

# PRELIMINARY PROGRAM

## **CLIMATE CHANGE: Impacts, Policy, and Regulation**

**September 10-11, 2013  
Hyatt Dulles • Herndon, VA**

### **PROFESSIONAL DEVELOPMENT COURSES:**

**Workshops to Resilience: Climate Change Adaptation through NASA's Telescope**

September 9, 2013 (8:00 a.m. – 12:00 p.m.)

**Strategies for Addressing New Air Quality, Greenhouse Gas and Energy Requirements**

September 9, 2013 (1:00 p.m. – 5:00 p.m.)



AIR & WASTE MANAGEMENT  
ASSOCIATION

<http://climatechange.awma.org>

# PRELIMINARY PROGRAM

## ABOUT THE CONFERENCE

The conference will provide a forum for discussing the multiple facets of the climate change issue including its impact assessment, policy options and status of regulations for greenhouse gasses mitigation and adaptation. The conference will also examine a range of related topics, including the co-benefits of integrated approaches to air quality and climate change, and will take note of lessons learned and successful implementation strategies.

## GENERAL INFORMATION

### REGISTRATION

To register, complete the registration form at <http://climatechange.awma.org/> and return it with your payment to:

Registrar, Air & Waste Management Association  
420 Fort Duquesne Blvd., 3rd Floor  
Pittsburgh, PA 15222-1435 USA  
Fax: 412-232-3450

There is also the option to register online. Your registration will not be processed without payment.

### REFUND POLICY

If written notice of cancellation is received on or before August 26, 2013, payment will be refunded, less a \$75 cancellation fee. (Cancellation fees apply regardless of payment method). Substitutions may be made at any time; payment for any difference is due at the time of substitution. This refund policy applies to all occurrences, including weather-related events and other natural disasters. In the unlikely occurrence of event cancellation, the Association is not liable for any expenses incurred by the registrant other than the full refund of registration fee(s) paid.

### CONTINUING EDUCATION CREDIT OPPORTUNITIES

Conference attendees may be eligible for continuing education credit. For more information, contact Gloria Henning, at 412-904-6031, or [glhenning@awma.org](mailto:glhenning@awma.org).

### CONFERENCE COMMITTEE

#### General Conference Chairs:

C. Flint Webb, SAIC  
Miriam Lev-ON, The LEVON Group, LLC

#### Committee Members:

Tiffany Dillow, Dixon Environmental  
Stan Hayes, ENVIRON  
John Kinsman, Edison Electric Institute  
Jayne Somers, U.S. EPA

### PRESENTERS' BREAKFAST

Presenters and Session Chairs will meet for a complimentary continental breakfast on the day of their session involvement to review program details. Presenters should bring their presentations on a memory stick/USB to this meeting.

### CONFERENCE PROCEEDINGS

Conference proceedings will be posted on the A&WMA Web site. Attendees will be notified by e-mail when the extended abstracts and presentations are available.

## PROFESSIONAL DEVELOPMENT COURSES

Looking to expand your industry knowledge? Consider taking one of the professional development courses that are being offered prior to the conference on Monday, September 9, 2013. Course registration includes a refreshment break and a copy of the course manual. The course registration fee is not included in the regular conference registration; for course prices please visit <http://climatechange.awma.org> and click on the Courses button. For more information about the courses and instructors contact Robin Lebovitz at [rlebovitz@awma.org](mailto:rlebovitz@awma.org) or 412-904-6020.

### **WORKSHOPS TO RESILIENCE: CLIMATE CHANGE ADAPTATION THROUGH NASA'S TELESCOPE**

**MONDAY, SEPTEMBER 9, 2013**  
**8:00 AM - 12:00 PM**

**Instructors:** *Daniel A. Bader and Erik Tucker, SAIC*

### **STRATEGIES FOR ADDRESSING NEW AIR QUALITY, GREENHOUSE GAS AND ENERGY REQUIREMENTS**

**MONDAY, SEPTEMBER 9, 2013**  
**1:00 PM - 5:00 PM**

**Instructor:** *Rich Pandullo, Trinity Consultants*

## THANK YOU TO OUR SPONSOR



Since 1993, companies across industries have turned to Dixon Environmental, valuing its ability to provide advanced solutions that streamline compliance implementation, maintenance, and management and allow its clients to operate more cost-efficiently and effectively. We are nationally recognized experts in environmental regulatory compliance management, knowledge retention, and emissions reduction strategies.

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## LOCATION AND LODGING

**Hyatt Dulles**  
**2300 Dulles Corner Blvd**  
**Herndon, VA 20171**  
**Phone: +1-703-713-1234**

Enjoy the convenient luxurious hotel in Herndon, Virginia. Located just two miles from Washington Dulles International Airport (IAD), the hotel offers a complimentary shuttle service both to the airport and to Reston Town Center, a shopping, dining and entertainment destination. Just 25 miles from Washington DC, a cultural, historical and political destination full of the country's most important sites.

For more information visit <http://dulles.hyatt.com>

### HOTEL RESERVATIONS

A block of rooms has been reserved for conference attendees at the Hyatt Dulles Hotel at the rate of \$159 single/double. To ensure availability, reserve your room by August 12, 2013. After that date, the reserved hotel room block is released for general sale. Make your reservations by calling the hotel at +1-703-713-1234 and referencing the Air & Waste Management Association's Climate Change Conference or booking online at <https://resweb.passkey.com/go/AWMA9>

### DIRECTIONS AND TRANSPORTATION

#### To/From Dulles International Airport:

Enjoy easy access to and from Dulles International Airport (IAD) with complimentary Dulles Airport hotel shuttle. The drop off and pick up points at the airport will be at curbs 2A and 2H. The shuttle runs every 30 minutes from 5:15am until 12:30am. The shuttle leaves the hotel at the :15 and :45 of every hour and the shuttle picks up at Dulles International Airport (IAD) at the top (:00) and bottom (:30) of every hour.

#### To/ From Reston Town Center:

The Hyatt Dulles provides daily complimentary shuttle service to the Reston Town Center. Shuttles depart the Hyatt Dulles daily at 4:45pm, 6:45pm and 8:45pm. Shuttles pick up in the Reston Town Center and return to the Hyatt Dulles at 5:00pm, 7:00pm and 9:00pm. A taxi cab can also be taken to the Reston Town Center for approximately \$15.00 each way.

#### Metro:

The closest two Metro stops to the Hyatt Dulles are the West Falls Church Metro Stop and the Vienna Metro Stop both located on the Orange Line. The hotel is approximately 25 minutes away from these two metro stops.

There is a Washington Flyer bus available from the West Falls

Church Metro station to Dulles International Airport. [http://www.washfly.com/flyer\\_bus\\_schedule.htm](http://www.washfly.com/flyer_bus_schedule.htm)  
From the airport guests can take the Hotel Shuttle.

#### To/ From Reagan National Airport:

The recommended transfer option from Reagan National Airport (DCA) is via taxi cab service. This will cost approximately \$65.00 each way. Metrorail can also be taken from the Reagan Airport to the West Falls Church Metro Stop and a taxi can be taken from there to the hotel.

#### To/From Washington, DC:

Washington DC is approximately 25 miles away from the Hyatt Dulles. Transportation options to/ from Washington DC include the following; Taxi cab, which is approximately \$65.00 each way; Metrobus, which can be picked up at Dulles International Airport and taken to L'Enfant Plaza for \$6.00 each way.

#### To/From Union Station:

The best transportation option for transfers from Union Station in downtown Washington, DC to our Northern Virginia hotel is to take a taxi. A Taxi cab is approximately \$65.00 each way and will take approximately 45 minutes, depending on traffic.

#### Parking

Complimentary outdoor self-parking is available during your stay.

### ABOUT THE AIR & WASTE MANAGEMENT ASSOCIATION

The Air & Waste Management Association (A&WMA) is a nonprofit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for information exchange, professional development, networking opportunities, public education, and outreach to more than 5,000 environmental professionals in 65 countries. A&WMA promotes global environmental responsibility and increases the effectiveness of organizations to make critical decisions that benefit society.

For more information, please visit [www.awma.org](http://www.awma.org).

A&WMA Federal Tax ID # 25-6048614.

The Air & Waste Management Association supports the Americans with Disabilities Act (ADA). Those attendees requiring specific equipment or services should contact Malissa Wood, Conference & Events Associate, at 412-904-6012 to make those needs known in advance. A&WMA will make every reasonable effort to accommodate them.

## PRELIMINARY SCHEDULE - TUESDAY, SEPTEMBER 10, 2013

8:00 a.m. – 5:15 p.m.	Conference Registration
8:00 - 9:00 a.m.	Presenters' Breakfast
8:00 - 9:00 a.m.	Coffee Service
9:00 - 9:10 a.m.	Conference Welcome Sara Head, AECOM, President of Air & Waste Management Association
9:10 - 9:40 a.m.	Keynote Dr. Robert Dixon, Global Environment Facility, The World Bank Group (Invited)
9:40 - 10:55 a.m.	Keynote Panel – Climate Change Mitigation Strategies and Global Policy <b>Chair:</b> Miriam Lev-On, The LEVON Group, LLC <b>Panelists:</b> Tom Peterson, Center for Climate Strategies, Paul Gunning, U.S. EPA, Bruce Braine, AEP
10:55 - 11:10 a.m.	Coffee Break
11:10 a.m. – 12:10 p.m.	Climate Change Impacts and Adaptation Panel <b>Panelists:</b> Frank Princiotta, U.S. EPA, Jenny Dissen, NOAA, Clara Poffenberger, Bingham McCutchen
12:10 - 1:40 p.m.	Luncheon Speaker (To Be Determined)
1:40 - 3:20 p.m.	Concurrent Technical Sessions - TUES PM 1 (Sessions 1, 2, and 3)
	<b>Session 1: Climate Change Impacts and Adaptation</b> <b>Chair:</b> C. Flint Webb, SAIC; <b>Co-Chair:</b> Tom Marrero, University of Missouri - Columbia
	<b>Session 2: Policy, International, &amp; National</b> <b>Chair:</b> Miriam Lev-On, The LevOn Group LLC
	<b>Session 3: Policy, Corp, &amp; Local</b> <b>Chair:</b> Tiffany Dillow, Dixon Environmental
3:20 - 3:35 p.m.	Refreshment Break
3:35 - 4:55 p.m.	Concurrent Technical Sessions - TUES PM 2 (Sessions 1, 2, and 3)
	<b>Session 1: Climate Change Impacts and Adaptation (Continued)</b> <b>Chair:</b> C. Flint Webb, SAIC; <b>Co-Chair:</b> Tom Marrero, University of Missouri - Columbia
	<b>Session 2: Policy, International, &amp; National (Continued)</b> <b>Chair:</b> Miriam Lev-On, The LevOn Group LLC
	<b>Session 3: Policy, Corp, &amp; Local (Continued)</b> <b>Chair:</b> Tiffany Dillow, Dixon Environmental
5:15 – 6:15 p.m.	Reception and Poster Viewing
7:00 – 8:30 p.m.	Baltimore-Washington Chapter of the South Atlantic States Section Dinner Meeting *Separate Registration Required

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## PRELIMINARY AGENDA - TUESDAY, SEPTEMBER 10, 2013

### SESSION 1 (TUES PM 1): CLIMATE CHANGE IMPACTS AND ADAPTATION

**Chair:** C. Flint Webb, SAIC

**Co-Chair:** Tom Marrero, University of Missouri - Columbia

#### **1:40 – 2:00 p.m.**

Abstract #49

**Climate Change Municipal Risk Assessment Model to Assist in Prioritization of Investment**

Ravi Mahabir<sup>1</sup>, Scott Prail<sup>2</sup>, Dave Pool<sup>3</sup>; <sup>1</sup>Dillon Consulting Limited, Oakville, ON; <sup>2</sup>Dillon Consulting Limited, Chatham, ON; <sup>3</sup>Dillon Consulting Limited, Calgary, AB

#### **2:00 – 2:20 p.m.**

Abstract #32

**Using Rainfall Measurements to Assess Climate Change and Its Impact on Municipal Infrastructure**

Hong Liu<sup>1</sup>, Paul Donahue<sup>2</sup>, Carrie Baron<sup>3</sup>; <sup>1</sup>Dillon Consulting Limited, Oakville, ON; <sup>2</sup>Dillon Consulting Limited, Richmond, BC; <sup>3</sup>Dillon Consulting Limited, Surrey, BC

#### **2:20 – 2:40 p.m.**

Abstract #40

**Storm Tide and Wind Impact of Hurricane Sandy the Hudson River**

Paul Eisen; Roux Associates, Inc. Islandia, NY

#### **2:40 – 3:00 p.m.**

Abstract #29

**Working Towards Climate Preparedness in the National Capital Region**

Amanda Campbell, Maia Davis, and John Rohlf; Metropolitan Washington Council of Governments, Washington, DC

#### **3:00 – 3:20 p.m.**

Abstract #5

**Port of San Diego Climate Mitigation and Adaptation Plan (Climate Plan) and the Road Ahead**

Cody Hooven<sup>1</sup>, Douglas Daugherty<sup>2</sup>, Laura Moran<sup>2</sup>, and David Kim<sup>2</sup>; <sup>1</sup>Port of San Diego, San Diego, CA; <sup>2</sup>ENVIRON International Corporation, San Francisco, CA

### SESSION 1 (TUES PM 2): CLIMATE CHANGE IMPACTS AND ADAPTATION (CONTINUED)

**Chair:** C. Flint Webb, SAIC

**Co-Chair:** Tom Marrero, University of Missouri - Columbia

#### **3:35 – 3:55 p.m.**

Abstract #55

**Assessment of Climate Change Impacts on the Electric Power Industry Using the Integrated Planning Model**

Wendy Jaglom<sup>1</sup>, Charlotte Mack<sup>1</sup>, Boddu Venkatesh<sup>1</sup>, Rawlings Miller<sup>1</sup>, Juanita Haydel<sup>1</sup>, Michelle Colley<sup>1</sup>, Joseph Casola<sup>1</sup>, Paul Cross<sup>1</sup>, Serpil Kayin<sup>1</sup>, Peter Schultz<sup>1</sup>, James McFarland<sup>2</sup>, and Bill Perkins<sup>2</sup>; <sup>1</sup>ICF International, Fairfax, VA; <sup>2</sup>U.S. EPA, Washington, DC

#### **3:55 – 4:15 p.m.**

Abstract #12

**A Climate-Killing Regional Transportation Plan Winds Up in Court: Background and Remedies**

Mike Bullock; San Diego Chapter of the Sierra Club, Oceanside, CA

#### **4:15 – 4:35 p.m.**

Abstract #19

**Incorporating Impacts of Changing Fire Regimes and Emissions in Integrated Climate Change Mitigation and Adaptation Strategies**

William Sommers; George Mason University, Fairfax, VA



# PRELIMINARY AGENDA - TUESDAY, SEPTEMBER 10, 2013

## SESSION 2 (TUES PM 1): POLICY, INTERNATIONAL, & NATIONAL

**Chair:** Miriam Lev-On, *The LevOn Group LLC*

### **1:40 – 2:00 p.m.**

Abstract #70

*The Past as Prologue: Inter-linkages of International Climate Change Negotiations and U.S. Climate Policy*  
*Eric Holdsworth; Edison Electric Institute, Washington, DC*

2:00 – 2:20 p.m.

Abstract #51

*The Future (Form) of Climate Change Policy and Regulation in the United States*  
*Kurt Kissling; Pepper Hamilton LLP, Southfield, MI*

### **2:20 – 2:40 p.m.**

Abstract #33

*Driving Factors to Reduce CO2 Emissions: In Case of Industries*  
*Takako Wakiyama; Institute for Global Environmental Strategies (IGES), Kanagawa, Japan*

### **2:40 – 3:00 p.m.**

Abstract #15

*Greenhouse Gas Emission Mitigation Plan for the State of Israel: Strategies, Incentives and Reporting*  
*Ofira Ayalon<sup>1</sup>, Miriam Lev-On<sup>2</sup>, and Perry Lev-On<sup>1</sup>; <sup>1</sup>Samuel Neaman Institute, Haifa, Isra.; <sup>2</sup>The LEVON Group, LLC, Thousand Oaks, CA*

### **3:00 – 3:20 p.m.**

Abstract #46

*EPA Regulation of Greenhouse Gases, a Carbon Tax, or All of the Above? – Understanding Their Relative Economic Impacts*  
*Scott Bloomberg, Mei Yuan, Sebastian Mankowski, and Anne Smith; NERA Economic Consulting, Washington, DC*

## SESSION 2 (TUES PM 2): POLICY, INTERNATIONAL, & NATIONAL (CONTINUED)

**Chair:** Miriam Lev-On, *The LevOn Group LLC*

### **3:35 – 3:55 p.m.**

Abstract #6

*Integrated Assessment of the Co-benefits of Fine Particulate Matter Reduction Under US Climate Change Policies*  
*Rebecca Saari<sup>1</sup>, Noelle Selin<sup>1</sup>, Sebastian Rausch<sup>2</sup>, Tammy Thompson<sup>3</sup>; <sup>1</sup>Massachusetts Institute of Technology, Cambridge, MA; <sup>2</sup>ETH Zurich, Zurichbergstrasse, Zurich; <sup>3</sup>CSU Cooperative Institute for Research in the Atmosphere, Fort Collins, CO*

### **3:55 – 4:15 p.m.**

Abstract #30

*Economic Modeling for the Western Climate Initiative*  
*William Dean; California Environmental Protection Agency, Sacramento, CA*

### **4:15 – 4:35 p.m.**

Abstract #13

*Are Current Strategies Sufficient to Determine Funding Allocation for California's Cap and Trade Proceeds?*  
*Linda Hall<sup>1</sup> and Douglas Daugherty<sup>2</sup>; <sup>1</sup>ENVIRON International Corporation, Emeryville, CA; <sup>2</sup>ENVIRON International Corporation, San Francisco, CA*

### **4:35 – 4:55 p.m.**

Abstract #41

*New Greenhouse Gas Protocol Standards for Quantifying GHG Effects of Policies and Tracking Progress Toward Mitigation Goals*  
*David Rich, Kelly Levin, Jared Finnegan, and Apurba Mitra; World Resources Institute, Washington, DC*

# PRELIMINARY PROGRAM

## PRELIMINARY AGENDA - TUESDAY, SEPTEMBER 10, 2013

### SESSION 3 (TUES PM 1): POLICY, CORP, & LOCAL

**Chair:** Tiffany Dillow, *Dixon Environmental*

**1:40 – 2:00 p.m.**

Abstract #7

Climate Change: A Driving Force in Shaping Business Strategy

Jeanne Ng; CLP Holdings Limited, Kowloon, Hong Kong

**2:00 – 2:20 p.m.**

Abstract #36

Carbon Dioxide Emission Reductions as a Result of Fuel Switching from Coal to Natural Gas Fired Electricity Generation

Marcus Koblitz; *American Petroleum Institute (API), Washington, DC*

**2:20 – 2:40 p.m.**

Abstract #23

Projections of Achievable GHG Reductions Due to Increased Natural Gas Use in Electricity Generation and Industry

Dahl Winters<sup>1</sup> and Michael Hannan<sup>2</sup>; <sup>1</sup>RTI International, Research Triangle Park, NC; <sup>2</sup>U.S. EPA, Washington, DC

**2:40 – 3:00 p.m.**

Abstract #64

Co-Benefits of Integrating GHG, Air Quality, and Climate Change Adaptation Strategies

Yasmeen Sultana<sup>1</sup> and Kevin Madry<sup>2</sup>; <sup>1</sup>Environmental Resources Management, Bakersfield, CA; <sup>2</sup>Environmental Resources Management, Denver, CO

**3:00 – 3:20 p.m.**

Abstract #67

Urban Air Quality and Climate Change: How Policy and Regulation Can Cool the 'Hot Spots' in Vulnerable Communities

Jalonne White-Newsome, Laetitia N'Dri, and Cecil Corbin-Mark; *WE ACT for Environmental Justice, Washington, DC*

### SESSION 3 (TUES PM 2): POLICY, CORP, & LOCAL (CONTINUED)

**Chair:** Tiffany Dillow, *Dixon Environmental*

**3:35 – 3:55 p.m.**

Abstract 71

Perspectives from the Transportation Energy Futures Project

Austin Brown<sup>1</sup> and Laura Vimmerstedt<sup>2</sup>; <sup>1</sup>National Renewable Energy Laboratory, Washington, DC; <sup>2</sup>National Renewable Laboratory, Golden, CO

**3:55 – 4:15 p.m.**

Abstract #34

Transport Beyond Oil – The Environmental, Economic, Energy, National Security & Practical Implications of Selected New Transportation Paradigms for the USA

Alan Drake; *Independent Consulting Engineer, Georgetown, KY*

**4:15 – 4:35 p.m.**

Abstract #42

Full Valuation of Energy Efficiency Benefits

Kenneth Colburn, Christopher James, and John Shenot; *Regulatory Assistance Project, Montpelier, VT*

**4:35 – 4:55 p.m.**

Abstract #56

Lowering the Carbon Footprint Of a Traditional Fossil-fuel Power Plant

Dan Golomb<sup>1</sup>, Stephen Zemba<sup>1</sup>, and Louis Arak<sup>2</sup>;

<sup>1</sup>University of Massachusetts, Lowell, MA; <sup>2</sup>Footprint Power, Salem, MA



## PRELIMINARY SCHEDULE - WEDNESDAY, SEPTEMBER 11, 2013

7:00 a.m. – 4:00 p.m.	Conference Registration
7:00 - 8:00 a.m.	Presenters' Breakfast
7:00 - 8:00 a.m.	Coffee Service
8:00 - 8:10 a.m.	Conference Welcome C. Flint Webb, SAIC, General Conference Chair
8:10 - 8:40 a.m.	Keynote Janet McCabe, Office of Air and Radiation, U.S. EPA
8:40 – 10:10 a.m.	NSPS Panel <b>Chair and Moderator:</b> John Kinsman, Edison Electric Institute <b>Panelists:</b> Starla Yeh, Natural Resources Defense Council, Kyle Danish, Van Ness Feldman Allison Wood, Hunton & Williams
10:10 – 10:25 a.m.	Coffee Service
10:25 a.m. - 12:05 p.m.	Concurrent Technical - WED AM (Sessions 4, 5, and 6)
	<b>Session 4: Greenhouse Gas Regulations</b> <b>Chair:</b> John Kinsman, Edison Electric Institute
	<b>Session 5: Greenhouse Gas Inventories</b> <b>Chair:</b> Stan Hayes, ENVIRON; <b>Co-Chair:</b> Tom Marrero, University of Missouri - Columbia
	<b>Session 6: Non-CO2 Greenhouse Gases</b> <b>Chair:</b> Jayne Somers, EPA
12:05 – 1:05 p.m.	Luncheon
1:05 - 2:20 p.m.	Concurrent Technical Sessions - WED PM (Sessions 4, 5, and 6)
	<b>Session 4: Greenhouse Gas Regulations (Continued)</b> <b>Chair:</b> John Kinsman, Edison Electric Institute
	<b>Session 5: Greenhouse Gas Inventories (Continued)</b> <b>Chair:</b> Stan Hayes, ENVIRON; <b>Co-Chair:</b> Tom Marrero, University of Missouri - Columbia
	<b>Session 6: Non-CO2 Greenhouse Gases (Continued)</b> <b>Chair:</b> Jayne Somers, U.S. EPA
2:25- 2:45 p.m.	Refreshment Break
2:45 – 4:15 p.m.	Closing Panel – The Road Ahead and Where Do We Go From Here? <b>Chair:</b> C.Flint Webb; SAIC, General Conference Chair <b>Panelists:</b> Nicholas Bianco, World Resources Institute, Edward Maibach, George Mason University, Center for Climate Change Communication (invited)
4:15 – 4:25 p.m.	Closing Remarks C. Flint Webb; SAIC General Conference Chair

# PRELIMINARY PROGRAM

## PRELIMINARY AGENDA - WEDNESDAY, SEPTEMBER 11, 2013

### SESSION 4 (WED AM): GREENHOUSE GAS REGULATIONS

**Chair:** John Kinsman, *Edison Electric Institute*

#### **10:25 – 10:45 a.m.**

Abstract #69

#### **Managing the Costs of Carbon in a GHG Compliance Program**

*Victoria Evans<sup>1</sup>, Rich Shih<sup>2</sup>, and Ariane Burwell<sup>2</sup>; <sup>1</sup>Carbon Venture Partners, Palo Alto, CA; <sup>2</sup>Environmental Resource Management, Walnut Creek, CA*

#### **10:45 – 11:05 a.m.**

Abstract #22

#### **Carbon Capture, Utilization, and Storage as a Climate Change Mitigation Strategy: Challenges and Opportunities for the State of Maryland**

*Jennifer Gunnulfsen<sup>1</sup>, Brandie Sebastian<sup>1</sup>, Leonard Rafalko<sup>1</sup>, John Sherwell<sup>2</sup>, and Paul Petzrick<sup>2</sup>; <sup>1</sup>Environmental Resources Management, Annapolis, MD; <sup>2</sup>Maryland Department of Natural Resources, Annapolis, MD*

#### **11:05 – 11:25 a.m.**

Abstract #50

#### **Streamlining GHG Permitting**

*Howard Feldman; American Petroleum Institute, Washington, DC*

#### **11:25 a.m. – 11:45 a.m.**

Abstract #52

#### **Case Studies of Permitting Greenhouse Gas Emissions**

*Ian Donaldson<sup>1</sup>, Ali Farnoud<sup>2</sup>, and Susan Barnes<sup>2</sup>; <sup>1</sup>Trinity Consultants, Wexford, PA; <sup>2</sup>Trinity Consultants, Frederick, MD*

#### **11:45 a.m. – 12:05 p.m.**

Abstract #54

#### **EPA's GHG Regulations: A Help or Hindrance to Geologic CCS and Beneficial Uses of Captured Carbon Dioxide?**

*Margaret Peloso and Matthew Dobbins; Vinson & Elkins, LLP, Washington, DC*

### SESSION 4 (WED PM): GREENHOUSE GAS REGULATIONS (CONTINUED)

**Chair:** John Kinsman, *Edison Electric Institute*

#### **1:05 – 1:25 p.m.**

Abstract #62

#### **Challenges and Lessons Learned in Developing an Integrated Data Management System to Support EPA's Greenhouse Gas Reporting Program**

*Kong Chiu; U.S. EPA, Washington, DC*

#### **1:25 – 1:45 p.m.**

Abstract #53

#### **EPA Greenhouse Gas Reporting Program Data Quality Management System**

*Sean Hogan, Brian Cook, Kong Chiu, Michael Hannan, Barbora Master, and Katherine Sibold; U.S. EPA Climate Change Division, Washington, DC*

#### **1:45 – 2:05 p.m.**

Abstract #27

#### **Verifications of Stationary Combustion and Electricity Generating Sources Reported to the EPA Greenhouse Gas Reporting Program**

*Jason Goldsmith<sup>1</sup>, Stephen Boone<sup>1</sup>, Matthew Hakos<sup>1</sup>, Michael Hannan<sup>2</sup>, and Sean Hogan<sup>2</sup>; <sup>1</sup>RTI International, Washington, DC; <sup>2</sup>U.S. EPA, Washington, DC*

#### **2:05 – 2:25 p.m.**

Abstract #18

#### **Cost of Compliance with EPA's Mandatory GHG Reporting Rule, Subpart W for Onshore Oil and Natural Gas Production**

*Terri Shires and Matt Harrison; URS Corporation, Austin, TX*

#### **2:25 – 2:45 p.m.**

Abstract #4

#### **Complexities in Defining Boundaries for Mandatory Greenhouse Gas Reporting**

*David Kim<sup>1</sup>, Douglas Daugherty<sup>1</sup>, and Jeffrey Forde<sup>2</sup>; <sup>1</sup>ENVIRON International Corporation, San Francisco, CA; <sup>2</sup>ENVIRON International Corporation, Irvine, California*

# PRELIMINARY AGENDA - WEDNESDAY, SEPTEMBER 11, 2013

## SESSION 5 (WED AM): GREENHOUSE GAS INVENTORIES

**Chair:** Stan Hayes, *ENVIRON*

**Co-Chair:** Tom Marrero, *University of Missouri - Columbia*

### **10:25 – 10:45 a.m.**

Abstract #43

**RGGI Unplugged: Accounting for All CO<sup>2</sup> Emissions from the Electric Power Consumed in the RGGI Region**  
*David Farnsworth; The Regulatory Assistance Project, Montpelier, VT*

### **10:45 – 11:05 a.m.**

Abstract #61

**Environmental and Carbon Disclosure: Status, Evolution & Best Practices**  
*John Fillo; Trinity Consultants, Inc., Wexford, PA*

### **11:05 – 11:25 a.m.**

Abstract #76

**How a California Utility Implemented a Single Reporting Solution for Multiple Climate Change Programs**  
*Linus Farias; Pacific Gas and Electric Company, San Ramon, CA*

### **11:25 – 11:45 a.m.**

Abstract #47

**Data Quality Challenges and Opportunities with Greenhouse Gas Emissions Reporting in the US and Implications for Future Policy to Mitigate Climate Change**  
*Ramesh Narasimhan, Nicole Sullivan, and Jessica Quinn; Environmental Resources Management, Metairie, LA*

### **11:45 a.m. – 12:05 p.m.**

Abstract #39

**Light Duty in Use GHG/Fuel Economy Data Collection and Evaluation**  
*Timothy DeFries, Michael Sabisch, Sandeep Kishan, John German, Francisco Posada Sanchez, and Anup Bandivadekar; Eastern Research Group, Washington, DC*

## SESSION 5 (WED PM): GREENHOUSE GAS INVENTORIES (CONTINUED)

**Chair:** Stan Hayes, *ENVIRON*

**Co-Chair:** Tom Marrero, *University of Missouri - Columbia*

### **1:05 – 1:25 p.m.**

Abstract #72

**Planning-Level Assessment of Construction and Maintenance Emissions**  
*Jeffrey Houk<sup>1</sup>, John Davies<sup>2</sup>, and Frank Gallivan<sup>3</sup>; <sup>1</sup>Federal Highway Administration, Lakewood, CO; <sup>2</sup>Federal Highway Administration, Washington, DC; <sup>3</sup>ICF International, San Francisco, CA*

### **1:25 – 1:45 p.m.**

Abstract #3

**A Cross Canada Review of Greenhouse Gas Reporting Programs**  
*John Georgakopoulos and Joanna Vince; Willms & Shier Environmental Lawyers, LLP, Toronto, ON*

### **1:45 – 2:05**

Abstract #24

**Carbon Dioxide Emissions Indirectly Generated from U.S. Plug-in Electric Vehicles**  
*Ashley Mapou<sup>1</sup> and Derek Shendell<sup>2</sup>; <sup>1</sup>Center for School and Community-Based Research and Education, New Brunswick, NJ; <sup>2</sup>Rutgers Biomedical and Health Sciences, Piscataway, NJ*

### **2:05 – 2:25 p.m.**

Abstract #25

**Emissions Data Reported to the Greenhouse Gas Reporting Program**  
*John Crenshaw; Eastern Research Group, Morrisville, NC*

# PRELIMINARY PROGRAM

## PRELIMINARY AGENDA - WEDNESDAY, SEPTEMBER 11, 2013

### SESSION 6 (WED AM): NON-CO2 GREENHOUSE GASES

**Chair:** Jayne Somers, U.S. EPA

#### **10:25 – 10:45 a.m.**

Abstract #38

#### Development of U.S. Non-CO<sup>2</sup> GHG Emissions Projections

*Paula Fields Simms<sup>1</sup>, Joanna MacCarthy<sup>2</sup>, John Watterson<sup>2</sup>, and Jameel Alsalam<sup>3</sup>; <sup>1</sup>Eastern Research Group, Inc., Rancho Cordova, CA; <sup>2</sup>The Gemini Building, Didcot, UK; <sup>3</sup>U.S. EPA, Washington, DC*

#### **10:45 – 11:05 a.m.**

Abstract #74

#### Coal Mine Methane Developments in the United States and Globally

*Jayne Somers; U.S. EPA, Washington, DC*

#### **11:05 – 11:25 a.m.**

Abstract #10

#### Estimation of Methane Emissions Attributable to Stockpiled Power Plant Coal Fuels Prior to Combustion

*Andrew Stern<sup>1</sup>, Robinson Khosah<sup>1</sup>, John Sherwell<sup>2</sup>, and Robert Sawyer<sup>3</sup>; <sup>1</sup>Chester Engineers, Moon Township, PA; <sup>2</sup>Maryland Department of Natural Resources, Annapolis, MD; <sup>3</sup>Environmental Resources Management, Inc., Annapolis, MD*

#### **11:25 – 11:45 a.m.**

Abstract #21

#### Methane Emissions from Key Sources in Onshore Natural Gas Production Operations: A Comparative Assessment

*Karin Ritter, Terri Shires<sup>2</sup>, and Miriam Lev-On<sup>3</sup>; <sup>1</sup>American Petroleum Institute, Washington DC, <sup>2</sup>URS Corporation, <sup>3</sup>The LEVON Group, Thousand Oaks, CA*

#### **11:45 – 12:05 p.m.**

Abstract #11

#### Quantifying Methane Mitigation Opportunities and Costs from the US Oil and Natural Gas Sector

*David McCabe<sup>1</sup>, Ellen Baum<sup>1</sup>, Stephanie Sauner<sup>2</sup>; <sup>1</sup>Clean Air Task Force, Boston, MA; Carbon Limits, Oslo, Norway*

### SESSION 6 (WED PM): NON-CO2 GREENHOUSE GASES (CONTINUED)

**Chair:** Jayne Somers, U.S. EPA

#### **1:05 – 1:25 p.m.**

Abstract #77

#### Landfills and Methane Emissions in the United States: Emerging Trends and Highlights from the EPA Greenhouse Gas Reporting Program Data Set

*Katherine Bronstein<sup>1</sup>, Jeffrey Coburn<sup>1</sup>, and Rachel Schmeltz<sup>2</sup>; <sup>1</sup>RTI International, Research Triangle Park, NC; <sup>2</sup>U.S. EPA, Washington, DC*

#### **1:25 – 1:45 p.m.**

Abstract #35

#### Lessons Learned from Federal Mandatory GHG Reporting Data Analysis for Landfills

*Raymond Huff<sup>1</sup>, Amy Banister<sup>2</sup>, Phillip Smith<sup>2</sup>, John Henkelman<sup>3</sup>, Patrick Sullivan<sup>3</sup>, and Niki Wuestenberg<sup>4</sup>; <sup>1</sup>SCS Engineers, Long Beach, CA; <sup>2</sup>Waste Management, Houston, TX; <sup>3</sup>SCS Engineers, Sacramento, CA; <sup>4</sup>Republic Services, Phoenix, AZ*

#### **1:45 – 2:05 p.m.**

Abstract #37

#### Development of a Waste Sector NAMA: Lessons Learned

*Brian Guzzone; Eastern Research Group, York, PA*

#### **2:05 – 2:25 p.m.**

Abstract #20

#### Methane and Nitrous Oxide Sources and Emissions in the Central Valley of California Derived from Positive Matrix Factorization (PMF) Analysis, Airborne Flux Measurements and Inverse Modeling of Tall Tower Observations

*Abhinav Guha<sup>1</sup>, Pawel Misztal<sup>1</sup>, Robin Weber<sup>1</sup>, Allen Goldstein<sup>1</sup>, Jeff Peischl<sup>2</sup>, Thomas Ryerson<sup>2</sup>, Seongeun Jeong<sup>3</sup>, Marc Fischer<sup>3</sup>, Drew Gentner<sup>4</sup>, and Thomas Karl<sup>5</sup>; <sup>1</sup>University of California, Berkeley, CA; <sup>2</sup>National Oceanic and Atmospheric Administration, Boulder, CO, <sup>3</sup>Lawrence Berkeley National Laboratory, Berkeley, CA; <sup>4</sup>University of California, Berkeley, CA; <sup>5</sup>University of Innsbruck, Innsbruck, Austria*

# PRELIMINARY AGENDA - WEDNESDAY, SEPTEMBER 11, 2013

## POSTERS

Abstract #66

Mandatory and Voluntary GHG Reporting Programs and Lessons Learned

*Yasmeen Sultana<sup>1</sup> and Kevin Madry<sup>2</sup>; <sup>1</sup>Environmental Resources Management, Bakersfield, CA; <sup>2</sup>Environmental Resources Management, Denver, CO*

Abstract #34

Transport Beyond Oil – The Environmental, Economic, Energy, National Security & Practical Implications of Selected New Transportation Paradigms for the USA

*Alan Drake; Independent Consulting Engineer, Georgetown, KY*

Abstract #63

The Climate – Cookstove Connection: A Review of Household Energy Interventions and an Assessment of GHG and Aerosol Emissions

*Katherine Bronstein; RTI International, Research Triangle Park, NC*

Abstract #44

FERC Order 1000 Offers New Opportunities for Air Quality Considerations in Electric System Planning

*Christopher James and Kenneth Colburn; The Regulatory Assistance Project, Montpelier, VT*

Abstract #45

Integrated Multi-pollutant Planning for Energy and Air Quality (IMPEAQ)

*Christopher James, Kenneth Colburn, and John Shenot; The Regulatory Assistance Project, Montpelier, VT*

Abstract #28

Racing to the Top: Regional Greenhouse Gas Mitigation in the National Capital Region

*Amanda Campbell, Jeff King, Maia Davis, and Joan Rohlf; Metropolitan Washington Council of Governments, Washington, DC*

Abstract #58

Smart Growth planning for cities: Integrating GHG reductions and urban climate resilience

*Peter Rawlings and Leanne Farrell; Environmental Resources Management, Washington, DC*

**\*\*Please note that this agenda is preliminary and author titles and presentation times are subject to change.**