CLEAN TECH LEADERSHIP FORUM PATHWAYS TO PROGRESS

Monday, October 5, 2015

777 North Capitol Street, NE, Suite 300, Washington, D.C. 20002 Walter A. Scheiber Board Room

9:30am - 4:00pm







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SIEMENS







9:00 - 9:30am

9:30 -9:40am

9:40 -10:00am

10:00-10:45am

10:45-11:00am

11:00am-12:15pm

12:30-1:30pm

1:30-2:45pm

2:45-3:50pm

Agenda

Registration and Continental Breakfast

Welcome

Chuck Bean, Executive Director, Metropolitan Washington Council of Governments

Introductory Remarks

Scott Johnstone, Executive Director, Vermont Energy Investment Corporation

Keynote: State of the Clean Tech Economy and the Road Ahead

Ron Pernick, Founder and Managing Director, Clean Edge, Inc.

Break

Public Sector Initiatives to Unlock Capital Investment

Francis Slakey, Executive Director, Georgetown University Energy Prize **Austin Brown**, Senior Policy Analyst, Office of Science and Technology, The White House

Eric Coffman, Chief, Office of Energy and Sustainability, Department of "Green" General Services, Montgomery County, Maryland

Paul Zielinski, Chair, Federal Laboratory Consortium for Technology Transfer

Lunch and Keynotes

Tommy Wells, Director, Department of Energy and Environment, District of Columbia

Ali Zaidi, OMB Associate Director for Natural Resources, Energy, and Science, The White House

Enhancing Private Sector Investment and Innovation

Kathy Magruder, Director, Maryland Clean Energy Center (moderator)

Joshua Greene, Co-Founder and Board Chair Southeast Region, Cleantech Open **Evan Burfield**, Founder and Co-CEO,1776

Josh Levi, Vice President for Policy, Northern Virginia Technology Council **Eric Wachsman**, Director, University of Maryland Energy Research Center

Crafting the Vision for Supporting the Clean Tech Economy

Energy Efficiency and Social Equity (Board Room)

Ted Trabue, Managing Director, D.C. Sustainable Energy Utility

Technology and Innovation (Board Room)

Kathy Magruder, Director, Maryland Clean Energy Center

Local Government Session (DEP Conference Room)

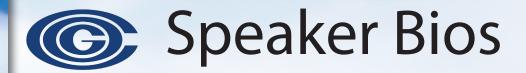
Gail Scott, Climate Change and Energy Programs, U.S. Environmental Protection Agency

Robert Graff, Manager, Office of Energy and Climate Change Initiatives, Delaware Valley Regional Planning Commission

Financing and the Business Case for Clean Tech (3rd Floor Conference Room)

Robert Lazaro, Director, Regional Energy Planning, Northern Virginia Regional Commission

Closing Remarks and Adjourn





Austin Brown is a senior policy analyst on detail to the Office of Science and Technology Policy in the Executive Office of the President. His work focuses on technologies and policies for clean energy and sustainable transportation. His home institution is the Washington, D.C., Office of the National Renewable Energy Laboratory, where he covers analysis topics for the Department of Energy.

Austin was a scientist in his previous life. He has a B.S. in Physics from Harvey Mudd College and received his Ph.D. in Biophysics from Stanford University. With this scientific training, he transitioned to Washington to connect science to policy decisions, especially federal clean energy research. Austin's primary career interest is to see the United States begin on a pathway that leads towards a future where energy is clean, affordable, and reliable domestically, and worldwide. This overall goal is at least partially selfish as it will ensure he can continue doing many of his favorite things – appreciating the outdoors, running, SCUBA diving, skiing – and help save these invaluable resources for future generations.



Evan Burfield is the cofounder and co-CEO of 1776, where he works with startups around the world tackling important challenges in areas like education, health, energy, transportation, and cities. He is a frequent speaker and contributor to publications such as the Wall Street Journal, the Washington Post, and Huffington Post. He is also an active angel investor as a cofounder of K Street Capital.

Evan's past entrepreneurial endeavors have included cofounding netDecide in 1996 shortly after graduating from high school, helping to build Oakwood Global Finance in London as Director of Strategy, and founding Synteractive in 2006. Evan holds Bachelor's and Master's degrees in Philosophy, Politics, and Economics from the University of Oxford. Evan currently serves as a Trustee of the Federal City Council and on the Board of the Rothermere American Institute in Oxford.



Eric Coffman established and leads the Montgomery County Office of Energy and Sustainability (OES) in the Department of General Services (DGS). OES is dedicated to implementing comprehensive planning and actions to reduce the environmental footprint of County operations. Before launching OES, Eric was Senior Energy Planner with Montgomery County's Department of Environmental Protection. In this role he was responsible for policy and programs to reduce market barriers to clean energy and energy-efficiency. Eric is a United States Green Building Council Leadership in Energy and

Environmental Design (LEED) professional, Certified Energy Manager and Certified Energy Procurement Professional.



Chuck Bean is an executive and civic leader with more than 25 years of leadership experience in nonprofits, philanthropy, and government. Bean is Executive Director of the Metropolitan Washington Council of Governments (COG), one of the country's most prominent regional councils, where he is responsible for its overall administration. COG is an independent, nonprofit association that brings area leaders together to address major regional issues like land-use, human services, public safety, environmental and transportation planning. Its membership is comprised of 300 elected officials from 22 local

governments, the Maryland and Virginia state legislatures, and U.S. Congress. Bean became Executive Director in 2012.



Robert Graff manages the Office of Energy and Climate Change Initiatives for the Delaware Valley Regional Planning Commission (DVRPC), the MPO and regional planning forum for Greater Philadelphia. Mr. Graff manages initiatives to reduce energy use and greenhouse gas emissions, and to prepare the region for the long-term impacts of a changing climate. This includes developing tools and guidance for cost-effective strategies to reduce energy demand and curb greenhouse gas emissions in the region, both in buildings and in the transportation sector. Mr. Graff represents DVRPC on two

transportation research advisory panels for the National Academy of Sciences and serves by gubernatorial appointment as a member the State of Pennsylvania's Climate Change Advisory Committee.

Immediately prior to joining the Commission in 2007, Mr. Graff worked for the Pennsylvania Economy League. Prior to that he was an Associate Scientist at Tellus Institute in Boston, where he helped create the Global Reporting Initiative, now the global standard for corporate sustainability reporting. Mr. Graff earned a Master of Public Affairs and Urban & Regional Planning degree from the Woodrow Wilson School at Princeton University.



Joshua Greene is the Leader of the Global Energy, Environment, and Natural Resources Policy and Regulatory Practice at Squire Patton Boggs LLP and uses his two decades of experience as a former Congressional staff member and entrepreneur in assisting his clients to achieve their business goals and objectives. Mr. Greene's legal practice focuses on energy and environmental regulation, compliance, project development and finance, as well as corporate counseling with a particular concentration on renewable and alternative energy development, energy efficiency, energy storage, technology diligence,

resource scarcity, project funding, economic development, and public-private partnerships. He has also been actively engaged in counseling clients regarding environmental and energy commodities in the United States and abroad. Finally, Mr. Greene is actively engaged in providing business and regulatory counsel to emerging technology companies within the energy, natural resources, and information technology sectors.

In addition to his legal work, Mr. Greene currently serves as Chairman of the Southeast Region of the Silicon Valley based 501c3 Cleantech Open, which administers the world's largest accelerator program for cleantech startups. Mr. Greene resides in the Maryland and is extremely active in his local community, where he sits on the boards of both civic and charitable organizations. He has also received numerous appointments in the State of Maryland, the most recent of which included being named a Commissioner to Maryland Economic Development Commission.



Robert W. Lazaro, Jr. serves as Director of Regional Energy and Sustainability Policy for the Northern Virginia Regional Commission (NVRC). Prior to his appointment as Director, Lazaro has a long history of public service in the community elected first as a Town Council member of the Town of Purcellville, Virginia and four terms as Mayor. During his service the Town was recognized in a number of areas for environmental protection and sustainability, winning the Governor's Gold Medal for Environmental Excellence (2010), the Historic District Design Excellence Award (2011 & 2012) and the prestigious Siemens' Corporation

National Sustainable Communities Award (2012). Lazaro has served as Chairman and Vice-Chairman of the NVRC and actively participated in the Transatlantic Urban Climate Dialogue with colleagues from Germany and Canada.



Katherine Magruder - As Executive Director of the Maryland Clean Energy Center, Ms. Magruder is working to advance the adoption of clean energy products, services and technologies in the state. In this capacity she engages in business and workforce development initiatives, advocates for supportive public policy and financing programs. She is recognized as a Certified Economic Developer by the International Economic Development Council.

Ms. Magruder served as Chief of Staff at the University of Maryland Biotechnology Institute, a part of the University System of Maryland widely known for performing cutting edge research and transfer of technology discoveries to commercial application. During her appointment to the Maryland Department of Business and Economic

Development as Director of Resource Based Industries, she built a program focused on sustaining agriculture, forestry, mining, fisheries and maritime industry sectors. Ms. Magruder holds a professional Certificate in Destination Marketing & Management from George Washington University School of Business & Public Management. Kathy's undergraduate coursework began at the University of Maryland College Park and was completed with a BFA in Fine Art from Maryland Institute College of Art. She currently resides in Centreville, Maryland where she served as chair of the Centreville Economic Development Authority.



Scott Johnstone is a strong leader in guiding complex organizations through long-term transformational periods in the private and public sectors. He is committed to public service and good governance. These elements have driven his decision-making in improving the quality and effectiveness of the organizations he has led.

Scott became Vermont Energy Investment Corporation's (VEIC) Executive Director in 2008, and has led the mission-driven organization through substantial strategic growth,

doubling staff and tripling the revenue- and the energy savings for customers and clients - across seven years. Under his leadership, VEIC built upon the success of Efficiency Vermont and launched two more energy efficiency utilities (in Washington, DC, and Ohio), created a transportation efficiency policy and research entity, acquired the Biomass Energy Resource Center, and gained statewide recognition as a high-value employer.

Prior to his becoming the Executive Director at VEIC in 2008, he was the Executive Director of the Chittenden County Metropolitan Planning Organization, Secretary of the Vermont Agency of Natural Resources, and the Director of Public Works for the City of Burlington, Vermont. He holds a Bachelor of Science degree in Civil Engineering from the University of Maine, and is certified as a Professional Engineer.



Josh Levi is Vice President for Policy for the Northern Virginia Technology Council (NVTC), a position he has held since 2002. NVTC is the largest technology council in the nation with about 1,000 member companies employing 200,000 people. As NVTC's Vice President for Policy, Josh Levi is responsible for the organization's public policy advocacy efforts on behalf of Northern Virginia's technology community. He previously served as NVTC Public Policy Manager and later as Director of Policy.

During Mr. Levi's eleven-year tenure at NVTC, the organization has achieved substantial success advancing policies and initiatives related to technology-driven economic development and job creation, science and technology education, workforce development, Internet governance and e-government, new company formation and promotion of entrepreneurship, infrastructure investment, research, and tax policy. He also led efforts to establish and grow TechPAC, NVTC's state-level Political Action Committee.

Josh Levi received his bachelor's degree in political science from Virginia Tech in 1995 and graduated cum laude from the University of Richmond School of Law in 1999. He is a member of the Virginia State Bar.



Ron Pernick is founder and managing director of Clean Edge, the first analyst firm devoted exclusively to the clean-tech market. A seasoned researcher and publisher with three decades of high-tech experience, Ron is the coauthor of two books on clean-tech business and innovation, Clean Tech Nation (HarperCollins, 2012) and The Clean Tech Revolution (HarperCollins, 2007). At Clean Edge he has coauthored more than three-dozen reports on clean technologies, markets, and policies. He oversees the firm's indexing and benchmarking services, tracking publicly traded companies; state and metro regions;

utilities and grid modernization; consumer attitudes; and more. He consults regularly to companies, government agencies, NGOs, and investors and is a guest speaker at universities and international events. Prior to founding Clean Edge, he helped build the brands of such Internet pioneers as Internet In A Box, Preview Travel, The WELL, and Yahoo and lived and worked in Japan with a focus on the telecommunications and consumer electronics sectors.



Gail Scott is Gail Scott is a true "Midwesterner" at heart, born in Columbus, Ohio, and then moved on to the windy city of Chicago where she lived for 28 years. She graduated from Bradley University, in Peoria, Illinois receiving a degree in Political Science, and went on to receive her Master's Degree in Public Administration from Northern Illinois University. Her career with the U.S Environmental Protection Agency started in Chicago but really took off once she arrived in Philadelphia. Gail has worked for EPA for over 28 years in various positions. She has served as an EPA congressional liaison to Capitol Hill, press relations

officer, manager for the ENERGY STAR programs, Sustainability and Renewable Energy Program Manager, Children's Health Program, and Special Assistant for the Mid-Atlantic Regional Administrator from 2001 to 2008.



Francis Slakey is the Upjohn Lecturer on Physics and Public Policy at Georgetown University, the Executive Director of the Georgetown University Energy Prize, and author of the international best-selling memoir "To The Last Breath." Dr. Slakey received his PhD in Physics in 1992 from the University of Illinois, Urbana-Champaign. His technical publications have received more than 500 citations. He has written widely on science policy issues, publishing more than fifty articles for the popular press including The New York Times, Washington Post, and Scientific American. He has served in advisory positions

for a diverse set of organizations including the National Geographic, the Council on Foreign Relations and the Creative Coalition - the political advocacy organization of the entertainment industry. He is a Fellow of the APS, a Fellow of the AAAS, a Lemelson Research Associate of the Smithsonian Institution, and a MacArthur Scholar.

Dr. Slakey became the 28th American to summit Mt. Everest in an environmental expedition that was the subject of the movie "Beyond the Summit". He is the first person in history to both summit the highest mountain on every continent and surf every ocean. In recognition of his adventures, as part of the 2002 Olympic Games, he carried the Olympic torch from the steps of the US Capitol.



Ted Trabue - As Managing Director, Mr. Trabue is responsible for leading the DCSEU in meeting its economic, environmental, and job creation goals. Mr. Trabue has over 30 years of experience in public affairs, most recently as Executive Director of the Green Builders Council of DC. He also served two terms as the President of the District of Columbia State Board of Education. Mr. Trabue is a fourth generation Washingtonian, and like his mother and grandmother, he attended DC public schools. He received his undergraduate degree in Economics from Dartmouth College, and a law degree from Howard University School

of Law. Mr. Trabue is a member of the DC Bar and has served on the board of directors of the DC Chamber of Commerce, DC Appleseed, and the DC Building Industry Association.



Dr. Eric D Wachsman, Director of the University of Maryland Energy Research Center, is the William L. Crentz Centennial Chair in Energy Research with appointments in both the Department of Materials Science and Engineering, and the Department of Chemical Engineering at the University of Maryland. He received his Ph.D. in Materials Science & Engineering from Stanford University, and his B.S. in Chemical Engineering from the University of California at Berkeley.

He is a recipient of the 2014 Sir William Grove Award from the International Association for Hydrogen Energy; the 2014 Pfeil Award from The Institute of Materials, Minerals, and Mining; the Outstanding Invention of 2013 award from the University of Maryland Office of Technology Licensing; the 2012 Fuel Cell Seminar & Exposition Award; and the 2012 HTM Outstanding Achievement Award from The Electrochemical Society. His research is focused on solid ion-conducting materials and electrocatalysts, and includes the development of solid oxide fuel cells (SOFC), solid-state batteries, ion-transport membrane reactors, solid-state gas sensors, and the electrocatalytic conversion of CH4, CO2, and NOx, using advanced ion conducting materials. He has more than 230 publications and 12 patents on ionic and electronic transport in materials, and their catalytic properties, and device performance. He was appointed by the Governor to the Board of Directors of the Maryland Clean Energy Center.

Tommy Wells is the director of the Department of Energy & Environment (DOEE). Appointed January 2015, he is chiefly responsible for protecting the environment and conserving the natural resources of the District of Columbia. Tommy's team is comprised of approximately 300 environmental professionals collectively working to improve the quality of life for residents and the natural inhabitants of the Nation's Capital.

Most recently, Tommy served as the DC Councilmember representing Ward 6—a position he held since 2006. During his time on Council, he garnered broad support for his efforts to make the District livable and walkable for all. Tommy worked with the City's leadership and, in particular, residents of Ward 6 to create a shared and respected place where drivers, cyclists, pedestrians, and exercise enthusiasts can co-exist safely. Known for his neighborhood-focused development, Tommy championed efforts to ensure availability of public transit, including the construction of new streetcar lines and the expansion of the DC Circulator. As Chair of the DC Council Committee on Transportation and the Environment, he worked to double the city's Capital Bikeshare program.

A passionate innovator and student of cutting edge solutions, Tommy earned his law degree from the Columbus School of Law at Catholic University in 1991 and a master's degree in social work from the University of Minnesota in 1983. He and his wife, Barbara, a writer and arts enthusiast, are residents of Ward 6 in the District.



Ali Zaidi is the White House Office of Management and Budget's Associate Director for Natural Resources, Energy, and Science. In this role, Zaidi leads a team of policy and budget experts overseeing a wide array of policy, budget and management issues across a nearly \$100 billion portfolio and a number of federal agencies including the Departments of Energy, Agriculture, and the Interior; the Environmental Protection Agency; the National Aeronautics and Space Administration; the Army Corps of Engineers' civil works; and the National Science Foundation.

Zaidi brings to the position a strong background in the design and implementation of federal policies and the development of public and private sector partnerships to increase U.S. energy security and cut harmful carbon pollution. In his previous role, as the Domestic Policy Council's Deputy Director for Energy Policy, Zaidi handled a wide range of issues on the White House's domestic policy team. His portfolio covered policy matters related to supply of and demand for energy - including policies that reduce our dependence on foreign oil by promoting responsible federal-lands production and adoption of alternative fuels; and policies that create jobs by advancing research and deployment of clean energy and energy efficiency technologies - as well as the intersection of these matters with the President's Climate Action Plan.

Since February 2009, Zaidi has served in a number of roles within the Obama Administration: Before his position at the White House Domestic Policy Council, he served as senior director for Cabinet Affairs at the White House. Zaidi has also served as a policy aide to the U.S. Energy Secretary Steven Chu and as special projects coordinator at the White House Office of Management and Budget.



Paul Zielinski is the Director of the Technology Partnerships Office (TPO) at the National Institute of Standards and Technology (NIST). TPO serves as the Office of Technology and Research Applications for NIST and is responsible for NIST technology transfer activities including patents, licenses, cooperative research, and small business innovation research. In addition, Paul is the current Chair of the Federal Laboratory Consortium for Technology Transfer and coordinates the Interagency Workgroup on Technology Transfer that addresses technology transfer policy issues. Prior to joining NIST, Paul worked at the

Environmental Protection Agency, the Department of Energy, private industry, and served on active duty as a commissioned officer in the United States Army. Paul has Master of Science degree in engineering and Master of Business Administration.









777 NORTH CAPITOL STREET, NE, SUITE 300, WASHINGTON, D.C. 20002 202.962.3200 T / 202.962.2301 F / 202.962.3213 TDD WWW.MWCOG.ORG

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