9th Annual Sustainability Conference

Engineering a Sustainable Economy

Innovating Solutions for the 21st Century Hosted By:







American Society of Civil Engineers – Pittsburgh Section Environmental and Water Resources Institute – Pittsburgh Chapter Champions for Sustainability a Program of Sustainable Pittsburgh

In Collaboration With:





The City of Pittsburgh – Office of the Mayor American Public Works Association – Western Pennsylvania Chapter

AUGUST WILSON CENTER

Thursday November 16, 2017 – 8:00AM to 3:00PM Cost: \$55 Members and Government Officials, \$60 Non-Members, \$20 Students Registration includes 5.0 PDH attendance certificate - Breakfast and lunch provided http://www.asce-pgh.org/event-2597414

Conference Summary

Across the globe, businesses and public agencies are implementing sustainable engineering practices to reduce ecological impacts, optimize social benefits, stand out with stakeholders, and stimulate financial and social return on investments. Planners, engineers, and scientists are achieving these goals through recent innovations such as building information modeling, interconnected systems integration, and "smart" infrastructure data analytics. These types of innovative sustainable practices are resulting in palpable cost savings as well as achieving social and ecological goals. Significant cost savings and related economic benefits are being achieved by incorporating sustainable practices within procurement approaches, engineering design standards, and operations. As expectations for sustainable design and performance gain momentum in public policy and the marketplace, planning and design professionals are increasingly stepping up to plan and build more sustainable communities in which to live, work, and play.

Join us on Thursday November 16th at 8 AM at the August Wilson Center for the 9th Annual ASCE/EWRI/C4S Sustainability Conference where we will showcase various strategies, tools, and real-world case studies where innovation is driving change in the way we do business. Lively discussions along with questions and answer sessions from leading experts on the topic will be conducted. Engineers, architects, city planners, government officials, and related infrastructure practitioners are all encouraged to attend.

Beginning in 2008, the American Society of Civil Engineers – Pittsburgh Section (ASCE), the Environmental and Water Resources Institute – Pittsburgh Chapter (EWRI) and Champions for Sustainability / Sustainable Pittsburgh (C4S) have organized annual, day-long conferences in an effort to highlight new and cutting edge sustainability knowledge and practices for the Pittsburgh region. The conferences also provide contextual awareness of sustainability-themed issues facing the Pittsburgh region, such as public policy, funding, and socio-economic barriers.

For more information, please contact:

Tom Batroney (thomas.batroney@mottmac.com), 412-297-2922

Founded in 1852, the **American Society of Civil Engineers** (ASCE) represents more than 137,700 members of the civil engineering profession worldwide and is America's oldest national engineering society. ASCE's vision is to position engineers as global leaders, building a better quality of life. The Pittsburgh Section of ASCE has nearly 1,600 members and represents engineering and construction interests for communities throughout Western PA.

The **Environmental & Water Resources Institute** (EWRI) is a civil engineering specialty institute of the ASCE. EWRI services are designed to complement ASCE's traditional civil engineering base and to attract new categories of members (noncivil engineer allied professionals) who seek to enhance their professional and technical development. The mission of the EWRI is to provide for the technical, educational and professional needs of its members; promotes the sustainable use, conservation, and protection of natural resources; and promotes human well-being.

Champions for Sustainability (C4S), a network for sustainable business solutions, brings together companies large and small to put sustainability into practice. A program of Sustainable Pittsburgh, C4S provides value via education, technical assistance and consulting on operational needs, and serves as a catalyst for new enterprise and innovation for cementing the business case for sustainability.

A 501(c)(3) nonprofit, **Sustainable Pittsburgh** (SP) affects decision-making for the Pittsburgh region to integrate economic prosperity, social equity, and environmental quality bringing sustainable solutions for communities and businesses. Over the past 20 years, SP has proven adept at building coalitions for change on issues that get at the heart of sustainability for southwestern Pennsylvania

Conference Agenda

8:00 - 8:30	Registration and Breakfast
8:30 - 8:45	Welcome and Introduction
8:45 - 9:30	 Keynote Session: Institute for Sustainable Infrastructure John Stanton, President and CEO, Institute for Sustainable Infrastructure
9:30 - 10:15	 Keynote Session: Driving Change Through Sustainability in Los Angeles County California Rosanna D'Antonio, Deputy Director, Los Angeles County Department of Public Works
10:15 - 10:30	Scheduled Break
10:30 - 11:30	 Panel Discussion: Sustainability and Innovation in the Pittsburgh Region Karina Ricks, Director of Mobility and Infrastructure, City of Pittsburgh James Ritzman, Dep. Secretary of Planning, PennDOT Courtney Ehrlichman, Deputy Executive Director, Traffic21, Mobility21 UTC and T-SET UTC at Carnegie Mellon University Dan Cessna, PE, Senior Vice President, Michael Baker International
11:30 - 12:30	Lunch
12:30 - 1:00	 Smart Transportation Infrastructure: The Future of Sustainable Transportation Infrastructure Courtney Ehrlichman, Deputy Executive Director, Traffic21, Mobility21 UTC and T-SET UTC at Carnegie Mellon University
1:00 - 1:30	 Smart Stormwater Systems Infrastructure: The Future of Sustainable Stormwater Infrastructure Viktor Hlas, Business Team Lead, Opti Stormwater Controls Megan Zeigler, Green Infrastructure Project Manager, Pittsburgh Water and Sewer Authority
1:30 - 1:45	Scheduled Break
1:45 - 2:30	 Panel Discussion: CEOs for Sustainability - Corporate Innovators & Driving Sustainability in the Private Sector - Michael Barnard PE, LEED-AP, Project Director, Oxford Development Company Daniel Bonk, PE, Senior Engineer, Montauk Energy Dhaval Bhalodia, Director of Asset Optimization, EverPower Wind Holdings
2:30 - 2:45	Student Award Presentation (Sponsored by Mott MacDonald)
2:45 - 3:00	Closing Remarks and Adjourn

Keynote Session:

John Stanton President and CEO at Institute for Sustainable Infrastructure



John has spent his career working on sustainability issues. Prior to joining ISI as CEO and President in 2017, he served as Executive Vice President & Regulatory Counsel at Tesla / SolarCity, Executive VP and General Counsel at the Solar Energy Industries Association (SEIA), Vice President for Energy and Climate at the PEW National Environmental Trust, Legislative Counsel at the US EPA, New Jersey Deputy Attorney General and Director of the Energy & Environment Committee at the National Conference of State Legislatures. He earned his law degree at Georgetown University Law School.

Rosanna D'Antonio Deputy Director, Los Angeles County Department of Public Works



Rossana D'Antonio serves as Deputy Director over Business Outreach/Technical Support. She provides executive leadership in all matters relating to contracting, business outreach, and engineering support. Rossana created the Department's Innovation Lab with a broad-based mission to develop and implement innovative and sustainable ideas that foster progressive changes in design projects, methodologies, and processes. She received her Bachelor of Science Degree in Civil Engineering from Fresno State and an MBA with emphasis in leadership and organizational development from Pepperdine University. Rossana holds dual registrations in the State of California in Civil and Geotechnical Engineering.

Rossana believes strongly in giving back to the profession. She has achieved Fellow status with American Society of Civil Engineers (ASCE), has served on the Board of Directors for ASCE, and is an active member of the Society of Women Engineers and the American Public Works Association. She is a passionate advocate for equal opportunity in the workplace through recruitment, mentoring, outreach and diverse advancement. Rossana is co-founder of the Department's Women's Leadership Council where she continues to work on implementing Department initiatives that empower women. As an advocate of increasing representation in the STEM fields, she also makes presentations to high school and college students.

Michael Barnard Project Director, Oxford Development Company



As Project Director, Michael Barnard is responsible for leadership and execution of all aspects of a wide variety of development and owner's representative projects from inception to turnover and occupancy by client. Michael has been with Oxford since 2006 and is experienced working with diverse clients and teams to oversee the complete building process to deliver exceptional and sustainable working and living environments. He has overseen the planning, programming, design, and construction of major sports facilities, education, performing arts, commercial, entertainment, residential, and transportation projects with a total construction value over \$1 billion.

Michael served as owner's representative for the design and construction of the \$321 million, LEED Gold, PPG Paints Arena (formerly CONSOL Energy Center), and various projects for the LEED Platinum David L. Lawrence Convention Center. He is currently serving as the owner's representative for Pittsburgh's 178-acre brownfield redevelopment, Almono. Michael has also managed the construction for projects in Oxford's own portfolio, most recently completing the 117-unit apartment complex Hot Metal Flats, and the 590-space multimodal facility, The Hub at 3 Crossings.

Michael is a Professional Engineer licensed in the state of Pennsylvania as well as a LEED® Accredited Professional. He is the Pittsburgh Affiliate Chair for the ACE Mentor Program and Vice-Chair of Pittsburgh Allegheny County Thermal (PACT). Michael also serves as the Chair of Oxford's Sustainability Committee and volunteers with the Green Building Alliance and the Pittsburgh 2030 District. Michael is a graduate of The Johns Hopkins University with a Bachelor of Science Degree in Mechanical Engineering.

Dhaval Bhalodia Director of Asset Optimization, EverPower Wind Holdings



Dhaval Bhalodia is the Director of Asset Optimization at EverPower Wind Holdings. He is the company expert on the technical side of wind turbines, and leads the EverPower control room. He is responsible for managing operational data storage and SCADA overlay for all the wind farms, creation of the monthly operations reports, as well as extensive algorithm and database scripting. His current work includes anomaly detection that resulted in over 12 million dollars in cost avoidance. Dhaval also develops and manages advance analytical tools used to identify issues with wind turbines, and leads the troubleshooting and resolving of such identified problems.

Before EverPower, he worked as a Wind Turbine Performance and Diagnostics Engineer for General Electric Renewable Energy. He earned the GE Energy President's Award in 2010 for Outlier Detection, currently known as GE Pulse Point. Dhaval holds an Aerospace Engineering degree from Penn State, where he graduated as a Valedictorian of College of Engineering. Dhaval worked with a wind turbine manufacturer to dramatically increase blade aerodynamics for small scale turbines for his graduating thesis for the Schreyer's Honors College at Pennsylvania State University in 2008.

Daniel Bonk Senior Engineer, Montauk Energy



Dan Bonk is a Senior Engineer with Montauk Energy. Based in Pittsburgh, Pennsylvania, Montauk Energy is one of the largest producers of Renewable Natural Gas in the United States. Montauk extracts methane from municipal landfills and processes it so that it can be utilized beneficially to generate electricity, heat homes and businesses, and as Compressed Natural Gas (CNG) or Liquified Natural Gas (LNG).

Dan was born and raised in Pittsburgh. A graduate of Central Catholic High School, he has BS and MS degrees in Civil Engineering from the University of Pittsburgh. He is a registered Professional Engineer in Pennsylvania.

The majority of Dan's career has been concentrated in the environmental and sustainability space. In 1985 Dan co-authored the first manual on Dam Safety in the US for the State of Pennsylvania. Considered a major environmental publication in its day, it is now in its 6th printing. It has served as a model for similar publications for many other states across the US on this topic.

In 1993 Dan was honored by the Pittsburgh Chapter of the American Society of Civil Engineers as its Young Civil Engineer of the Year.

Dan is also an accomplished writer and an expert in modern ballpark and stadium design. His books have sold tens of thousands of copies to date. He advised various stakeholders involved in the site selection and design of PNC Park. He remains a sought-after speaker and media guest on this topic both locally and nationally. In 1991 he was a finalist for a Golden Quill, an annual award that honors professional local writing sponsored by the Press Club of Western Pennsylvania.

Dan spent over 20 years as a Pittsburgh-based geotechnical and environmental engineer, but has logged many miles working across the US. He joined Montauk Energy in 1999 and is now one of the longest serving professionals in the genre of companies whose business focus is landfill methane, RNG and environmental sustainability.

Dan Cessna Senior Vice President, Michael Baker International



Dan Cessna, PE, is a Senior VP and Regional Director of Michael Baker International's Pennsylvania Headquarters Region. In this role, he is responsible for leading all engineering, business, marketing, and financial operations across the state within Michael Baker.

Prior to joining Michael Baker, Mr. Cessna had 24 years of industry experience in transportation planning, design, construction management, asset planning and management, and public involvement with the Pennsylvania Department of Transportation (PennDOT). During the last 12 years, he served as District Executive for District 11, serving the Pittsburgh metro.

Mr. Cessna is an adjunct professor at the University of Pittsburgh's Swanson School of Engineering. Mr. Cessna also is President of the Engineers Society of Western Pennsylvania. He holds a Master of Engineering degree in Civil Engineering and a Bachelor of Science degree in Civil Engineering from The Pennsylvania State University, and a Master of Business Administration degree from the University of Pittsburgh's Joseph M. Katz Graduate School of Business.

Karina Ricks Director of Mobility and Infrastructure, City of Pittsburgh



Karina Ricks is the inaugural Director of the City of Pittsburgh's newly created Department of Mobility and Infrastructure. This department is leading efforts to provide Pittsburgh residents with sustainable, safe, accessible, and efficient transportation options. Karina comes to Pittsburgh from Washington, DC where she played a pivotal role in regenerating traditional main streets, revitalizing the downtown and restoring the waterfront.

Over the course of her 20-year careers, Karina has predominantly been in the public sector as planner, visionary, enabler, implementer and innovator at the national, state, and municipal level. She has led multiple major initiatives that have built or revived dynamic, diverse, and prosperous neighborhoods and communities. Karina recognizes that transportation is the formative and catalytic element that joins communities and opportunities and the environment and economy. She researched and wrote *The Innovative DOT* for Smart Growth America, a national publication to fund and promote sustainable transportation options at the state level and is an active leader with both the Complete Streets Coalition and American Public Transit Association

Courtney Ehrlichman Deputy Executive Director, Traffic21, Mobility21 UTC and T-SET UTC at Carnegie Mellon University



A leader in the transportation technology space, Courtney believes intelligent deployment and integration of technology solutions will disrupt and transform the transportation industry and urban fabric that we know today.

Currently, she shares time between roles as the Deputy Executive Director of the Traffic 21 Institute and Mobility21 National USDOT University Transportation Center at Carnegie Mellon University, and as Founder and Advisor of RoadBotics, a CMU Robotics Institute spinoff. She also serves on the Leadership Circle and the Legislative Rapid Response Team of the Intelligent Transportation Society of America, as well as on the board of the Intelligent Transportation Society of Pennsylvania, and is a founding board member of the Women's Transportation Seminar Pittsburgh Chapter.

James Ritzman Deputy Secretary of Planning, Pennsylvania Department of Transportation



Jim was appointed as the Deputy Secretary for Planning at the Pennsylvania Department of Transportation in 2007. He directs the activities associated with overseeing Pennsylvania's planning and programming functions (such as PennDOT's long range plan/comprehensive freight movement plan, Twelve Year Program development, and the Statewide Transportation Improvement Program which includes managing approximately \$1.6 billion federal each year), Services to Local Governments, GIS, Mapping, Transportation Statistics, Research and Innovation, and the Public Private Partnership (P3) Office.

Prior to his present assignment, Jim served as the Director of the Center for Program Development and Management, the Chief Design Services Engineer in the Bureau of Design, the Construction Project Manager for the I-99/US 220 Corridor in Centre County, Special Assistant to the Deputy Secretary for Highway Administration, as well as several other assignments in his 32 years with the Pennsylvania Department of Transportation.

Jim received a Bachelor of Science Degree in Civil Engineering from Geneva College and is active nationally in the American Association of State Highway and Transportation Official's (AASHTO) Committee on Planning, Committee on Performance Based Management, Transportation Policy Forum, and Funding and Finance Committee, as well as the Transportation Research Board's (TRB) Statewide Multimodal Planning Committee.

Viktor Hlas Business Team Lead, Opti Stormwater Controls



Mr. Hlas is responsible for managing client and partner relationships, implementing business growth strategies, and developing innovative project delivery methods. Prior to joining Opti in 2015, he was a Business Analyst at Geosyntec Consultants and a Project Engineer for the University of New Hampshire Stormwater Center where he designed and managed the construction of Low Impact Development (LID) projects. Mr. Hlas holds an MS and BS Summa Cum Laude from the University of New Hampshire in Civil Engineering, and an MBA from Babson College.

Megan Zeigler Green Infrastructure Project Manager, The Pittsburgh Water and Sewer Authority



As a Green Infrastructure Associate Project Manager for the Pittsburgh Water and Sewer Authority, Megan is responsible for establishing design standards and protocols for how to construct, operate and maintain new green stormwater facilities within the City of Pittsburgh. As the Authority's GI Program is being developed, a majority of Megan's time currently focuses on the sewershed level planning and cross department coordination for capital projects. She has field experience as a former business owner with a strong focus on community design and engagement through her work in the nonprofit sector and at a community design center. She holds a Masters in Landscape Architecture from the University of Georgia and a BA in Environmental Studies from the Warren Wilson College.

Contact Information:

Interested in becoming involved in future conferences? Or perhaps just wish to be more informed

for future events and sustainability related outreach initiatives?

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