



Transportation Innovation and Policy in a Fragmenting World

August 22-25, 2017

SPEAKERS AND MODERATORS

PASCAL AMAR – *Volvo*

Pascal Amar is a Principal Investigator in the Volvo Group's advanced technologies and research division. For the last 15 years he has led projects aimed at reducing the environmental impact of heavy duty vehicles, both in Europe and North America. These projects resulted in multiple concept trucks, as well as the launch in 2011 of the first "downspeeding powertrain" that revolutionized the long haul trucking industry. Between 2011 and 2016 Pascal headed Volvo's SuperTruck project which demonstrated an 88% freight efficiency improvement and delivered multiple technologies that are now available on Volvo and Mack trucks. He is currently the Principal Investigator for Volvo's "SuperTruck 2" effort as well as multiple technology demonstration projects co-funded with the state of California.

MICHAEL BACKSTROM – *Southern California Edison*

Michael Backstrom is the Managing Director, Energy and Environmental Policy for Southern California Edison (SCE). In this role, he is responsible for leading the analysis of proposed energy and environmental regulations; developing regulatory engagement strategies; overseeing advocacy at state and federal environmental agencies; and ensuring effective case management of key energy policy proceedings.

Mr. Backstrom joined SCE in 2005 as an attorney in the legal department, responsible for regulatory proceedings before the California Public Utilities Commission. He subsequently held positions in both regulatory and legislative affairs, developing policy positions and advocating for the company in Washington D.C. and California. In 2013, he became Director, Chairman's Office, where he served as chief of staff to Ted Craver, Chairman and CEO of Edison International. In 2015, Mr. Backstrom moved to the position of Director, Customer Experience at SCE. He was responsible for customer satisfaction improvement strategies, website development, and the marketing of customer programs and services. In 2017, he assumed his current position.

Prior to joining SCE, Mr. Backstrom was an associate in the Los Angeles office of Howrey, LLP, where his practice focused on commercial litigation. He earned a bachelor's degree in English from Pepperdine University in 1997, and a juris doctor from the University of Southern California in 2000.

MATTHEW J. BARTH – *University of California, Riverside*

Matthew Barth is the Yeager Families Professor at the College of Engineering, University of California, Riverside. He is part of the intelligent systems faculty in Electrical and Computer Engineering and also serves as the Director for the Center for Environmental Research and Technology (CE-CERT), UCR's largest multi-disciplinary research center. Dr. Barth's research focuses on applying engineering system concepts and automation technology to transportation systems, and in particular how it relates to energy and air quality issues. His current research interests include ITS and the environment, transportation and emissions modeling, vehicle activity analysis, advanced navigation techniques, electric vehicle technology, and advanced sensing and control.

MICHAEL BERUBE – *U.S. Department of Energy*

Michael Berube leads the Vehicle Technologies Office for the U.S. DOE Office of Energy Efficiency and Renewable Energy (EERE). In this post, he leads an array of activities that help reduce America's dependence on foreign oil and secure a clean energy future. The Vehicle Technologies Office supports about \$300 million in annual research funding for hybrid drivetrains, advanced batteries, lightweight materials, advanced combustion and fuels, vehicle systems integration, and Clean Cities deployment activities.

He brings more than 25 years of experience in the automotive industry to his EERE post, specifically in the areas of environmental compliance, energy and safety policy, product development and marketing. He has worked on a broad range of electric vehicle, connected car and advanced powertrain initiatives. Berube also led multiple environmental and energy initiatives within the Chrysler Corporation.

Berube has a bachelor's degree in civil engineering from MIT. He later returned to MIT as both a graduate student and researcher where he received a master's degree in the Technology and Policy Program and a master's degree from the Sloan School of Management. He was recognized for his early work on corporate sustainability and led research for the MIT International Motor Vehicle Program.

EMILY CASTOR – *Lyft*

Emily Castor is Director of Transportation Policy at Lyft. As a member of the original Lyft team, Castor has been on the front lines of ridesharing policy since the birth of the industry. She works with transportation agencies across the United States to integrate Lyft as a viable alternative to car ownership and understand its impacts on infrastructure, behavior, and the environment. Castor started her career as a transportation policy aide for a U.S. Congresswoman and later served as a financial advisor for municipal infrastructure projects. She holds a master's degree in public administration from the University of Pennsylvania.

BILL CHARMLEY – *U.S. Environmental Protection Agency*

JOEL COUSE – *TOTAL S.A.*

As Group Chief Energy Economist, Joel Couse coordinates the cross-branch dialogue within TOTAL on the world macroeconomic and energy outlook, as they relate to the company's strategy. Until September 2017, he was VP Market Analysis for the Trading & Shipping Division (TOTS), managing a team providing analysis and technical support for TOTAL's oil trading activity. The work was also used by the planning, the upstream and the downstream divisions of TOTAL.

Couse has worked in the oil industry since joining Elf Trading in September 1992, and was appointed to Trading & Shipping Management Committee in 2009. He holds a bachelor's degree in engineering from McMaster University (Ontario, Canada) and a master's degree in Energy Economics from Université de Grenoble (France). Following his studies, he worked on radioisotope production in Canada and subsequently, in France, on long-term energy studies for EDF, DRI, and the International Energy Agency.

SCOTT CRAMER – *Certified Freight Logistics, Inc.*

Scott Cramer is the third generation President of Certified Freight Logistics, Inc., a refrigerated carrier based in Santa Maria, California, operating 150 tractors and 300 refrigerated trailers moving product in seven western states. The company can trace its origins back to 1928, with his family taking ownership of the company in 1955. Today, Certified moves 40,000 truckloads per year for growers, shippers, and corporate grocery chains, supplying jobs to over 200 people.

ANTHONY EGGERT – *ClimateWorks Foundation*

Anthony Eggert is a director at ClimateWorks Foundation, which mobilizes philanthropy to solve the climate crisis and ensure a prosperous future. Eggert comes to ClimateWorks with 20 years of public and private sector experience working on clean energy technologies and policies. Prior to ClimateWorks, Eggert served as the founding director of the UC Davis Policy Institute for Energy, Environment and the Economy dedicated to leveraging university expertise to inform better policy. His public sector experience includes serving as an appointee of Governors Jerry Brown and Arnold Schwarzenegger, including as Senior Advisor to the Chair of the California Air Resources Board, Commissioner of the California Energy Commission, and Deputy Secretary of California Environmental Protection Agency where he helped implement California's landmark clean energy and climate policies. Eggert started his career as an automotive engineer and program manager at Ford Motor Company working on regulatory compliance and advanced vehicle technology development. He received a bachelor's degree in Mechanical Engineering at the University of Wisconsin-Madison and a master's degree in Transportation Technology and Policy at UC Davis.

TIMOTHY R. FRAZIER – *Cummins Inc.*

Tim Frazier is the Executive Director of Advanced Engineering at Cummins Inc. In this role, he leads the technical organization responsible for research and engineering of next generation powertrain and power-system solutions. His organization performs leading research and technology development for Cummins' On-Road, Off-Road and Power Generation markets, both domestic and international. Previously, Frazier was Technical Leader and Chief Engineer at Cummins Westport, where he was responsible for advanced technology development, new product development, and current product engineering for mobile natural gas engines. His earlier career focused on leading Cummins' Advanced Engineering Performance and Systems Team responsible for next generation tailpipe emissions and fuel efficiency technologies. Tim joined Cummins' Combustion Research organization in 1999, and has worked on a variety of advanced combustion and system technologies at Cummins over the years.

Tim holds a doctorate in Mechanical Engineering from the University of Illinois, where he specialized in the development of ultra-low emissions combustion technology. In addition, he holds a Master of Science and a Bachelor of Science in Mechanical Engineering, also from the University of Illinois.

LEW FULTON – *University of California, Davis*

Lewis Fulton has worked internationally in the field of transport/energy/environment analysis and policy development for over 25 years. He is Co-Director of the Sustainable Transportation Energy Pathways (STEPS) program within the Institute of Transportation Studies at the University of California, Davis. There he leads a range of research activities around new vehicle technologies and new fuels. He was a lead author on the recent IPCC 5th Assessment Report, Mitigation ("Climate Change 2014: Mitigation of Climate Change," transport chapter). Current projects include analyses of electric vehicles, shared mobility, automation, and other drivers of transportation futures.

From 2007 to 2012 he was a Senior Transport Specialist with the International Energy Agency, Paris, as well as Division Head for Energy Technology Policy from 2011 to 2012. He returned to the IEA in 2007 after working there originally from 1999 to 2005. At the IEA Fulton led the development of the Mobility Model and directed transport-related analysis connected with the Energy Technology Perspectives series of publications. During 2006 to 2007 he worked in Kenya with the UN Environment Program, developing and implementing GEF-funded sustainable transport projects around the world. During the 1990s he also worked at the U.S. Department of Energy for four years, and taught at the Independent University of Bangladesh and the University of Maryland.

Fulton received his Ph.D. in Energy Management and Environmental Policy from the University of Pennsylvania in 1994.

GENEVIEVE GIULIANO – *University of Southern California*

Dr. Genevieve Giuliano is the Margaret and John Ferraro Chair in Effective Local Government in the Sol Price School of Public Policy, University of Southern California, and Director of the METTRANS joint USC and California State University Long Beach Transportation Center.

Her research areas include relationships between land use and transportation, transportation policy analysis, travel behavior, and information technology applications in transportation. She has conducted extensive research on freight policy and planning, and has published over 170 papers.

Professor Giuliano is a past Chair of the Executive Committee of the Transportation Research Board, and of the Council of University Transportation Centers. She has received numerous distinguished scholarship and service awards. She was a member of the National Freight Advisory Committee, and currently serves on the California Freight Efficiency Group.

NIEL GOLIGHTLY – *Shell*

Niel Golightly is Vice President, Energy Transition Strategy for Shell Oil Company, Royal Dutch Shell's American subsidiary. His current focus is on scenarios for the energy transition in the U.S, and Shell's strategies for responding to them. Niel joined Shell in July 2006, after a 13-year career at Ford Motor Company, where his positions included Director, Sustainable Business Strategies; Vice President, Public Affairs for Ford of Europe; and Director of the Chairman's Office. Before joining Ford, Niel served on active duty with the U.S. Navy, first as a fighter pilot then as a Pentagon speechwriter for General Colin Powell. Niel received a bachelor's degree in liberal arts from Cornell University in the U.S. and later studied at the University of Konstanz in Germany as a Navy Olmsted Scholar.

DAVID L. GREENE – *University of Tennessee*

David Greene is Senior Fellow of the Howard H. Baker, Jr. Center for Public Policy and Research Professor of Civil and Environmental Engineering at the University of Tennessee. In 2013 he retired from Oak Ridge National Laboratory as a Corporate Fellow after 36 years researching transportation and energy policy issues. Author of over 275 professional publications, he is a Lifetime National Associate of the National Academies and recipient of the Transportation Research Board's Roy W. Crum Award.

ROLAND HWANG – *Natural Resources Defense Council*

Roland Hwang directs the Natural Resources Defense Council's Energy and Transportation Program and is based in their San Francisco, California office. Hwang joined NRDC in 2000 after working for seven years at the Union of Concerned Scientists where he directed their Transportation Program. Hwang is an expert on clean vehicle and fuels technologies and policies and is the author or contributing author of eleven NRDC reports analyzing clean energy technologies and policies.

Hwang serves or has served on numerous advisory panels and committees, most recently for the California Plug-in Electric Vehicle Collaborative, the National Academy of Sciences Committee on Fuel Economy, the National Academy of Sciences Committee on Barriers to Electric Vehicle Deployment and the U.S. EPA Mobile Source Technical Review Subcommittee. Hwang was also part of the Intergovernmental Panel on Climate Change that won the 2007 Nobel Peace Prize.

Hwang brings to NRDC experience in energy demand forecasting and air pollution regulation. Previously, he has worked for the U.S. DOE at Lawrence Berkeley National Laboratory (LBNL) and the California Air Resources Board (CARB). At LBNL, he developed computer models to forecast energy demand in the U.S. residential and industrial sectors. At CARB, Hwang was involved in the permitting process for hazardous waste incinerators and developed procedures to assist air districts in evaluating toxic air emissions from landfills.

Hwang received his bachelor's degree in Mechanical Engineering in 1986 and his master's degree in Mechanical Engineering (specializing in Combustion Engineering) in 1988, both from the University of California, Davis. He also received a master's in public policy in 1992 from the Goldman School of Public Policy at the University of California, Berkeley.

AMY JAFFE – *University of California, Davis*

Amy Myers Jaffe is a leading expert on global energy policy, geopolitical risk, corporate strategy, and energy and sustainability. She serves as executive director for energy and sustainability at the University of California, Davis where she is senior research lead at the Institute of Transportation Studies (ITS-Davis) and Executive Advisor on energy and sustainability at the Office of the Chief Investment Officer, University of California Regents. Jaffe heads the fossil fuel component of the STEPS research program and works on emerging corporate business strategies for alternative and traditional fuels. Before joining UC Davis, she served as director of the Energy Forum (now called the Center for Energy Studies) and Wallace S. Wilson Fellow in Energy Studies at Rice University's James A. Baker III Institute for Public Policy.

Her research focuses on oil and natural gas geopolitics, strategic energy policy, corporate investment strategies in the energy sector, and energy economics. She was formerly senior editor and Middle East analyst for *Petroleum Intelligence Weekly*. As an energy consultant, she is a frequent keynote speaker at major energy industry and investment conferences and at board meetings of industry and environmental NGOs. She has provided testimony on Capitol Hill on energy matters as well as to governments in Europe, the Middle East and Asia. She is a widely quoted commentator on oil and energy policy in the international media, appearing regularly on a variety of television and print media, including CNN, *The NewsHour* with Jim Lehrer, FOX, Al-Jazeera TV, MSNBC, National Public Radio, the *Wall Street Journal* and the *Financial Times* of London. Her writings have been featured by the *New York Times*, *The Economist*, Dow Jones International, and *Petroleum Intelligence Weekly*.

ANDREAS KLUGESCHEID – *BMW Group*

Andreas Klugescheid is Head of Steering Government, External Affairs and Sustainability Communications at the Munich-based headquarters of BMW Group. Until June 2015, he was responsible for communications of the global production network. Previously, he was heading the BMW Group Representative Office in Sacramento, California. In this function, he managed the company's activities in the fields of environmental, mobility and sustainability policies. The geographical areas of his responsibilities included the Western Region of the United States, Mexico and South America.

He held numerous positions within BMW Group, including Spokesman for Governmental Affairs at the company's Munich based headquarters and Western Region Corporate Communications Manager for BMW, North America. He started his career with BMW Group as Head of Clean Energy Communication. Among other activities, he was responsible for BMW Group's participation in UN conferences like the Johannesburg World Summit on Sustainable Development and the UN Climate Conferences COP 14–16.

Klugescheid holds a master's degree in History, International Law and German Literature from the Georg-August University in Goettingen, Germany.

STEFAN KNUPFER – *McKinsey*

Stefan Knupfer is a Senior Partner in McKinsey's Stamford office and leads McKinsey's Sustainable Resources and Productivity (SRP) Practice in North America. Prior to this, Knupfer was responsible for McKinsey's Automotive and Assembly Practice in the Americas and was the leading partner in their Detroit office. As a leader in McKinsey's Advanced Industry Sector including automotive and assembly, aerospace, and diversified industries, he serves clients on large-scale improvement and global strategy programs. Knupfer has led McKinsey's knowledge efforts in electrical vehicles and leads the firm's global activities on

all mobility related activities. He holds a master's degree in Mechanical Engineering (Germany), and in Business Administration (UK), and an International Marketing Diploma (UK).

DREW KODJAK – *International Council for Clean Transportation*

Drew Kodjak is an environmental attorney with 25 years of experience working with governments to address air pollution from vehicles and fuels. Kodjak is currently the Executive Director of the International Council on Clean Transportation, an organization that he founded in 2005 to support governments in the top vehicle markets develop policies to improve the environmental performance and energy efficiency of all modes of vehicles and fuels.

Prior to joining the ICCT, Kodjak served as Attorney-Advisor for the U.S. EPA, during which time he contributed to regulatory developments of major rulemakings. Kodjak held a number of previous positions with a range of non-profit organizations including the Bipartisan Policy Center (then NCEP), and the Northeast States for Coordinated Air Use Management (NESCAUM). Kodjak is a graduate of New York University and Boston University Law School where he graduated with honors in 1991.

Kodjak serves on a number of important committees and organizations related to his work on transportation and air pollution. Kodjak is a member of the Transportation Research Board's Committee on Alternative Transportation Fuels and Technologies and the U.S. DOE's Hydrogen Fuel Cell Partnership. Kodjak previously served on the National Academies of Sciences Panel on Medium and Heavy-duty Vehicle Fuel Economy (2008–2010), and was co-chair of the U.S. Mobile Source Technical Advisory Committee (2010–2016). He speaks internationally on the topic of air pollution and transportation.

PETER KOSAK – *General Motors*

Peter Kosak is currently Executive Director, GM Global Urban Mobility. His team develops GM urban mobility strategies, especially toward vehicle sharing services and technology enablers.

Kosak began his GM career in 1986 as an aerodynamics engineer and has since held various positions in purchasing, engineering, design, product planning, and marketing. His recent assignments include Global Vehicle Line Executive for Cadillac CT6 and Executive Director of GM Global Advance Purchasing.

Kosak holds a bachelor's degree in Mechanical Engineering from the University of Massachusetts, a master's degree in Mechanical Engineering from Purdue University, and a master's degree in Business Administration from Columbia University.

TIMOTHY LIPMAN – *University of California, Berkeley*

Timothy Lipman is an energy and environmental technology, economics, and policy researcher and lecturer with the University of California, Berkeley. He is serving as Co-Director for the campus' Transportation Sustainability Research Center, based at the Institute of Transportation Studies, and also as Director of the Northern California Center for Alternative Transportation Fuels and Advanced Vehicle Technologies effort. Lipman's research focuses on electric-drive vehicles, fuel cell technology, combined heat and power systems, biofuels, renewable energy, and electricity and hydrogen energy systems infrastructure.

Most of his research projects are related to the transformation of energy systems to support motor vehicles and buildings, examining how both incremental and "leap frog" technologies can be applied to reduce greenhouse gas emissions and other negative environmental and social impacts of energy use. A central concept for his research is that the electrification of the transportation sector can realize synergy with a concentrated effort to reduce the carbon intensity of the electrical grid, yielding benefit for the electricity sector as well as the expanded use of electricity, hydrogen, and biofuels.

Lipman received his Ph.D. in Environmental Policy Analysis from UC Davis. He also received a master's degree in Transportation Technology and Policy, also at UC Davis, and a bachelor's degree from Stanford University.

MATT MIYASOTO – *South Coast Air Quality Management District*

Dr. Matt Miyasato is the Deputy Executive Officer for Science & Technology Advancement at the South Coast Air Quality Management District. He is responsible for the SCAQMD's Technology Advancement Office, Mobile Source Division, and Monitoring and Laboratory Analysis Division. Miyasato's principal charges are to identify, evaluate and stimulate development and commercialization of clean air technologies, develop and coordinate mobile source regulations, and to conduct ambient monitoring, source testing and laboratory analysis.

Miyasato received his undergraduate degree in Mechanical Engineering, and his master's and Ph.D. in Engineering, specializing in combustion technologies and air pollution control – all from the University of California, Irvine. Miyasato has worked at Southern California Edison in the Nuclear Engineering Department and at General Electric, where he designed burners and combustion modifications for utility boilers. He was also a research scientist at UCI, where he managed the industrial burner research program and has publications on combustion phenomena, active control, and laser diagnostics. Miyasato has also been a lecturer at UCI for the undergraduate air pollution control course.

BRIAN MORMINO – *Cummins Inc.*

Brian Mormino leads the Environmental Strategy and Compliance organization – which establishes and implements Cummins' global environmental strategy addressing both facility and product regulations, certification and compliance as well as sustainability to reduce the company's footprint. Before joining Cummins in 2006 as Director of Government Relations, Mormino worked for U.S. Senator George V. Voinovich as Staff Director for the Subcommittee on Clean Air, Climate Change and Nuclear Safety. He serves on the U.S. EPA's Clean Air Act Advisory Committee and the Executive Committee for the Truck and Engine Manufacturers Association. Mormino is a graduate of the University of Akron, Georgetown University and Indiana University.

MARY NICHOLS – *California Air Resources Board*

Mary D. Nichols, J.D., was reappointed Chairman of the California Air Resources Board by Governor Jerry Brown in January 2011, a post she previously held under Governor Arnold Schwarzenegger from 2007 to 2010 and under Governor Brown (during his first tenure) from 1979 to 1983. At ARB she is responsible for implementing California's landmark greenhouse gas emissions legislation as well as setting air pollution standards for motor vehicles, fuels and consumer products.

After graduating from Cornell University and Yale Law School, Nichols practiced environmental law in Los Angeles, bringing cases on behalf of environmental and public health organizations to enforce state and federal clean air legislation. President Clinton appointed her to head the Office of Air and Radiation at U.S. EPA, where she was responsible for, among many other regulatory breakthroughs, the acid rain trading program and setting the first air quality standard for fine particles.

She also served as California's Secretary for Natural Resources from 1999 to 2003. Prior to her return to the ARB, Nichols was Professor of Law and Director of the Institute of the Environment at UCLA.

JOAN OGDEN – *University of California, Davis*

Dr. Joan Ogden is Professor of Environmental Science and Policy at the University of California, Davis and director of the STEPS program at the UC Davis Institute of Transportation Studies. Her primary research interest is technical and economic assessment of new energy technologies, especially in the areas of

alternative fuels, fuel cells, renewable energy and energy conservation. She has written extensively on energy topics, including two books, 27 book chapters, and 43 peer-reviewed journal articles, as well as numerous reports and conference papers.

Over the past 20 years, she has conducted a number of technical and economic assessments of hydrogen and fuel cell systems. Since 1994 she has studied alternative strategies for developing a hydrogen infrastructure for transportation applications. She and her colleagues have developed an extensive set of data on hydrogen and fuel cell technologies, and tools for modeling infrastructure performance and costs. Her work has been supported by the U.S. Department of Energy, private foundations, and private sector companies, particularly the automotive and oil industries.

Ogden has served on a number of high-level committees and working groups convened by the U.S. DOE on future energy technologies and strategies. In 2007-2008, she served on a National Academies Panel that assessed research needs for hydrogen and fuel cell technologies and in 2009-2010 on a National Academies panel assessing these needs for plug-in hybrid electric vehicles. In 2007-2009, she served on a California state panel to advise the state on implementing its greenhouse gas law AB 32, and the U.S. DOE's Hydrogen Technical Advisory Committee. She is a lead author for the Intergovernmental Panel on Climate Change 2011 Special Report on Renewable Energy, examining the future role of renewable energy.

She received a Ph.D. in theoretical plasma physics from the University of Maryland in 1977, with a specialization in numerical simulation techniques. An interest in broader energy questions led her to Princeton University, where she was a research scientist at Princeton University's Center for Energy and Environmental Studies, Princeton Environmental Institute from 1985 to 2003. Her recent work centers on the use of hydrogen as an energy carrier, particularly hydrogen infrastructure strategies, and applications of fuel cell technology in transportation and stationary power production. She joined the faculty of UC Davis in September 2003.

JANEA SCOTT – *California Energy Commission*

Janea A. Scott was appointed to the California Energy Commission by Governor Edmund G. Brown, Jr. in February 2013 and reappointed in January 2016. She is the Energy Commission's public member, and is the lead commissioner on transportation and western regional planning. Scott also leads adoption of recommendations by the Energy Commission's SB 350 Barriers Study to expand access to the benefits of clean energy and transportation for low-income Californians, including those in disadvantaged communities—as well as small businesses in disadvantaged communities. Additionally, Scott chairs the California Plug-In Electric Vehicle Collaborative. Before joining the Energy Commission, Scott worked at the U.S. Department of the Interior's Office of the Secretary as deputy counselor for renewable energy. She also worked as a senior attorney in the Environmental Defense Fund's climate and air program.

DANIEL SPERLING – *University of California, Davis*

Daniel Sperling is distinguished professor of Civil Engineering and Environmental Science and Policy at the University of California, Davis and founding director of the UC Davis Institute of Transportation Studies (ITS-Davis). He is also co-director of the U.S. Department of Transportation's \$13 million National Center for Sustainable Transportation, a six-university consortium led by UC Davis.

Sperling has held the transportation seat on the California Air Resources Board since 2007, was chair of the California Fuel Cell Partnership in 2013, and was the 2015 chair of the Transportation Research Board of the National Academies of Sciences, Engineering and Medicine. He is recognized as a leading international expert on transportation technology assessment, energy and environmental aspects of transportation, and transportation policy—and has testified before Congress seven times on these issues.

Sperling was recognized with a major global award, the 2013 Blue Planet Prize, described as the Nobel Prize of environmental sciences, for being “a pioneer in opening up new fields of study to create more efficient,

low-carbon, and environmentally beneficial transportation systems.” He is author or editor of over 200 technical articles and 12 books, including *Two Billion Cars* (Oxford University Press, 2009). Sperling earned his Ph.D. in Transportation Engineering from the University of California, Berkeley (with minors in Economics and Energy and Resources) and his bachelor’s degree in Environmental Engineering and Urban Planning from Cornell University, and served in the Peace Corps in Honduras as an urban planner.

MATTHEW TIPPER – *Shell International*

Matthew Tipper was appointed VP of Shell Alternative Energies in 2012 where he has responsibility for developing advanced biofuels, hydrogen and electric mobility, marketing of Shell GTL Fuels, and supporting Shell’s sugar and cane ethanol joint venture in Brazil. He joined Shell Alternative Energies in 2009 and has more than 25 years of commercial experience in Shell, gained across various downstream business roles, primarily in trading and supply. He was previously responsible for leading Shell’s global gasoline trading business, where he spent several years working in Houston and established a number of new trading ventures. He spent much of his early career in a range of trading and supply operations in Africa, the Middle East, and Europe. Tipper has a first degree in geography and a master’s in Business Administration. He is a fellow of the Royal Geographical Society, and a graduate of Mansfield College, Oxford. He is a non-executive director of bio-bean, a UK bio-energy company.

WILLIAM TODTS – *Transport & Environment*

William Todts is the Executive Director of Transport & Environment, steering the organization to promote, at EU and global level, policy that ensures cleaner, safer, smarter transport. He joined the organization in 2011. As climate and freight director, Todts has led the campaign to regulate CO2 emissions from trucks in Europe for the first time. He also campaigned successfully to get cleaner and safer trucks on European roads as well as for the 95 gramme CO2 emissions target that new cars must achieve by 2021.

A Belgian native, Todts started his career in Brussels working for a MEP, after which he joined Belgium’s EU presidency team to help negotiate the first CO2 standards for vans. In his spare time, he is a 'cyclo-path' for two-wheeled transport and at weekends can be found cycling one of the city's 'green ways.' A history graduate, William also enjoys reading about classical antiquity especially Rome.

TOM TURRENTINE – *University of California, Davis*

Dr. Thomas Turrentine is Director of the California Energy Commission’s Plug-in Hybrid Electric & Vehicle Research Center at the Institute of Transportation Studies, UC Davis. For the past 20 years, he has been researching consumer response to alternative fuels, vehicle technologies, road systems, and policies with environmental benefits. His most recent work includes “Taking Charge”, California’s plan for electrification of transport, multi-year projects to study consumer use of the BMW MINI E, PRIUS PHEV conversions, the Nissan Leaf, and specially designed energy feedback displays in vehicles. In the coming years, his center will be working with several car companies and power utilities on purchase and use patterns of new electric and plug-in hybrids, developing tools to advise deployment of infrastructure, integration of plug in vehicles to California’s grid and ways to restructure the cost of lithium batteries.

He studies the role of travel and movement in the evolution of culture, society and lifestyle. He focuses on understanding automobile-based lifestyles, applying anthropological methods and theories to explore potential responses of car users to new technologies and policies aimed at mitigating the negative impacts of automobile infrastructure and use. He has studied consumer responses to electric vehicles, alternative fueled vehicles, micro-vehicles, station car systems, advanced traveler information, and other intelligent transportation systems. He also studies travel behavior and road systems in environmentally sensitive areas, focusing on Yosemite National Park and the Sierra Nevada region in California. He has a Ph.D. in Anthropology from UC Davis.

DAVID VICTOR – *University of California, San Diego*

David Victor is a professor of International Relations at the School of Global Policy and Strategy at UC San Diego. He is a director of the Laboratory on International Law and Regulation (ILAR) and of the campus-wide Deep Decarbonization Initiative, which focuses on real world strategies for bringing the world to nearly zero emissions of warming gases. Prior to joining the faculty at UC San Diego, Victor was a professor at Stanford Law School where he taught energy and environmental law.

His research focuses on regulated industries and how regulation affects the operation of major energy markets. Much of his research is at the intersection of climate change science and policy. Victor authored "Global Warming Gridlock," which explains why the world hasn't made much diplomatic progress on the problem of climate change while also exploring new strategies that would be more effective. The book was recognized by *The Economist* as one of the best books of 2011.

Victor was a convening lead author for the Intergovernmental Panel on Climate Change (IPCC), a United Nations-sanctioned international body with 195 country members that won the Nobel Peace Prize in 2007. Victor has been tapped by Southern California Edison to lead the company's Community Engagement Panel for decommissioning of the San Onofre Nuclear Power Plant. According to utility officials, he was chosen to lead the panel because he has the vision, leadership and experience to bring together a diverse group of concerned people. Victor, in 2016, was appointed to Co-Chair, The Brookings Institution, Initiative on Energy and Climate. He is a member of the World Economic Forum's Global Future Council on Energy, where his work focuses on the role of natural gas as a transition fuel to deep decarbonization

At UC San Diego, Victor and the ILAR research team look at how international agreements function and why some agreements are much more effective than others. ILAR's research looks at all major areas of international cooperation, including environment, human rights, trade and investment. The lab also conducts experimental research to investigate how humans make the complex decisions that are typical of designing and implementing international agreements.

His Ph.D. is from the Massachusetts Institute of Technology and A.B. is from Harvard University.

JOHN VIERA – *Ford Motor Company*

John Viera is the Global Director, Sustainability and Vehicle Environmental Matters for Ford Motor Company, a position he has held since January 2007. Viera is responsible for developing global sustainable business plans and policies, interfacing and negotiating environmental regulations with global governmental bodies, reporting externally on the company's environmental and social performance, and leading the company's engagement and partnerships with non-government organizations (NGOs) and other key stakeholders. Viera is an active member of the Product Development arm of the Ford African Ancestry Network (FAAN), with a focus on mentoring and counseling. Mr. Viera currently serves on the Advisory Board of the Graham Institute of Environmental Sustainability at the University of Michigan, is the Co-Chair of the Erb Strategic Advisory Board at the University of Michigan, and has recently served on the Advisory Board at Georgia Tech in Atlanta, the Energy Advisory Committee at the Museum of Science and Industry in Chicago, and the Department of Homeland Security's Sustainability and Efficiency Task Force in Washington, D.C.

JOAN WALKER – *University of California, Berkeley*

Joan Walker's research focus is behavioral modeling, with an expertise in discrete choice analysis and travel behavior. She works to improve the models that are used for transportation planning, policy, and operations. Professor Walker joined UC Berkeley in 2008 as faculty in the Department of Civil and Environmental Engineering and a member of the interdisciplinary Global Metropolitan Studies (GMS) initiative. She currently serves as Co-Director of GMS. She received her Bachelor's degree in Civil Engineering from UC Berkeley and her Master's and Ph.D. degrees in Civil and Environmental Engineering from MIT. Prior to

joining UC Berkeley, she was Director of Demand Modeling at Caliper Corporation and an Assistant Professor of Geography and Environment at Boston University. She is a recipient of the Presidential Early Career Award for Scientists and Engineers – the highest honor bestowed by the U.S. government on scientists and engineers beginning their independent careers. She is an Associate Editor of Transportation Science and the current Chair of the Committee on Transportation Demand Forecasting (ADB40) for the Transportation Research Board of the National Academies.