

Agenda

TECHNOLOGICAL PATHWAYS To A Lower Carbon Transportation Sector

SEPTEMBER 25, 2012 • WORKSHOP AGENDA
Multipurpose Room • 1 Pace Plaza • Lower Manhattan

- 10:00** **Welcome**
- 10:15** **Exploring Policies to Drive a Low Carbon Transportation Sector**
• **Dan Sperling**, Director of the Institute of Transportation Studies at the University of California–Davis
- 11:00** **Complementary Measures: State and Regional Efforts to Reduce Emissions from the Transportation Sector**
• **Sonia Hamel**, Hamel Environmental Consulting
- 11:15** **Break**
- 11:30** **Wheels in Motion: The New Charge in Electric Vehicles**
A panel will present new innovations in electric vehicle technology and its associated infrastructure, focusing on local companies and implementation prospects in the region. Technological and regulatory barriers to deployment will also be covered.
MODERATOR: **Jeremy McDiarmid**, Massachusetts Director, Environment Northeast
• **Phil Ovitt**, Senior Analyst, NRG Energy
• **Brian Jones**, Senior Vice President, Michael Bradley & Associates
• **Seth Cutler**, Product Manager for EV Infrastructure, General Electric
- 12:30 pm** **Lunch**
- 1:30** **Expanding Focus: The Potential in Natural Gas**
This panel will focus on regional opportunities to implement natural gas fleets and service centers with an emphasis on technological progress within the industry.
MODERATOR: **Carol Lee Rawn**, Director of Transportation, Ceres
• **Kathryn Clay**, Executive Director of the Drive Natural Gas Initiative, American Gas Association
• **Mark Simon**, New York City Co-Coordinator, Clean Cities Coalition
• **Rich Kassel**, Senior Vice President, Gladstein, Neandross, & Associates
- 2:30** **Break**
- 2:45** **Rapid Growth: Advances in Biofuels**
This panel will discuss new developments within advanced biofuels and feedstocks and analyze potential benefits to the region.
MODERATOR: **Mary Solecki**, Clean Fuels Consultant, Environmental Entrepreneurs
• **Ted Kniesche**, Vice President of Business Development, Fulcrum BioEnergy
• **Thomas Richard**, Director, Penn State Institute of Energy & the Environment
• **Jeremy Martin**, Senior Scientist, Union of Concerned Scientists' Clean Vehicles Program
- 3:45** **Workshop Closing**
• **Jackson Morris**, Director of Strategic Engagement, Pace Energy & Climate Center
- 4:00** **Reception**

TECHNOLOGICAL PATHWAYS

To A Lower Carbon Transportation Sector



DANIEL SPERLING is a member of the California Air Resource Board who is recognized as a leading international expert on transportation technology assessment, energy and environmental aspects of transportation, and transportation policy. Dr. Sperling is also a 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 led ITS-Davis to international prominence by building strong partnerships with industry, government, and the environmental community, integrating interdisciplinary research and education programs, and connecting research with public outreach and education.

Dr. Sperling is recent chair of the Davos World Economic Forum's Council on "Future of Mobility" and recent chair of the U.S. Transportation Research Board's standing committees on Sustainable Transportation and Alternative Fuels. He was honored as a lifetime National Associate of the National Academies, is author or editor of 200 technical articles and 12 books, including *Two Billion Cars* (Oxford University Press, 2009), and has testified many times to the U.S. Congress on alternative fuels and advanced vehicle technology.

He earned his Ph.D. in Transportation Engineering from the University of California, Berkeley (with minors in Economics and Energy & Resources) and his B.S. in Environmental Engineering and Urban Planning from Cornell University.



SONIA HAMEL consults to governments, foundations, non-profits and corporations in the areas of climate, energy and transportation policy and program development.

Ms. Hamel has over 30 years of experience in policy analysis and program implementation.

Since 2007, she has been the CEO of Hamel Environmental Consulting a Massachusetts-certified women-owned business, a small team of professionals working on energy, climate and transportation strategies. Sonia also is working as a consultant to many state and local agencies to assist them in developing energy, climate and transportation programs and policies.

Previously, Sonia served in the Massachusetts Office for Commonwealth Development, where she wrote the Massachusetts Climate Protection Plan and led the state's efforts in creating the Regional Greenhouse Gas Initiative (RGGI), a regional cap and trade program for the electric sector. She was also the Massachusetts Director of Air Policy and Planning for 10 years, leading one of the most successful air quality programs in the U.S.



SETH CUTLER is the GE Product Manager for EV Infrastructure, with responsibility for setting the strategic direction of GE's EV Infrastructure products. Seth was previously the Design Leader for GE's Solar product programs, including the EV Solar Carport offering. Seth joined GE in 2007 as part of the Edison Engineering Program having graduated from The City College of New York with a Bachelor of Science degree in Mechanical Engineering.



BRIAN JONES is a Senior Vice President with the consulting firm of M.J. Bradley & Associates. Brian advises energy sector and NGO clients on energy and environmental related programs and policies at the state, regional and national levels. Brian's current efforts are focused on advising industry clients on sustainability programs, greenhouse gas emission inventories and reduction strategies as well as regional and state climate policies including the Regional Greenhouse Gas Initiative, California AB32 cap and trade and Low Carbon Fuel Standard programs.

Prior to joining MJB&A in 1998, Brian worked on state energy and environmental policy while at the Commonwealth of Massachusetts Executive Office of Environmental Affairs. Brian holds a Bachelor's Degree in Political Science and Environmental Studies from Providence College ('96).



PHIL OVITT is a Senior Analyst for electric vehicle policy and business development at NRG Energy, connecting NRG's policy efforts in Washington, DC to its electric vehicle network business, eVgo. Prior to NRG, Phil was the Policy Analyst for carbon investment manager C-Quest Capital in Washington, DC. He also served as the Legislative Assistant for energy and environment to then-U.S. Senator Sam Brownback, the current Governor of Kansas. While at the Senate, Phil worked on legislative issues including carbon offset provisions introduced during the Lieberman-Warner climate debate. Phil began his career in the Energy and Natural Resources practice at Accenture, helping analyze supply chains at some of the world's largest publicly traded energy companies. Phil holds a BA from Indiana University and is a proud Hoosier.



DR. KATHRYN CLAY is the Executive Director of the Drive Natural Gas Initiative and an Adjunct Professor with the Georgetown University Program on Science and the Public Interest. Previously, Dr. Clay was Vice President for Research and Technology Policy at the Alliance of Automobile Manufacturers and served on the professional staff of the Senate Energy and Natural Resources Committee and the House Committee on Science. She holds a Ph.D. in Applied Physics and an M.S. in Electrical Engineering.



MARK SIMON has served as Director of Alternate Fuel Programs for the NY City Department of Transportation since 1997. He designs and manages 40 million dollars in federal grant programs to promote clean vehicle programs in the public and private sectors. His program experience is with electric vehicles, natural gas and biogas vehicles biodiesel and ethanol. Prior to that, he worked at the NY City Department of Environmental Protection on air quality, environmental impact analysis, mobile source programs as well as alternate fuels. Mark has an MS in Public Administration/ Environmental Planning from New York University and a BA from Earlham College.



RICH KASSEL joined Gladstein, Neandross & Associates, an environmental consulting firm that specializes in the transportation sector, as a senior vice president in June 2012. From 1991 until then, Rich directed the Clean Fuels and Vehicles Project at the Natural Resources Defense Council (NRDC). His work helped spur the creation of NYC Transit's clean-fuel bus program, including hundreds of natural gas buses; a series of EPA regulations that will cut pollution from highway, nonroad, locomotive, and marine engines by more than 90 percent over the coming decade; and the Partnership for Clean Fuels and Vehicles, which led the successful campaign to eliminate leaded gasoline in more than 80 countries worldwide since 2002.



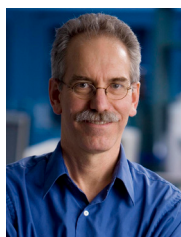
TED KNIESCHE has been with Fulcrum since its inception and has been instrumental in developing the company's business strategies. Overseeing business development, project development and government relations activities, Ted has led the negotiations for several of Fulcrum's commercial contracts and relationships, including numerous long term MSW feedstock supply agreements which provide enough feedstock supply to produce more than 700 million gallons of ethanol each year. He also leads Fulcrum's State and Federal Government and Regulatory affairs. Ted came to Fulcrum from US Renewables Group (USRG), where he helped acquire, develop and operate renewable power and clean fuel assets. Prior to USRG, Ted served in the investment banking group at Bear Stearns & Co. Inc. Ted has a B.A. in economics from the University of California, Berkeley and a general course certificate from the London School of Economics and Political Science.



JEREMY MARTIN is a Senior Scientist in the Union of Concerned Scientists' Clean Vehicles Program. His report for UCS, "The Billion Gallon Challenge," assesses biofuels policies and lays out a plan to get biofuels back on track. He has also studied the role of biofuels in "The Energy Water Collision," a UCS investigation of the connections between energy and water use. Most recently Jeremy has focused on improving biofuels tax policy to support innovation and cleaner fuels while building on the policy framework of the Renewable Fuels Standard.

Dr. Martin has also played an active technical role in the EPA's Renewable Fuel Standard Regulations and served as a member of the California Air Resources Board's Low Carbon Fuel Standard Expert Workgroup. Dr. Martin is the author of more than 15 technical publications and 13 patents on topics ranging from biofuels lifecycle accounting to semiconductor manufacturing and polymer physics.

Before joining UCS, Dr. Martin worked in research, development and manufacturing of computer chips at Advanced Micro Devices. Dr. Martin received his Ph.D. in Chemistry and Chemical Engineering from the California Institute of Technology and a bachelor's degree in chemistry and English literature from Haverford College.



TOM RICHARD is the Director of Penn State's Institutes for Energy and the Environment (PSIEE) and a professor in the Department of Agricultural and Biological Engineering. Dr. Richard's teaching and research apply fundamentals from ecology, synthetic biology, and bioprocess engineering to develop sustainable strategies for a bio-based economy. He currently also serves as the deputy technical director for the DOE's National Risk Assessment Partnership for carbon sequestration. Dr. Richard is the author or co-author of over 140 research and technical publications and serves on the editorial boards of three scientific journals. He is active in several professional societies and a Fellow and Past President of the Institute of Biological Engineering. Dr. Richard has a B.S. from the University of California at Berkeley, and M.S. and PhD degrees from Cornell University.



JACKSON MORRIS serves as the Director of Strategic Engagement at the Pace Energy and Climate Center. He represents Pace in advancing clean energy policies in the state capital, through direct engagement with state agencies, the Executive Chamber, the New York State legislature, and the New York Independent System Operator (NYISO), as well as working with utilities and other energy, environmental, health and consumer organizations. Jackson analyzes, proposes, and advances regulatory and legislative mechanisms for improving New York's profile for investment by clean energy companies, including innovative financing mechanisms for attracting energy efficiency, renewable energy and other low carbon venture capital to the state. Mr. Morris holds a B.A. in Sociology and certificates in Primatology and Markets & Management from Duke University, as well as an M.S. in Environmental Policy from Bard Center for Environmental Policy.

Moderators



JEREMY MCDIARMID is Environmental Northeast's Massachusetts Office Director and leads ENE's climate and energy advocacy in Massachusetts. He also serves as a staff attorney. Jeremy has extensive experience in energy efficiency, renewable energy and clean transportation policy development and serves as the environmental appointee on the Massachusetts Energy Efficiency Advisory Council. He has also been appointed to the Massachusetts Global Warming Solutions Act Implementation Advisory Committee. In addition, he leads ENE's analysis and advocacy on the development of a low carbon fuels program in the Northeast and Mid-Atlantic states. He represents ENE in regulatory proceedings before the public utilities commission, and he serves on the policy committee of the New England Clean Energy Council. Prior to joining ENE, Jeremy was an attorney with a civil litigation practice in Boston. He also served as a Public Information Officer at the Massachusetts Division of Energy Resources and a Special Assistant to the Director of the State Office of Consumer Affairs and Business Regulation. Jeremy received an A.B. with honors from Syracuse University and holds a JD with honors from Boston College Law School. (jmcdiarmid@env-ne.org)



CAROL LEE RAWN directs the Transportation Program at Ceres. She is an environmental attorney with more than 20 years of experience working with federal and state regulatory agencies, companies and nonprofit organizations on a wide variety of environmental issues. She currently works with investors and companies on a variety of transportation policy issues.

She previously served as General Counsel for the Massachusetts Executive Office of Environmental Affairs, as well as Deputy Legal Counsel to the Governor of Massachusetts.

She has also been an attorney with the Conservation Law Foundation, the Massachusetts Attorney General's Office and the Natural Resources Defense Council.



MARY SOLECKI leads Environmental Entrepreneurs (E2)'s clean fuel program. E2 is a national community of business leaders who promote sound environmental policy that builds economic prosperity. She conducts research, applied policy studies and communications for advanced biofuels, and works on biofuel regulation and policy across the United States.