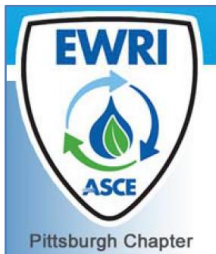


# 8<sup>th</sup> Annual Sustainability Conference

## Resilient Infrastructure in the Age of Climate Change

Hosted By:



A PROGRAM OF  
**SUSTAINABLE PITTSBURGH**

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

In Collaboration With:



The City of Pittsburgh – Office of the Mayor  
American Public Works Association – Western Pennsylvania Chapter  
The German Marshall Fund of the United States

## AUGUST WILSON CENTER

Thursday May 19, 2016 – 8:00AM to 3:30PM

Cost: \$45 Members and Government Officials, \$55 Non-Members, \$20 Students

# Conference Summary

In 2016, the 8<sup>th</sup> Annual ASCE/EWRI/C4S Sustainability Conference is revisiting its first conference theme on climate change. The very first ASCE-PGH/C4S Sustainability Conference in 2008 explored the potential impacts of climate change on regional infrastructure. Since the inaugural conference in 2008, the overall landscape and dialogue relating to climate change has greatly changed. No longer is the dialogue about whether or not climate change may exist or potentially pose a threat to critical infrastructure. The dialogue has now shifted to developing real and tangible infrastructure protection strategies against the impacts climate change while at the same time finding new and innovative ways to reduce greenhouse gas emissions.

Join us on Thursday May, 19<sup>th</sup> at 8 AM at the August Wilson Center for the 8<sup>th</sup> Annual ASCE/EWRI/C4S Sustainability Conference where we will showcase various strategies, tools, and real-world case studies for creating resilient infrastructure and communities for a changing climate. 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 Batrone ( [thomas.batrone@hatchmott.com](mailto:thomas.batrone@hatchmott.com) ), 412-297-2922

Matt Mehalik ( [MMehalik@sustainablepittsburgh.org](mailto:MMehalik@sustainablepittsburgh.org) ), 412-258-6644 or

Greg Scott ( [GScott@bucharthorn.com](mailto:GScott@bucharthorn.com) ), 412-567-2235

---

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 (non-civil 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 14 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 – 9:15** Designing Resilient Infrastructure for a Changing Climate  
[Duane Verner, Program Manager at Argonne National Laboratory](#)
- 9:15 – 9:45** City of Pittsburgh Climate Change Initiatives  
[Grant Ervin, Chief Resilience Officer – City of Pittsburgh](#)
- 9:45 – 10:00** Break (Poster Session by University Students)
- 10:00 – 11:00** The Path Forward in the City of Pittsburgh – City Resilience Assessments, Transportation via Complete Streets, and Resilient Stormwater Management  
[City of Pittsburgh Resilience Office](#)
- 11:00 – 11:30** Adapting Infrastructure and Civil Engineering Practice to a Changing Climate, American Society of Civil Engineers – Committee on Climate Change  
[Dr. Costa Samaras, Co-Author and Professor at Carnegie Mellon University](#)
- 11:30 – 12:30** Lunch (Poster Session by University Students)
- 12:30 – 1:15** International Case Study – Waste to Energy Strategies and Reducing GHG Emissions in Amsterdam  
[Andre Struker, Strategic Advisor/Innovation Manager at Waternet](#)
- 1:15 – 2:00** Panel Discussion: Utility Coordination for Creating Sustainable and Resilient Cities
- 2:00 – 3:00** Group Breakout Sessions with Conference Speakers
- 3:00 – 3:15** Best Student Poster Award Ceremony and Presentation
- 3:15 – 3:30** Closing and Expression of Appreciation
- 3:30 – 4:00** University Student Poster Sessions

## Duane Verner Program Manager at Argonne National Laboratory



Duane Verner is a Program Manager for the Risk and Infrastructure Science Center in the Global Security Sciences Division at Argonne National Laboratory. Mr. Verner oversees staffing and technical assignments including modeling and analysis of critical infrastructure, conducting site-level vulnerability assessments, developing climate change adaptation strategies, assessing the security of cyber-physical systems, developing region-wide dependency analyses, leading facilitated discussions, and developing assessment reports.

Mr. Verner is a member of the Transportation Research Board's (TRB's) Committee on Critical Transportation Infrastructure Protection (ABR10) and the Physical Security Subcommittee of ABR10. Prior to his position with Argonne National Laboratory, Mr. Verner was a project manager in the homeland security, defense, transportation, and environmental planning sectors with a private sector engineering firm. Mr. Verner is a certified planner and holds a M.A. in Urban Planning from Cleveland State University and a B.A. in Sociology from Hiram College.

## Grant Ervin Chief Resilience Officer – City of Pittsburgh



Grant Ervin serves as the Chief Resilience Officer for the City of Pittsburgh where he oversees the integration of sustainability and resilience into City services, programs and policy. Prior to joining the City of Pittsburgh, Grant served as the Regional Director for 10,000 Friends of Pennsylvania, a statewide smart growth and sustainable development policy organization; and as Public Policy Manager for Pittsburgh Community Reinvestment Group (PCRG).

Grant brings fifteen years of experience, intersecting the worlds of environmental, community & economic development and infrastructure policy to create innovative and sustainable solutions for local governments, community development organizations and state agencies. Grant has helped lead the development of a variety of innovative programs including Pittsburgh's inclusion in the Rockefeller Foundation's 100 Resilient Cities Initiative; the creation of the Uptown Eco-Innovation District, District Energy Pittsburgh, Pittsburgh and Neighborhood Community Information System and the Pennsylvania Community Transportation Initiative.

## Constantine Samaras Assistant Professor at Carnegie Mellon University



Costa Samaras is an assistant professor in the Department of Civil and Environmental Engineering at Carnegie Mellon University. His research spans energy, climate change, infrastructure, and defense analysis. Costa directs Carnegie Mellon's Center for Engineering and Resilience for Climate Adaptation and teaches the graduate class "Climate Adaptation for Infrastructure". He is an affiliated faculty member in Carnegie Mellon's Scott Institute for Energy Innovation and the College of Engineering's Energy Science, Technology and Policy Program. Costa is also an Adjunct Senior Researcher at the RAND Corporation and a Professor at the Pardee RAND Graduate School. He previously held positions as a Senior Engineer at the RAND Corporation and a civil engineer for Parsons Brinckerhoff in New York. Costa received a joint Ph.D. in Civil and Environmental Engineering and Engineering and

Public Policy and from Carnegie Mellon, a M.P.A. in Public Policy from the Wagner Graduate School of Public Service at New York University, and a B.S. in Civil Engineering from Bucknell University. Costa tweets about energy and climate topics with @CostaSamaras.

## Andre Struker Strategic Advisor and Innovation Manager at Waternet



André studied Fysics and Technology and Policy at the University of Technology in Eindhoven. He started his career as a consultant in the field of Energy savings and Renewable Energy at Ecofys. He became director of the Energy Agency *Amsterdam Reduces CO2-emissions*. Together with the city districts of Amsterdam, he stimulated and realized renewable energy and energy efficiency. During that time he got his degree on Industrial Engineering and Management at the University of Twente.

At Waternet André works on strategic issues and integrated long term solutions within the water cycle. He develops policy and projects to upgrade waste water into new materials. From 2012 he also manages the R&D program *Waternet Climate Neutral in 2020*. Together with the Port of Amsterdam and the waste to energy company AEB he started

Clean Capital to upgrade waste streams.

## 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?**

### ASCE Pittsburgh Section

Tom Batrone, PE, ENVSP, M.ASCE,  
Mott MacDonald, ASCE Pittsburgh Sustainability Committee Chair  
1600 W. Carson St.  
Pittsburgh, PA 15219

Phone: 412-497-2922

Email: [thomas.batronev@hatchmott.com](mailto:thomas.batronev@hatchmott.com)

Web: <https://www.mottmac.com/> and [www.asce-pgh.org/sustainability](http://www.asce-pgh.org/sustainability)

### Champions for Sustainability/Sustainable Pittsburgh

Matthew Mehalik, PhD,  
Program Manager, Sustainable Pittsburgh  
425 Sixth Avenue, Suite 1335  
Pittsburgh, PA 15219

Phone: 412-258-6642

Web: [www.sustainablepittsburgh.org](http://www.sustainablepittsburgh.org)

### EWRI Pittsburgh Chapter

Greg Scott, PE, M.ASCE  
Buchart and Horn, EWRI Pittsburgh Chairman  
2200 Liberty Avenue, Suite 300  
Pittsburgh, PA 15222

Phone: 412-567-2235

Email: [GScott@bucharthorn.com](mailto:GScott@bucharthorn.com)

Web: [www.bucharthorn.com](http://www.bucharthorn.com) and [www.asce-pgh.org/ewri](http://www.asce-pgh.org/ewri)

### EWRI Carnegie Mellon University Graduate Student Chapter

Nur Orak, EWRI CMU Graduate Student President  
119 Porter Hall, 5000 Forbes Avenue  
Pittsburgh, PA 15213

Contact website: <http://ewricmu.com/contact.html>

Web: <https://thebridge.cmu.edu/organization/EWRI>

Facebook: <https://www.facebook.com/EWRICMU>

### EWRI University of Pittsburgh Graduate Student Chapter

Sina Arjmand, EWRI Pitt Graduate Student President  
Benedum Hall, 3700 O'Hara Street  
Pittsburgh, PA 15261

Web: <https://sites.google.com/site/ewriupitt/>

Facebook: <https://www.facebook.com/EWRIPITT>

### Conference Planning Committee Members:

Tom Batrone  
Timothy Brett  
Kelly Good  
Djuna Gulliver  
Matthew Mehalik  
Kemal Niksic  
Don Nusser  
Nur Orak  
Gregory Scott  
Jonathan Shimko  
Cathy Trexler  
Liwei Zhang

