2007 and served as Chair of the Transportation Research Board (TRB) of the National Academies in 2015-16. Among his many prizes are the 2018 Roy W. Crum award from TRB, its highest research award; and the 2013 Blue Planet Prize from the Asahi Glass Foundation Prize for being “a pioneer in opening up new fields of study to create more efficient, low-carbon, and environmentally beneficial transportation systems.” He served twice as lead author for the IPCC (sharing the 2007 Nobel Peace Prize), testified 8 times to the US Congress, and has authored or co-authored over 250 technical papers and 13 books. Perhaps his most memorable accomplishment will be 6 minutes on The Daily Show with Jon Stewart.

Patty Monahan, California Energy Commission
In April 2019, Governor Gavin Newsom appointed Patty Monahan to be one of the five commissioners on the California Energy Commission. SHe serves in the Energy Commission's Science/Engineering position and is the lead commissioner on transportation. She has dedicated her career toward advancing clean energy technologies and cutting harmful pollution, with a focus on equity. Before joining the Energy Commission, she served as the transportation program director at the Energy Foundation, where she guided campaigns across the United States that advanced electric transportation adn mroe efficient vehicles. She worked at the Union of Concerned Scientists in serveral roles, including director of the California office and deputy director of clean vehicles. SHe also woked at the U.S. Environmental Protection Agency, Lawrence Berkely National Laboratory,, and several energy-related consulting firms. Commissioner Monahan recieved a bechelor of science degree from UC Berkeley and holds a master's degree in energy analysis and policy from the University of Wisconsin, Madison.

DAY TWO

Session 1

Kristin Dziczek, Center for Automotive Research

Kristin Dziczek is Senior Vice President of Research at the Center for Automotive Research (CAR). Dziczek has more than 25 years of experience as a researcher and policy analyst. She is globally recognized as an expert on automotive competitiveness, trade, industrial policy, labor, and talent issues. Kristin leads CAR's Business and Technology groups, with a research portfolio focused on developing a better understanding of the connections between the automotive industry, technology, the economy, society, and public policy. Before joining CAR, Kristin served as the associate director of the Michigan Manufacturing Technology Center and has worked for the U.S. Congress, International Union UAW, and General Motors Corporation. She earned her B.A. in economics, M.P.P. in public policy, and M.S. in industrial and operations engineering, all from the University of Michigan.

Brad Markell, AFL-CIO

Brad Markell serves as the Executive Director of both the AFL-CIO Industrial Union Council and the Working for America Institute. He also leads the federation's climate and energy policy work, and is a cleared trade advisor for the AFL-CIO. Prior to joining the AFL-CIO, Brad worked for the UAW, where he represented the union during the negotiations for the 2009 and 2012 tailpipe emissions standards, helped develop and pass the legislation establishing DOE's ATVM program, and participated in several rounds of national bargaining in the automobile, aerospace and heavy-truck industries. Brad's board and committee service on behalf of the labor movement has included the Biden-Harris transition team, the Labor and Employment Relations Association, the National Academy of Engineering, the Export-Import Bank Advisory Council, the Carbon Capture Coalition, the Michigan Climate Action Council, and the International Labor Organization's Expert Committee on Just Transition. Brad has degrees from the University of Michigan and Wayne State University. He joined the UAW in 1976 and is a member of Local 14 in Toledo, Ohio.

Zoe Lipman, BlueGreen Alliance

Zoe Lipman is Director of Manufacturing and Advanced Transportation at the BlueGreen Alliance where she leads BGA's policy and advocacy on clean technology manufacturing, advanced vehicles and transportation, and related economic topics. Prior to joining BGA, Lipman led the National Wildlife Federation's program on fuel economy and advanced and electric vehicles, and previously headed the organization's Midwest climate policy program. She has written and advocated on advanced vehicle supply chains, manufacturing and jobs policy, transportation and utility sector innovation, and other opportunities to speed adoption of climate and energy solutions while rebuilding America's economy, manufacturing communities, jobs and competitiveness. Lipman has also served on utility, transportation and climate policy forums at a state, regional and federal level and works closely with labor, environmental, business and government stakeholders. She holds a BA from Yale University and a Masters in Public Administration from Harvard's John F Kennedy School of Government.

Session 2

Warren Day, United States Geological Survey

Warren Day is a research geologist with the U.S. Geological Survey Mineral Resources Program and is based in Golden, Colorado. Warren is currently the Science Coordinator for the USGS Earth Mapping Resources Initiative (commonly known as Earth MRI). Earth MRI is a partnership with the State Geological Surveys, other federal agencies, and private industry to acquire modern framework geologic, geophysical, and topographic data for areas across the Nation that may host critical mineral resources. He received his undergraduate degree in Earth and Planetary Sciences from Washington University, St. Louis, Missouri and doctorate in geology and geophysics from the University of Minnesota. Over the past 38 years, Warren has conducted research on regional framework geology, the evolution of ore-forming systems, and associated mineral resource studies as well as having held several science management positions with the USGS.

David Klanecky, Piedmont Lithium

Mr. Klanecky has spent most of his career in senior operational, research & development, commercial, and strategic leadership roles. From 2013 to 2021, he served in increasingly senior management roles within Albemarle Corporation, the world's leading lithium producer, including as VP Strategy and Corporate Development and most recently serving as Vice President – Lithium Operations – APAC/EU, with global responsibility for Albemarle's manufacturing/operations, process technology and product management within the global lithium business. David also served as interim CEO of the MARBL joint venture between Albemarle and Mineral Resources Ltd, which includes the Kemerton and Wodgina assets in Australia. Before joining Albemarle, David had an impressive twenty-year career with The Dow Chemical Company that spanned the globe. In his last role with Dow, David launched the Dow Energy Materials Business, focused on Lithium-Ion Battery Materials offerings to cell manufacturers and Auto OEMs, where he served as the Global Business Director for this business unit prior to joining Albemarle in 2013. David has a Chemical Engineering degree from the University of Nebraska and an Executive MBA from Arizona State/Thunderbird School of Global Management. He joined Piedmont in April 2021 and will be based in the Company's Belmont, North Carolina headquarter.

Celina Mikolajczak, QuantumScape

As Vice President of Manufacturing Engineering, Celina Mikolajczak leads teams spanning the battery development process — from materials sourcing and cell engineering to automation equipment design and EH&S — and is responsible for bringing QuantumScape solid-state technology into mass production. Celina has held several leadership roles in her more than 20 years of working in Li-ion batteries. Prior to joining QuantumScape, she was Vice President of Engineering and Battery Technology at Panasonic Energy of North America, which produces Li-ion cells for Tesla at the Gigafactory in Sparks, Nevada. Celina worked at Uber as Director of Battery Engineering, leading the design of battery packs for micro-mobility and urban air mobility applications. Before that, she led Cell Quality and Materials Engineering at Tesla as the

company launched its Model S, Model X, Model 3, Powerwall and Powerpack products. Celina has a particular passion for battery safety; she frequently publishes and speaks on the topic and has served on various Li-ion battery safety standards committees. Earlier in her career, she helped found battery consulting group Exponent and developed battery failure analysis techniques and safety standards related to consumer electronics devices.

Session 3

Linda Gaines, Argonne National Laboratory

Linda Gaines is the Chief Scientist of the new ReCell Center for Advanced Battery Recycling and a Systems Analyst in the Energy Systems Division at Argonne National Laboratory. She holds a BA in Chemistry and Physics from Harvard, and a Ph.D. in Physics from Columbia. Her primary interest is problem solving, applied to efficient use of resources. She began her career at Argonne by writing a series of handbooks of energy and material flows in energy-intensive industries that provided background for studies of technical and institutional issues involved in producting and recycling advanced-design automobiles, trucks, and trains, and batteries. Her most recent work has involved studying ways to reduce impacts from transport by recycling of lithium-ion batteries. She is an editor of the journal Sustainable Materials and Technologies and on the Editorial Board of Scientific Reports (a Nature journal).

Fan Dai, University of California, Berkeley

Dr. Fan Dai has played a significant role leading California's collaboration with China on climate, energy and environment. She was appointed by Governor Edmund G. Brown Jr as Special Advisor on China. Under Brown, Dr. Dai chaired the state's China Interagency Working Group, and acted as the state's liaison on its critical economic and environmental initiatives on China. Previously, Dr. Dai served as senior advisor at California Environmental Protection Agency and California Governor's Office of Business and Economic Development, advising on the state's international policy and global climate partnership. In 2017, she organized Governor Brown's trip, which resulted in a successful meeting with President Xi Jinping and the commitment to establish the California-China Climate Institute.

Anna Stefanopoulou, University of Michigan

Prof. Anna Stefanopoulou, is the William Clay Ford Professor of Technology at the University of Michigan. She was an assistant professor at the University of California, Santa Barbara, a visiting professor at ETH, Zurich, and a technical specialist at Ford. She has a diploma in Naval Architecture and Marine Engineering from Greece and a PhD in Electrical Engineering from the University of Michigan. Her innovation in powertrain control technology has been documented in a book, 21 US patents, 400 publications (7 of which have received awards) on state estimation, model-based prediction, and multivariable control of batteries, fuel cells, and engines. She has been recognized as a Fellow of three engineering societies (ASME, IEEE, and SAE) and received many major society awards. She was elected at the Executive Committee of the ASME Dynamics Systems and Control Division and the Board of Governors of the IEEE Control Systems Society.

Session 4

Dave Howell, DOE-VTO

David Howell is the Acting Vehicles Technologies Office (VTO) Director in the Office of Energy Efficiency and Renewable Energy with responsibility for the Department's $400 million advanced vehicle R&D portfolio. He has over 35years of experience planning and executing complex, multi-disciplined R&D activities that includes hybrid and electric vehicle R&D, advanced battery research and manufacturing, and advanced structural materials research. Dave serves as the chair of the Federal Consortium for Advanced Batteries which brings together federal agencies to accelerate the development of a resilient, robust lithium-ion battery supply chain. The Consortium successfully developed the recently released National Blueprint for Lithium Batteries will help guide investments to develop a resilient lithium-battery manufacturing value chain. Dave served as DOE's Program Manager for Battery R&D from 2003-2017. He continues to serve as DOE's representative at the United States Advanced Battery Consortium Management Committee, the Executive Committee for the Battery500 Research Consortium, and various international and inter-government forums. Prior to DOE, Dave was on the research staff of the Oak Ridge National Laboratory and served on active duty at the Wright Patterson Air Force Base as the Program Manager for Advanced Materials for Space Structures at the Air Force Materials Laboratory. Dave received a Bachelor of Science degree in Aerospace Engineering from the University of Tennessee at Knoxville.

Renata Arsenault, Ford

Renata Arsenault is Ford Motor Co.'s Technical Expert for Advanced Battery Recycling. She works at Ford Ion Park, Ford's new Battery Center of Excellence, prior to which she was in Ford's R&A organization. She has been interfacing closely with battery suppliers, recyclers and other industry members since 2006. She is involved in numerous facets of Sustainability at Ford, representing the battery group on battery recycling, 2nd use and related topics (LCA, strategic materials, supply chain circularity etc.). She serves as PM for numerous USABC programs, is President-elect of NAATBatt, co-chair of NAATBatt's Battery Recycling and NA Manufacturing committees, and manages projects with multiple universities as part of Ford's University Research program. Renata has been a speaker and panelist on a long list of global battery conferences and has numerous publications and patents. Renata graduated from Queen's University in Ontario, Canada in 1988 with Bachelor of Science in Chemical Engineering. Renata spent 1989-1998 working in specialty chemicals for Diversey/Diversey-Lever where she led process development and scale-up of specialty products in North America.

John Graham, Indiana University

John D Graham is Professor of Risk Analysis at the Paul H O'Neill School of Public and Environmental Affairs, Indiana University. He formerly served as a senior OMB official in the George W Bush administration. He recently published a new book entitled The Global Rise of the Modern Plug-In Electric Vehicle: Public Policy, Innovation, and Strategy. Elgar Publishing. UK 2021.

DAY THREE

Session 1

Chris Nelder, The Energy Transition Show

Chris Nelder is the creator and host of the Energy Transition Show podcast, and a full-time traveler. Chris has written about energy transition for more than 15 years. He is the author of two books on energy and investing, as well as more than 200 articles on energy in publications such as Nature, Scientific American, Slate, The Atlantic, Quartz, Financial Times, Greentech Media, and SmartPlanet. Prior to taking the podcast on the road full time, he headed the EV-grid Integration team for five years in the Mobility practice at RMI in Boulder, Colorado. He enjoys bantering with other energy geeks on Twitter at @chrisnelder.

Matthew Cloud, National Grid

Matthew Cloud received the B.Sc. degree in electrical engineering from Clarkson University, Potsdam, NY, USA, in 2010 and his M.S.E.E. degree from the Worcester Polytechnic Institute, Worcester, MA, USA in 2016. He is currently a Lead Engineer in National Grid's Future of Electric organization developing the Company's strategy to support and promote electric vehicle adoption. Previously he spent three years in Distribution Planning within National Grid after spending the prior seven years working in various engineering roles at The United Illuminating Company in Orange, CT. He has studied the adoption of electric vehicles and their impacts to electric utility networks for the last ten years and has co-authored three published papers on the modeling of EVs and the efficacy of TOU rates in reducing grid impacts from EV charging.

Rohan Patel, Tesla

Rohan Patel serves as the Senior Global Director of Public Policy and Business Development at Tesla, where he oversees Tesla's regulatory, business development, and legislative efforts. Previously, he served as Special Assistant to the President and Senior Advisor for Climate and Energy Policy, where he worked on a range of power sector and transportation policies in addition to being President Obama's primary liaison with local elected officials. Rohan also served as Associate Director at the White House Council on Environmental Quality during the first term of the Obama administration. After the 2008 inauguration, he joined the Obama administration as Senior Policy Advisor to Secretary Vilsack at the United States Department of Agriculture. Prior to his appointment, he spent two years on the Obama Presidential Campaign in a number of leadership roles. He has also served on the staffs of Governor Chet Culver (D-IA), the Iowa Senate Democrats, and Senator Evan Bayh (D-IN). Rohan is a graduate of Northwestern University and a native of Goshen, Indiana.

Session 2

Jeremy Michalek, Carnegie Mellon University

Jeremy J. Michalek is a Professor of Engineering and Public Policy, Professor of Mechanical Engineering, and Director of the Vehicle Electrification Group at Carnegie Mellon University. He has published widely on technical, economic, environmental, behavioral, and public policy aspects of electric vehicles, ridesourcing, new mobility, transportation policy, and other topics.

Jeremy earned his B.S. from Carnegie Mellon in 1999 and his M.S. and Ph.D. from the University of Michigan in 2001 and 2005. His research is featured frequently in news outlets, such as the New York Times and National Public Radio, and he engages policymakers at federal and state levels, including via policy briefings and public comments on proposed rulemaking. Jeremy is currently serving on the National Academies' Committee on Current Methods for Life Cycle Analysis of Low-Carbon Transportation Fuels in the United States, and he serves on the Alternative Transportation Fuels and Technologies committee of the Transportation Research Board.

Michael Kintner-Meyer, Pacific Northwest National Laboratory
Dr. Michael Kintner-Meyer is a research engineer and systems analyst with more than 25 years in the area of energy/economy and multi-sector simulation and analysis for national and international clients. Educated in Germany with a Diplom Ingenieur Degree from RWTH Aachen in Mechanical Engineering and a Ph.D. from the University of Washington, Seattle, he work on European Union funded Energy/Economic research and on the U.S. Energy Information Administration's National Energy Modeling System (NEMS). He is currently leading the mobility and electrification of transportation research area as well as PNNL's energy policy research and institutional support for the Grid Modernization Initiative of the U.S. Department of Energy. He has led several major national assessments for energy storage, Hyperloop technology impacts on the US Grid, EV grid impacts and valuation of EVs for renewables integration. Currently, Dr. Kintner-Meyer leads for PNNL the research activities in mobility research focusing on transitioning the transportation sector to meet the nation's 21st century mobility needs under sustainability objectives. This includes decarbonization strategies, large scale traffic simulations of urban centers, connected vehicle controls research, as well as EV charging controls technology development. Dr. Kintner-Meyer holds 9 patents on EV charge management, grid-friendly appliances, and energy storage controls technologies.

Yamen Nanne, Los Angeles Department of Water and Power
Yamen Nanne is the Manager of Distribution System Development at the City of Los Angeles Department of Water and Power. He attended high school at Riverside Norte Vista where he scored 46 points in one game a basketball game, the second highest in his school's history in http://www.socalhoops.tierranet.com/archive/prepnotes/Feb98/riv211c.htm. He graduated from Cal Poly Pomona with a degree in electronics and computer engineering and is an avid Lakers fan. His passion about electric vehicles stems from his desire to play a role in improving air quality for all of California and to help LADWP customers learn about how they can save money by driving and EV. His motto is: Live life…Drive Electric!
https://www.linkedin.com/in/yamennanne/.As the LADWP's Electric Transportation Program Supervisor he was responsible for leading the utility's effort to enable its customers and the City of Los Angeles to become the leader in Electric Transportation. During his tenure LADWP and the City of Los Angeles was able to increase EV charging infrastructure 11 fold from about 1,200 commercial charging stations in 2018 to 13,900 today and EV adoption increased from 35,000 EVs to about 73,000 EVs today.

Session 3

Deepak Divan, Georgia Tech

Dr. Deepak Divan is Professor, John E Pippin Chair, GRA Eminent Scholar and Director of the Center for Distributed Energy at the Georgia Institute of Technology in Atlanta, GA. His field of research is in the areas of power electronics, power systems, smart grids, electrification of transportation and distributed control of power systems. He works closely with utilities and industry and is actively involved in research, teaching, entrepreneurship and starting new ventures. Dr. Divan has started several companies, including Varentec in Santa Clara, CA, where he served as Founder, President and CTO from 2011-14, and as Chief Scientist for several years after. He led the company as it developed its suite of innovative distributed real-time grid control technologies. Varentec was funded by leading green-tech Venture Capital firm Khosla Ventures and renowned investor Bill Gates. He has founded or seeded several new ventures including Soft Switching Technologies, Innovolt, Varentec and Smart Wires, which together have raised >$160M in venture funding. Dr. Divan is an elected Member of the US National Academy of Engineering, member of the National Academies Board on Energy and Environmental Systems and NASEM Committee on the Future Grid. He a Fellow of the IEEE, past President of the IEEE Power Electronics Society, is a recipient of the IEEE William E Newell Field Medal and is International Steering Committee Chair of the IEEE Empower a Billion Lives global competition to crowdsource scalable energy access solutions. He has 40 years of academic and industrial experience, 75 issued and pending patents, and over 400 reviewed publications. He received his B. Tech from IIT Kanpur, and his MS and PhD degrees from the University of Calgary, Canada.

Eric Cutter, Energy + Environmental Economics

Eric Cutter is a Senior Director at E3 leading our DER practice area, which focuses on enabling energy storage, electric vehicles, and flexible loads to respond to grid needs. Eric's work demonstrates how flexible and dispatchable DER supports higher penetrations of renewable generation and provides value to utilities and ratepayers. He is currently working with utilities in California, New York, and the Pacific Northwest to assess the impact of electric vehicles on distribution system costs and to develop dynamic charging programs that better accommodate renewable generation under future high-renewables scenarios. Eric does not own an EV, but has gone through the useful life of two electric bicycles so far.

Karen Glitman, Center for Sustainable Energy

Karen Glitman has more than 35 years of policy advocacy and public service experience, having served as a state legislator, Deputy Secretary of Transportation, Director of the University of Vermont University Transportation Center and Director of Efficiency Vermont. Currently she leads CSE efforts to uncover new opportunities to support entities around the nation in meeting a shared goal of decarbonization.

Jason Hills, Los Angeles Department of Water and Power
Jason Hills is the Manager of Distribution and Electrification at the Los Angeles Department of Water & Power (LADWP). LADWP supports the growth in adoption of electric vehicles and currently has over 14,000 public, workplace, and fleet charging stations in its territory, achieving its 2022 goal of 10,000 EV chargers nearly two years ahead of schedule. In this role, Jason oversees the implementation of various electric transportation programs that include the installation of charging stations at LADWP properties and the development of customer-facing EV incentive programs. Jason also oversees LADWP's distribution engineering team and has previously managed substation programs aimed at supporting the reliability and growth of LADWP's Power System.

Session 4
Sara Baldwin, Energy Innovation
Sara Baldwin is Energy Innovation's Director of Electrification Policy, where she leads the firm's electrification policy practice area to advance economy-wide decarbonization and provide guidance to policymakers and regulators on viable pathways to advance the electrification of buildings, transportation, and industry. Sara is the lead author of Accelerating Clean, Electrified Transportation By 2035: Policy Priorities and contributing author to Increasing Electric Vehicle Charging Access At Multi-Unit Dwellings: Workshop Summary Report, among others. From 2014-2020, Sara served as Vice President of Regulatory for the Interstate Renewable Energy Council (IREC), overseeing IREC's engagement in regulatory proceedings in dozens of states and led the development of several landmark publications, including A Playbook for Modernizing the Distribution. She also served on the Technical Team for U.S. DOE SunShot Solar Market Pathways Initiative and NREL's Distributed Generation Interconnection Collaborative Advisory Committee. From 2004-2014, Sara led clean energy policy efforts in Utah as a Senior Policy Associate for Utah Clean Energy. She was named an "Innovator and Influencer" by Solar Power World (2017) and one of "Utah's Enlightened 50″ by the Community Foundation of Utah (2012). Sara is a member of GridLab's advisory board, host of Energy Innovation's Electrify This! podcast, and former host of the Grid Geeks podcast. She earned her B.S. in Environmental Studies and a B.A. in Spanish from the University of Utah, graduating with honors.

Maria Bocanergra, Illinois Commerce Commission
Maria Bocanegra is a Commissioner with the Illinois Commerce Commission where she regulates public utilities, transportation, railroad and telecommunications. She currently serves as National Chair for the EV State Working Group at NARUC and holds advisory positions with the DOE's Voice of Experience's Electrification Steering Committee, the National EV Charging Initiative's Advisory Council and WRI's Electric School Bus Initiative. Commissioner Bocanegra has been recognized by Fortnightly's Under 40, Negocios Now's 40 Under 40, Negocios Now's Who's Who In Hispanic Chicago, Negocios Now's Rising Star and by Latino Leaders Magazine. In 2021, Negocios Now selected her as one of the 50 Most Influential Latinos in Chicagoland. She is only the second Latina to be appointed to the Illinois Commerce Commission.

Dan Bowermaster, Electric Power Research Institute
Daniel Bowermaster is the Senior Program Manager for Electric Transportation at the Electric Power Research Institute (EPRI), an independent non-profit center for public interest energy and environmental research. For more than 30 years, EPRI's electric transportation program provides research critical to the development of technology, infrastructure, and analytics necessary to support the advancement of electric transportation. Dan has worked on electric vehicles for more than 12 years, including two years at PG&E prior to EPRI. Bowermaster completed the Wharton-Lauder dual graduate degree program, earning an MBA from the Wharton School of Business and an MA in international studies from the University of Pennsylvania. In addition, he holds a BS in mechanical engineering and a BA in international relations from the University of California, Davis.

Alan Jenn, University of California, Davis
Alan Jenn is currently the assistant director of the Energy Futures Research center, an assistant professional researcher at the Plug-in Hybrid and Electric Vehicle (PH&EV) group of the Institute of Transportation Studies (ITS) at the University of California, Davis, and an affiliate at Lawrence Berkeley National Laboratory. He graduated from Carnegie Mellon University with a PhD in the department of Engineering and Public Policy (EPP) and has undergraduate degrees in Molecular and Cell Biology, Music, and Energy and Resources from the University of California, Berkeley. Alan's research is focused on plug-in electric vehicles (PEVs): integration with the electric grid, adoption of the technology, use in ride-hailing companies (such as Uber and Lyft), and its impact on transportation finance.

DAY FOUR

Session 1

Tyson Jominy, J.D, Power

Tyson Jominy has worked for J.D. Power since September 2009, advising OEMs on pricing and incentives for new and used vehicle sales. Prior to joining J.D. Power, Tyson worked for Ford Motor Company and Nissan North America, where he held several positions within finance and sales & marketing. Additionally, he has managed financial forecasting and planning in the CPG industry and advised executives in corporate development and M&A in the energy sector. Tyson has a bachelor's degree in finance from Indiana University in Bloomington, IN and a master's of business administration from The University of Chicago Booth Graduate School of Business in Chicago, IL.

Ahmed Abdulla, Carleton University

Ahmed Abdulla is an Assistant Professor in the Department of Mechanical and Aerospace Engineering at Carleton University. Abdulla investigates energy system design for deep decarbonization—focusing on the role of disruptive energy technologies that sit at a low level of technical readiness, including electro-fuel production, advanced nuclear power, and negative emissions technologies. Abdulla employs chemical process modeling, systems engineering, engineering economics, and quantitative risk and decision analysis in his research. He also pays special attention to integrating insights from public policy and behavioural science in his models to optimize the design and deployment of truly sustainable technologies—ones that are both techno-economically viable and socio-politically acceptable. Abdulla co-leads the APEX research group at Carleton. APEX—Alternative Pathways for the Energy Transition—comprises a group of highly interdisciplinary engineers devoted to accelerating the transition to a deeply decarbonized energy system to avert the worst consequences of climate change.

Shelley Francis, EV Noire

Dr. Shelley Francis, a former Medical School Faculty member, is a public health executive, entrepreneur and transportation disruptor. Dr. Francis is a Co-Founder and Principal at EVNoire. EVNoire's work centers on shared, connected, electric and autonomous vehicle technology. EVNoire's work focuses on two pillars: E-Mobility Best Practices and E-Mobility Diversity, Equity and Inclusion. Dr. Francis and Terry Travis' vision led to the Co-Founding of the nation's largest network of diverse EV drivers and enthusiasts, EVHybridNoire, a 501c3 Nonprofit. EVHybridNoire, is a national, award winning, multicultural organization focused on increasing EV adoption and awareness in diverse communities. Dr. Francis is frequently sought out for her expertise in E-Mobility, the public health impacts of transportation emissions and environmental justice and is often featured in national journals and publications such as the Baltimore Sun, Columbus Times-Dispatch, Energy News, Forbes and more. Dr. Francis was recently recognized as one of the top Women in EVs by Electric Drives; Dr. Francis was also featured in the Progressive Change Institute's report of the top 400 candidates recommended for the Biden-Harris Administration and she was identified by movmi and Sandra Phillips as one of their 2020

Mobility Leaders. She currently serves as a National Board Director for the Electric Auto Association.

Session 2
Gil Tal, University of California, Davis
Gil Tal holds a Ph.D. in Transportation Technology and Policy from UC Davis, and an M.A. in geography and environmental policy and planning from the Hebrew University in Jerusalem. Between 2008 and 2010 Dr. Tal was a post-doctoral researcher with the Center for Global Metropolitan Studies and the UC Transportation Center at UC Berkeley. His work at UC Davis and UC Berkeley focuses on travel behavior and the implementation of travel behavior related policies. At the PH&EV center Dr. Tal is leading projects on the future need for electric vehicle infrastructure, and the correlation between charging infrastructure, travel behavior and the demand for EV's. He is currently leading research on number of projects including a study on local planning and deployment of electric vehicle infrastructure, a study on GIS tools for infrastructure planning, a multi-state study of new plug-in vehicle buyers, and a study on the secondary market of plug-in vehicles in California.

Zhenhong Lin, Oak Ridge National Laboratory
Dr. Zhenhong Lin is a senior R&D staff member at National Transportation Research Center of Oak Ridge National Laboratory and joint Associate Professor of University of Tennessee, Industrial & Systems Engineering. As PI and manager of the Transportation Energy Evolution Modeling (TEEM) program, he is interested in analyzing technologies, strategies and policies that can transform the transportation energy system for societal objectives. Lin received the 2017 Vehicle Technologies Office Distinguished Achievement Award on his contribution to a joint study on CAV energy impact. He also received the 2011 DOE Vehicle Technologies Office R&D Award for his work on modeling consumer choices of advanced powertrain technologies. Having authored over 30 peer-reviewed articles, Lin has studied electric vehicle market acceptance, range optimization for battery and fuel cell electric vehicles, on-road fuel economy, alternative fuel infrastructure optimization, diesel engine injection control and fuel cell powertrain simulation. Lin is a member of the Alternative Transportation Fuels and Technologies Committee of the Transportation Research Board and a Senior Member of Institute of Electrical and Electronics Engineers. He received his PhD in Transportation Engineering in 2008 and MS in Transportation Technology & Policy from University of California, Davis. Before that, Lin obtained his BE/MS in Automotive Engineering from Tsinghua University in Beijing.

Session 3
Matthew Metz, Coltura
Matthew Metz is the founder and co-executive director of Coltura. Before starting Coltura in 2014, he was a trial lawyer and non-profit leader. Matthew has been at the forefront of the anti-gasoline movement since its inception. Along with his co-executive director Janelle London, Matthew wrote the first op-eds in the U.S. calling for a phaseout of gasoline-powered vehicles, sponsored early gatherings of California and global leaders to discuss 100% vehicle electrification, and led coalitions to support the passage of gasoline vehicle phaseout legislation

in California and Washington State. He writes about legal, political, and cultural strategies to transition off gasoline, most recently the gasoline superusers report. He was the lead author of recent law review articles about gas stations and state electric vehicle mandates. Matthew has created and produced performance and conceptual art works aimed at changing cultural perceptions of gasoline. Prior to founding Coltura, he founded the Metz Law Group, Jaguar Forest Coffee Company, the Central Area Development Association and the Central Area Arts Council, and worked for an international development NGO in Mexico City. He is a graduate of the University of Chicago and UCLA Law School and is fluent in Spanish.

Nick Millar, EV Connect
Nick Millar is a Product Manager at EV Connect, focusing on growing the availability of EV charging stations through software that enables great experiences for drivers and charging station managers alike. He has a background in mechanical engineering and has worked in many different applications of software for the energy transition, including energy efficiency, stationary battery storage, and EV charging.

Kelly Yearick, Forth
Kelly Yearick lives and works in Portland, Oregon where she leads programs to boost electric vehicle adoption and access to shared electric transportation. She joined the Forth team in 2017 and has managed various Federal and State contracts, including Forth's portfolio of programming as Backstop Aggregator in Oregon's Clean Fuels Program. In her work, she brings together diverse stakeholder groups such as utilities, government agencies, community-based organizations, and industry players to design and implement impactful programs. She currently manages the DOE-funded CRuSE project, a rural carsharing program, and brings her experience around workplace charging to the Electric Vehicle Adoption Leadership Program (EVAL). Kelly holds a Master's in Environmental Management and Sustainability from Portland State University, a B.S. from the University of North Carolina at Chapel Hill, and sits on the board of Solar Oregon.

Session 4
Carla Bailo, Center for Automotive Research
Ms. Carla Bailo is the President and CEO of the Center for Automotive Research (CAR). Ms. Bailo is a leader in engineering and vehicle program management with 35 years of experience in the automotive industry. In addition to her role at CAR, Ms. Bailo is the 2016-2018 vice president of automotive for SAE International, a global association of more than 138,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. Prior to joining CAR, Ms. Bailo was the assistant vice president for mobility research and business development at The Ohio State University. In that capacity, she assisted the University in accelerating sustainable mobility and transportation innovation, while integrating related research and education across Ohio State's academic units. She also helped coordinate Ohio State's involvement as the primary research partner for Smart Columbus, a $140 million program to transform central Ohio into a premier transportation innovation region. Ms. Bailo has 25 years of experience at Nissan North America, Inc., where in her most recent role at Nissan she served as senior vice president of research and development. She was responsible for vehicle

engineering and development operations in Michigan, Arizona, Mexico and Brazil, managing a $500 million budget and 2,500 employees. In this role, she improved the efficiency of Nissan's R&D functions. Ms. Bailo has a MS degree in mechanical engineering from the University of Michigan and a BS degree in mechanical engineering from Kettering University.

Britta Gross, Rocky Mountain Institute
Britta Gross is the Managing Director of RMI's mobility practice area, focused on the market-driven strategies and technologies required to accelerate towards carbon-free mobility solutions. Ms. Gross was formerly the Director of Advanced Vehicle Commercialization at General Motors, responsible for the energy and infrastructure strategies required to enable the commercialization of battery electric and hydrogen fuel cell electric vehicles. Britta is also currently the President of OUC's Board of Commissioners, Orlando's electric and water utility. Britta has an Electrical Engineering degree from LSU and studied language arts at the University of Wurzburg in Germany. She holds and has held numerous board seats, including the Alliance for Transportation Electrification (ATE), the North American Council for Freight Efficiency (NACFE), MobilityData, Plug in America, the Electric Drive Transportation Association (EDTA) and served as a Governor appointee on both the Massachusetts Zero Emission Vehicle Commission and the Maryland Electric Vehicle and Infrastructure Commission. Ms. Gross has received numerous industry awards including the Forth Roadmap Career Achievement Award, Automotive News' "Electrifying 100", the GreenBiz "Verge 25" award, has testified to the Senate Committee on Energy and Natural Resources, and speaks regularly to national audiences on topics related to transportation electrification.

Sandra Wappelhorst, International Council on Clean Transportation
Sandra Wappelhorst is a Senior Researcher on the ICCT Europe team. Her current research focuses on financial and non-financial incentive systems for electric vehicles and the electrification of shared ride services. Prior to joining the ICCT, Sandra worked for various research organizations with a focus on urban development, the adoption of innovative mobility services, and user acceptance of electric vehicles. She holds a diploma degree as an engineer in Spatial Planning (Dipl.-Ing.) from the Technical University of Dortmund (Germany) and a doctor's degree (Dr.-Ing.) from the University of the Federal Armed Forces Munich.

Joann Zhou, Argonne National Laboratory
Dr. Yan (Joann) Zhou is a Principal Analyst and Group Leader of the Mobility and Deployment Group at the Energy Systems Division at Argonne National Laboratory. She leads several DOE and industry-sponsored research projects on energy and emissions impacts analysis of alternative fuel and vehicle technologies, electric vehicle charging behavior, infrastructure modeling, and transportation energy burden analysis. Dr. Zhou is a member of the Transportation Research Board's Alternative Transportation Fuel and Technologies committee.