



**PROGRAM OF EVENTS** 

NOV 11 – 22, 2013



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### Welcome to the U.S. Center

The U.S. Center is a major public outreach initiative of the United States hosted by the Department of State to inform audiences around the world about the U.S. actions on climate change, whether they are attending the UN Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP-19) in Warsaw or viewing our programs through the web.

This public diplomacy initiative, made possible by input and support from multiple U.S. government agencies, academic institutions, non-governmental organizations, private sector entities, and other stakeholders, will highlight key climate programs and scientific research, underscoring the strong actions the U.S. is taking at home and the robust strategy the U.S. is pursuing abroad to combat this global challenge.

The U.S. Center, open from 10 a.m. to 7 p.m., is where visitors can learn more

about U.S. climate actions, participate in detailed discussions on key issues, and view stunning and powerful Hyperwall data visualizations on a 3x3 panel video wall. United States and international leaders in the fight against climate change will headline a varied series of panels during the two weeks of COP-19. Full details for scheduled events begin on page 7. All events will take place at the center, located within the Warsaw National Stadium.

We look forward to your visit to the U.S. Center, and we hope you will join us during COP-19.

NOTE: Please check our schedule at USCenter.tumblr.com. Event timing is subject to change. We will post daily updates. Updated schedules will also be available at the U.S. Center, and will be prominently posted throughout the conference.



### **Web Streaming**

Selected U.S. Center side events will be streamed online through the UStream interactive broadcasting platform. Online programming provides a virtual space for the interactive exchange of ideas, in which participants from anywhere in the world can congregate and discuss issues of concern.

The UStream portal page at http://www. ustream.tv/USCENTER will serve as your one-stop destination for all information about live streamed and on-demand programming from the U.S. Center. Check the site daily for updates on upcoming events and recordings from previous sessions with leading climate change experts.

All U.S. Center events are followed by question and answer sessions. Ask the experts your questions from anywhere in the world using #AskUSCenter.

Don't forget to follow us on Twitter with @US\_Center and stay involved in the conversation!

Stay up to date with U.S. Center COP-19 programs on the following sites:

http://www.state.gov/cop19 ustream.tv/USCENTER twitter.com/US\_Center USCenter.tumblr.com

## **NASA's Hyperwall**

You are invited to experience cutting-edge science visualizations presented to you by U.S Center. Come learn about the changes and trends taking place on Earth that have been observed from space; discover how people are using Earth-observation satellite data to address questions about water resources, agriculture, land use and land cover change, and urban growth; and see for yourself how full and open data policies in the U.S. provide essential information to decision makers, enabling them to make informed decisions on the places where we live and work.

The Hyperwall—a nine screen video wall—will display multiple high-definition images and data visualizations. These demonstrations will illustrate how international collaboration has led to various achievements and advancements in Earth-observation science, data sharing, and scientific research.



A variety of topics will be presented during the 30-minute Hyperwall events. For detailed descriptions of each Hyperwall event, visit page 6.

### **Hyperwall Presentations**

See event timings in the program schedule

- ▶ Earth's Climate from Space
- Oceans and Water Resources
- Aerosols and Atmospheric Composition
- World of Change and Urbanization







## **Hyperwall Event Descriptions**

#### **Earth's Climate from Space**

NASA currently operates sixteen Earthobserving satellite missions (many joint with other domestic and international agencies) and instruments that study all aspects of the Earth system (oceans, land, atmosphere, biosphere, cryosphere), with several more planned for launch in the next few years. Together, these missions collect global measurements to help scientists better understand Earth's climate, how it is changing, and the drivers of the change. NASA's climaterelated research encompasses a variety of topics including the temperature of the atmosphere and the oceans, the state of the ozone layer, air pollution, and changes in sea ice and land ice.

#### **Oceans and Water Resources**

Water is fundamental to life on Earth. NASA's Earth-observing satellites and instruments continuously observe our oceans and measure water throughout the atmosphere, on land, and beneath the Earth's surface. Data from these missions help advance our understanding of the global water cycle and improve forecasting capabilities for weather and climate, agriculture, freshwater availability, and natural hazards.

# Aerosols and Atmospheric Composition

Atmospheric chemistry plays a major role in Earth's climate and energy budget. NASA's Earth-observing satellites observe various atmospheric gases and aerosols throughout the atmosphere including carbon dioxide, carbon monoxide, nitrogen dioxide, ozone, water vapor, dust, and sulfates. These measurements help scientists understand the composition of the Earth's atmosphere and predict its future evolution.

#### **World of Change and Urbanization**

More than seven billion people share our planet and place ever-increasing demands on its resources. To meet our needs, humans are altering environments and extracting resources from terrestrial, marine, and freshwater ecosystems. For decades, NASA's Earth-observing satellites and instruments have been observing human-induced as well as natural environmental changes including increases in deforestation and in urban growth, decreases in lake water levels, and a rise in global temperature. Environmental changes are interrelated and have positive and negative, as well as short- and long-term effects on Earth's climate.

### **COP-19 Schedule of Events**

### **Monday, November 11**

**NASA Hyperwall Event:** Earth Climate from Space

12:30 - 13:00

**Event:** Partnerships for Regional Science

**Sponsor:** U.S. Department of Agriculture

13:30 - 14:30

Event Summary: In 2013, the US Department of Agriculture (USDA) began to implement new Regional Climate Science Centers across the United States. These Centers link together USDA researchers, land grant university scientists and resources, National Oceanic and Atmospheric Administration (NOAA) Regional Integrated Science and Assessment Program teams, and US Geological Survey (USGS) specialists. The goal is to produce scientific output on climate that is relevant to regions, as well as to communicate that science regionally and respond to regional stakeholder needs. Existing U.S. assessments of climate change were done at a national level; however, there were concerns from stakeholders that this national climate information was often not downscaled

to the local or regional level, and was therefore not useful. The USDA developed these Regional Science Centers as a response to these concerns. These Centers will strive to produce more useful information and communications to ensure that agricultural, forest, and other land users across all of the highly diverse regions of the U.S. are prepared to adapt to climate change. In this session, USDA and related scientists and policy makers will talk about how this model of regionally-focused climate research and information delivery could be useful for other countries worldwide.

**Event:** The Latest on the State of Our Climate and Drought Monitoring

**Sponsor:** National Oceanic and Atmospheric Administration

17:00 - 18:00

Event Summary: The US (NOAA) has led the compilation of this increasingly international annual report that serves as the annual "physical" of the state of the climate system. The report is truly global in its scope and its participation, with contributions from nearly 400 authors and editors from more than 50 countries. This presentation will explain the international collaboration that produces the State of the Climate reports, how the report



has evolved into a useful tool for helping scientists and non-scientists understand cause-and-effect relationships in the climate system, and how this understanding benefits society.

NASA Hyperwall Event: Ocean and Water Resources

**15:00 – 15:30** 

**Event:** Eyes on Earth 3-D Sponsor: NASA

17:30 - 18:00

**Event Summary:** This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earthobserving satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

**Event:** U.S. Interagency and International Collaboration on Carbon Cycle Science

**Sponsors:** U.S. Department of Agriculture/U.S. Global Change Research Program

18:00 - 19:00

**Event Summary:** The US Carbon Cycle Science Program (CCSP) coordinates U.S. research on the global carbon cycle for credible predictions and improved scientific foundation for carbon management decisions and climate change. The Program has enabled significant progress in carbon cycle science via the North American Carbon Program (NACP), the Ocean Carbon and Biogeochemistry Program (OCB) and other international partnerships. The NACP initiative between Canada, the US and Mexico, CarboNA, works toward greater cohesion across North America in carbon and greenhouse gas based mitigation strategies, and coordinates research, monitoring, reporting, and decision support in areas of common interest. The OCB parallels these efforts for ocean carbon dynamics, contributes to international research studies, and works with the terrestrial community on synthesis activities on carbon in coastal areas. CCSP also partners with the International Soil Carbon Network (ISCN) on research to curtail emissions

while enabling sustainable food and fiber production and a healthy environment. The ISCN facilitates data sharing, assembles databases, fills gaps in coverage, and provides spatially explicit assessments of soil carbon vulnerability, and is a model for shared data, infrastructure and recognition. This event will discuss these programs, networks and research activities, emphasizing results which may be most useful to decision-makers.

### **Tuesday, November 12**

NASA Hyperwall Event: Earth Climate from Space

12:30 - 13:00

**Event:** Climate Change and the World's Oceans

Sponsor: NASA

13:30 - 14:30

Event Summary: The oceans play a critical role in the climate system, in particular, absorbing a significant fraction of the increasing heat load on the Earth. Climate change will impact the Earth's oceans in many ways, and the changing oceans can further influence the Earth's climate. Impacts will occur (and have already been shown to occur) in a variety of issues — ocean physical state (temperature),

biology and biogeochemistry (including salinity), and ice cover. The Earth's oceans also respond to a variety of non-climate related forcings that may share origins with climate change (e.g., pollutant transport from continental interiors and release from coastal regions). In this presentation, a review of the role the Earth's oceans play in the climate system will be reviewed, and examples of changes seen in the oceans till now and changes anticipated to take place in the future will be provided.

**NASA Hyperwall Event:** Aerosols and Atmospheric Composition

**15:00 – 15:30** 

**Event:** The Global Research Alliance on Agricultural Greenhouse Gases

**Sponsor:** U.S. Department Of Agriculture

**16:00 – 17:00** 

Event Summary: The Global Research Alliance on Agricultural Greenhouse Gases launched in December 2009 and now has more than 30 member countries from all regions of the world. The Alliance is focused on research, development and extension of technologies and practices that will help deliver ways to grow more climate-resilient food systems without growing greenhouse gas emissions. Members of the Alliance aim to deepen



and broaden mitigation research efforts across the agricultural sub-sectors of paddy rice, croplands and livestock, and the cross-cutting themes of soil carbon and nitrogen cycling and inventories and measurement issues. Research groups have developed work plans that bring countries and other partners together in research collaborations, as well as to share knowledge and best practices, build capacity and capability amongst scientists and other practitioners, and move towards breakthrough solutions in addressing agricultural greenhouse gas emissions. Alliance members work with farmers and farmer organizations, the private sector, international and regional research institutions, and non-governmental organizations to improve the sharing of research results, technologies and good practices. At this event, we will discuss current research projects and findings from the Alliance, the way the Alliance functions in the international space, and what we have learned about making international partnerships work.

NASA Hyperwall Event: Ocean and Water Resources

**17:30 - 18:00** 

**Event:** There's No Place like Home: Locally-driven, Place-based Initiatives

**Sponsor:** U.S. Department of Transportation

18:00 - 19:00

**Event Summary:** This panel seeks to highlight U.S. Government-wide placebased initiatives. Panelists will discuss how the Federal government has been able to support locally-driven efforts to foster the development of sustainable communities. Audience members will learn that these initiatives ensure that the U.S. Government's support strategies achieve better results by taking into account where investments are made and how those investments interact with other local resources, policies, and programs. Panelists will discuss how urban form helps shape the demand for travel and emissions in the United States, and how urban form is best affected in the long-run by place-based initiatives that promote walkable and livable communities. Panelists will also highlight that the two largest demographic cohorts – the retiring Baby Boomers and the Millennials just entering the workforce - are the most interested in these walkable, transitaccessible communities.

### Wednesday, November 13

**Event:** Viewing the Earth's Climate from Space

**Sponsor:** NASA

11:00 - 12:00

**Event Summary:** The vantage point of space provides a unique way of looking at the entire Earth in order to document how it changes with time. Satellites enable consistent global observations that, to first order, are of equivalent quality anywhere in the world. Observations of atmosphere, oceans, land surface, cryosphere, and biosphere can all be routinely made. The wide scale sharing of these observations enables a global community of scientists to study these earth system components and the interactions among them. Particular attention is paid to assuring the quantitative accuracy of the satellite observations, so that the multi-instrument/ multi-platform and, typically, multiprogram, data sets created to document long-term Earth system evolution can be confidently used to assess trends, even in the face of large shorter-term variability. In this presentation, a summary of current programs, recent progress and results will be provided.

**NASA Hyperwall Event:** Ocean and Water Resources

12:30 - 13:00

**Event:** REDD+ Results: Real Stories from the Forest

**Sponsor:** U.S. Department of State

13:30 - 14:30

**Event Summary:** Reducing Emissions from Deforestation and forest Degradation (REDD+) programs and actions are being implemented by numerous governments, and other stakeholders, around the globe. REDD+ offers cost-effective opportunities to reduce global greenhouse gas emissions while providing other sustainable development benefits, such as improved local livelihoods, economic growth, and enhanced ecosystem services. While progress continues to be made on REDD+ under the UNFCCC, important achievements are already being made on the ground in developing and implementing REDD+ strategies, and supporting actions. Stakeholders are moving forward in developing the institutions, systems, capacities, and methodologies needed to implement REDD+, and are taking concrete actions on the ground to reduce emissions from the land sector.

This event will feature highlight concrete progress made in support of REDD+ in the past year in areas such as strategy and institutional development, implementation of activities, and methodology development. It will highlight the work of a diverse set of institutions working



on REDD+ throughout the world. The US continues to support REDD+ globally and in partner countries through multilateral institutions, bilateral programs, and targeted technical assistance.

**NASA Hyperwall Event:** Aerosols and **Atmospheric Composition** 15:00 - 15:30

**Event:** Eyes on Earth – 3 D

**Sponsor: NASA** 

17:30 - 18:00

**Event Summary:** This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earthobserving satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

### **Thursday, November 14**

**Event:** Clean Energy Solutions Center: Accelerating the Transition to Clean **Energy Technologies** 

**Sponsor:** U.S. Department of Energy 11:00 - 12:00

**Event Summary:** The Clean Energy Solutions Center serves as a first-stop clearinghouse of clean energy policy reports, data and tools, and provides interactive expert assistance and training forums. The Clean Energy Solutions Center is an initiative of the Clean Energy Ministerial (CEM). The Solutions Center has responded to more than 90 requests for expert assistance on renewable energy, energy efficiency, clean transport, and energy access submitted by policy makers and government-affiliated organizations from over 40 countries around the world. The Solutions Center also provides access to over 1500 technical resources, ongoing webinars, and training forums on clean energy policies. This side event will showcase the resources and support available through the Solutions Center and discuss recent achievements including support to the Government of India to create the India Renewable Energy and Energy Efficiency Database (IREEED), the establishment of the Renewable Energy Policy Advice Network (REPAN) with the International

Renewable Energy Agency (IRENA), the creation of the Clean Energy Regulators Initiative (CERI) in partnership with Leonardo Energy and the 21st Century Power Partnership, and cooperation with UNEP to design the knowledge management system and deliver clean energy services for the Climate Technology Center and Network.

**NASA Hyperwall Event:** World of Change & Urbanization

12:30 - 13:00

**Event:** From Concept to Reality: Mobilizing Private Investment for Clean Energy in Africa

Sponsor: USAID

13:30 - 14:30

**Event Summary:** The USAID-supported Climate Technology Initiative Private Financing Advisory Network (PFAN) helps small and medium-sized clean energy developers to secure private sector financing for their projects. In just six years, PFAN has helped more than 40 projects secure over \$500 million in private financing. The program has grown significantly in Africa and today provides extensive coverage across the region. This event will take the audience inside the PFAN approach, walking participants through the coaching process, project development, and ultimately the national

level impact. Panelists will include Michael Feldner, a long time PFAN coach in Africa, Humphrey Mulindi, developer of the Kaimosi Yala hydro project in Kenya, and Prince Lekan Fedina of Nigeria who sees firsthand the impacts of PFAN for clean energy in his country.

NASA Hyperwall Event: Ocean and Water Resources

15:00 - 15:30

Event: The US Goes Renewable -Cities, Students, Homeowners, and **Businesses** 

Sponsor: World Wildlife Fund

**16:00 – 17:00** 

**Event Summary:** Come find out about the hottest trends in renewable energy in the US. WWF's renewable energy campaign promotes cutting edge renewable energy solutions like:

- ► A new "Alternative Spring Break" program that will allow U.S. university students to install solar panels on lowincome family homes.
- ▶ The city of Cleveland's new program that provides residents with 100% renewable electricity.
- U.S. installer programs that offer rooftop solar panels for FREE to homeowners, and offer referral fees to anyone who finds a customer.



## Schedule of Events at US Center COP-19 - The schedule is subject to changes

	Monday Nov 11	Tuesday Nov 12	Wednesday Nov 13	Thursday Nov 14	Friday Nov 15	Saturday Nov 16	Sunday Nov 17	Monday Nov 18	Tuesday Nov 19	Wednesday Nov 20	Thursday Nov 21	Friday Nov 22
10:00 - 10:30			Hyperwa	Loop				Hyperwall Loop				
11:00 - Noon	Closed	Reserved	NASA Viewing the Earth from Space	<b>DOE</b> Clean Energy Solutions Center	NREL Advancing Collaborative Action for Low Emission Development			USAID REDD+ Advances and a Success Story in Colombia	BCSE Managing Climate Risks in a Changing Energy Landscape	CEQ/CDP Creating Business Value by Taking Climate Action	DOS  New U.S. Action on Short-Lived Climate Pollutants	NASA Aerosols and Black Carbon in a Changing Climate
12:30 - 1:00 PM	Earth Climate from Space	Earth Climate from Space	Ocean & Water Resources	World of Change & Urbanization	Aerosols & Atmospheric Composition	-		World of Change & Urbanization	World of Change & Urbanization	World of Change & Urbanization	Aerosols & Atmospheric Composition	World of Change & Urbanization
1:30 - 2:30 PM	<b>USDA</b> Partnerships for Regional Science	NASA Climate Change and the World's Oceans	<b>DOS</b> REDD+ Results: Real Stories from the Forest	USAID From Concept to Reality: Mobilizing Private Investment for Clean Energy in Africa	USAID User-Friendly: How Climate Services	Closed	Closed	CEQ Inside the U.S. Climate Action Plan	CEO/NOAA/HUD Approaches for Preparedness, Rebuilding, and Resilience: Lessons from Hurricane Sandy	Reserved	DOS Low Emission Development Strategies: 2013 in Review	Reserved
3:00 - 3:30 PM	Ocean & Water Resources	Aerosols & Atmospheric Composition	Aerosols & Atmospheric Compostion	Ocean & Water Resources	Ocean & Water Resources			Earth Climate from Space	Aerosols & Atmospheric Composition	Aerosols & Atmospheric Composition	World of Change & Urbanization	Closed
4:00 - 5:00 PM	NOAA The Latest on the State of Our Climate and Drought Monitoring	USDA The Global Research Alliance on Agricultural Greenhouse Gases	Reserved	wwF The US goes renewable- Cities, universities, and individuals	NIEHS/USGCRP Health Adaptation in the US and Around			Rutgers/NASA Impacts of Rapid Arctic Change	DOE The Rewards and Challenges for Women Addressing Climate Change	DOE Accelerating the Transition to Clean Energy thu the CEM	DOT When the Tunnel Floods: Hurricane Sandy: Pre-planning vs. Outcome	
5:30 - 6:00 PM	Eyes on Earth 3-D	Ocean & Water Resources	Eyes on Earth 3-D	Eyes on Earth 3-D	Eyes on Earth 3-D			Aerosols & Atmospheric Composition	Eyes on Earth 3-D	Earth Climate from Space	Eyes on Earth 3-D	
6:00 - 7:00 PM	USDA/USGCRP US Interagency and International Collaboration on Carbon Cycle Science	DOT There is no place like home: locally- driven, place- based initiatives	Reserved	Reserved	USAID National Adaptation Plans: Lessons from Jamaica and West Africa			C2ES Weathering the Storm: Building Business Resilience to Climate Change	DOS Unlocking Women's Potential on Climate Change	CERES US Leadership in Action: Tackling Climate Change as an Economic Opportunity	Gov California Local Leadership Creating Resilient Communities	



Event: Eyes on Earth 3-D Sponsor: NASA 17:30 – 18:00

**Event Summary:** This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earthobserving satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

### Friday, November 15

**Event:** Advancing Climate Resilient Low Emissions Development through Innovative Peer Learning Platforms

**Sponsor:** National Renewable Energy Laboratory

11:00 - 12:00

**Event Summary:** The LEDS Global Partnership is a collaborative network of more than 110 government agencies, international organizations and technical

institutes advancing climate resilient low emissions development through peer learning and information exchange, coordination, and cooperative projects. We invite you to join this side event to learn about LEDS GP activities and resources, including the newly launched no cost LEDS advisory services in finance, analysis, energy, waste, and transport measures; development of improved benefit analysis tools and pilots; best practices on integrating LEDS and climate resilience; innovative LEDS finance strategies; among others. We will also profile our innovative regional platforms for peer learning and collaboration in Asia, Africa and Latin America and the Caribbean. The event will provide an opportunity to identify synergies between programs to further advance climate resilient low emission development around the world.

NASA Hyperwall Event: Aerosols & Atmospheric Composition

12:30 - 13:00

**Event:** Climate Services: Bringing Decision Makers Climate Data They Can Use

Sponsor: USAID

13:30 - 14:30

**Event Summary:** Climate change data is complicated and can often be

intimidating; yet understanding the nature of climate change impacts is critical for decision makers to adapt and enhance development gains. USAID supported the formation of the global Climate Services Partnership in 2011 to bring together producers and users of weather and climate information around the world to share needs, lessons, and collaboratively develop tools to address climate stresses. Climate services are helping leaders and decision-makers access climate data they can really use and make informed decisions and take concrete actions to improve adaptation capacity. In this event, experts from USAID, NOAA, and the Climate Services Partnership and representatives from countries putting climate services to work will discuss the benefits these services can bring. In Jamaica, the Climate Services Partnership is helping the Weather Service and the Agricultural Extension Service develop drought information tools for farmers to better manage pests, optimize crop selection, and take steps to better manage water resources. As another example, the Red Cross and Columbia University developed a flood warning system that enables disaster managers to anticipate flooding and take preventive action and respond more quickly.

NASA Hyperwall Event: Ocean and Water Resources

15:00 - 15:30

**Event:** Health Adaptation in the US and Around the World

**Sponsor:** National Institute of Environmental Health Sciences /U.S. Global Change Research Program

16:00 - 17:00

**Event Summary:** Hear from a group of international experts in climate change and public health about the progress that has been made around the world in understanding critical vulnerabilities and putting health systems into place to protect people who are at greatest risk. Dr. John Balbus, who represents the Department of Health and Human Services on the U.S. Subcommittee for Global Change Research, will moderate a discussion of progress, priorities and gaps with a group of experts from the World Health Organization and other leading international public health organizations working on climate change adaptation.

Event: Eyes on Earth 3-D

**Sponsor:** NASA

17:30 - 18:00

Event Summary: This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon



dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earth-observing satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

**Event:** National Adaptation Plans: Lessons from Jamaica and West Africa

**Sponsor:** USAID

18:00 - 19:00

**Event Summary:** The UNFCCC and the Least Developed Countries Expert Group are supporting the development of National Adaptation Plans (NAPs) for all developing countries. USAID is supporting these efforts in partner developing countries around the world. USAID is working with the government of Jamaica as it develops a national policy, based on their Vision 2030 development strategy, to address climate risks and mitigation opportunities. In West Africa, USAID is working with officials from 11 countries to build regional coordination around their national plans to build resilience to climate change along West Africa's coast, where more than 30 million people live and depend on coastal resources for livelihoods and food security. The coastal

region, which is the economic engine of West Africa and a center of agriculture, fisheries, tourism, industry, and trade, is facing multiple climate change impacts, including droughts, floods, and storms. In this event, representatives from USAID, the Jamaican Meteorological Service, the Economic Community of West African States (ECOWAS), and West African governments will discuss their approaches to address climate change impacts and develop NAPs.

Saturday November 16 and Sunday November 17 the U.S. Center will be closed

### **Monday, November 18**

**Event:** REDD+ Advances and a Success Story in Colombia

Sponsor: USAID

11:00 - 12:00

Event Summary: Each year 13 million hectares of forest (more than the total area of the U.S. State of Virginia) are lost globally. USAID is partnering with countries around the world to strengthen their capacities and policy environments to participate in REDD+ to slow, halt, or reverse deforestation. USAID supports

several REDD+ projects, including the BIOREDD program in Colombia, that work to improve participatory land use planning, apply the best available science and technical tools, and facilitate REDD+ financing to ultimately support community development planning that goes beyond REDD+ and boosts local economies. In this event, USAID experts and local partners will describe the latest REDD+ efforts and achievements. Local leaders from Colombia will provide a detailed look into a powerful example of USAID REDD+ support - the BIOREDD program. BIOREDD is working with communities to generate social and biodiversity benefits from efforts to avoid deforestation of over one million hectares in Colombia's biological hotspot Pacific region. Using the best available science, the program works with Afro-Colombian and indigenous communities and private sector partners to promote sustainable regional development in Tumaco, Buenaventura, Choco, and Darien-Uraba.

NASA Hyperwall Event: World of Change & Urbanization

12:30 - 13:00

**Event:** Inside the U.S. Climate Action Plan

**Sponsor:** White House Council on Environmental Quality (CEQ)

13:30 - 14:30

**Event Summary:** This event highlights the domestic mitigation, preparedness and resilience, and international leadership components of President Obama's Climate Action Plan. A representative from an outside organization will facilitate a discussion with Nancy Sutley, Chair of the White House Council on Environmental Quality, and other Senior Administration officials on key aspects of the Climate Action Plan, including an update on progress and what's coming down the line, with time for Q&A from the audience at the end. This event will provide information on how the U.S. is taking action on climate change both domestically and internationally.

**NASA Hyperwall Event:** Earth Climate from Space

15:00 - 15:30

**Event:** Effects of Rapid Arctic Change

**Sponsors:** Institute of Marine and Coastal Sciences, Rutgers University and NASA

16: 00 - 17:00

**Event Summary:** A significant fraction of the Arctic's sea ice has disappeared...in only 30 years. Extreme weather events are increasing in the northern hemisphere. Are these two changes related? This is an active subject of scientific research, with many investigators thinking that there



IS a relationship. In this presentation. recent changes in the Arctic, notably sea ice cover, will be presented along with explanations of the potential linkages between the rapidly warming Arctic and changes in weather patterns in midlatitudes. Both observations and model simulations suggest that Arctic warming is causing the west-to-east winds of the jet stream to slow down, the waviness of the jet stream to increase, and weather patterns to become more persistent. Many types of extreme weather are caused by persistent jet-stream patterns -- such as flooding due to prolonged rains, heat waves, and droughts -- therefore as greenhouse gases continue to accumulate in the atmosphere, additional sea-ice loss and Arctic warming are expected to contribute to more frequent extreme weather events around the northern hemisphere.

# NASA Hyperwall Event: Aerosols & Atmospheric Composition

17:30 - 18:00

**Event:** Weathering the Storm: Building Business Resilience to Climate Change

**Sponsor:** C2ES

18:00 - 19:00

**Event Summary:** Join the Center for Climate and Energy Solutions (C2ES,

formerly the Pew Center on Global Climate Change) and a panel of corporate leaders to discuss the lessons learned from the C2ES report, "Weathering the Storm: **Building Business Resilience to Climate** Change." The report provides a detailed snapshot and case studies of resilience planning across global corporations, and outlines steps businesses can take to better assess and manage their growing corporate climate risks. The research finds that ninety percent of S&P Global 100 Index companies identify extreme weather and climate change as current or future business risks, while almost two-thirds say they are experiencing climate change impacts now, or expect to in the coming decade. However, most companies are managing these risks through existing business continuity and emergency management plans, and only a few have used climate-specific tools to comprehensively assess risks. Many companies (75 percent) also see new opportunities from a changing climate, including drought-resistant crops, stormresistant building materials, and weatherrelated insurance products. Panelists will discuss both the risks and some potential solutions, such as: creating a clearinghouse for reliable, up-to-date data and analytical tools; investing in public infrastructure resilience; considering resilience needs in regulation; and developing voluntary, public-private partnerships.

### **Tuesday, November 19**

**Event:** Managing Climate Risks in a Changing Energy Landscape

**Sponsor**: Business Council for Sustainable Energy

11:00 - 12:00

**Event Summary:** What is the impact of climate change on how energy is produced, consumed and thought about in the United States? Today's energy mix in the United States is undergoing a dramatic transformation towards lower carbon sources. The Sustainable Energy in America 2013 Factbook presents facts on the latest industry trends and demonstrates how traditional energy sources are declining, while natural gas, renewable energy and energy efficiency are on the rise. These new trends are increasing the diversity of the American energy mix, shrinking its 'carbon footprint' and building a more resilient energy infrastructure. Stakeholders in the energy sector are realizing the need to plan for the impact of climate change and extreme weather events on U.S. electricity grid and systems, as well as on our urban and coastal infrastructure and communities. A July 2013 U.S. Department of Energy report identifies critical areas in the energy sector at risk and showcases efforts underway to increase the sector's resiliency. A panel of clean energy

executives and government officials will discuss how renewables, natural gas and energy efficient technology providers are working together and with policymakers to create a more secure, diversified and low-carbon energy portfolio in the US.

NASA Hyperwall Event: World of Change and Urbanization

12:30 - 13:00

**Event:** Approaches for Preparedness, Rebuilding, and Resilience: Lessons from Hurricane Sandy

Sponsors: National Oceanic and Atmospheric Administration/ U.S. Department of Housing and Urban Development / White House Council on Environmental Quality (CEQ)

13:30 - 14:30

Event Summary: In October 2012,
Hurricane Sandy struck the East Coast
of the United States wreaking havoc
in communities throughout the region.
Entire neighborhoods were flooded.
Families lost their homes. Businesses
were destroyed. Infrastructure was torn
apart. Hurricane Sandy affected 24 states
across the Northeastern and Mid-Atlantic
United States. Unprecedented leadership
and coordination at the local, state and
Federal levels has resulted in a recovery
effort that is helping communities



rebuild smarter and better in a way that will help protect communities against future climate impacts. This event will include a panel discussion on U.S. efforts and the importance of national and subnational partnerships, for building resilience and improving preparedness for extreme weather events and climate change. The event will use examples from the Hurricane Sandy Recovery efforts to highlight innovative ways the U.S. government and non-government partners have developed to better prepare for weather and climate-related natural disasters and build more resilient communities to withstand future events. A panel featuring Senior U.S. officials, local U.S. leaders, and non-government experts will highlight lessons learned in three key areas. The first is the importance of collaboration between local, state and federal governments. The second is the need for climate science in real time to make decisions about how to respond and recover in a sustainable way. And the third is the importance of having adaptation plans developed that facilitate adaptive recovery efforts – building back better. Time at the end of the event will be available for audience members to discuss best practices being adopted around the world regarding disaster recovery and improved resilience.

NASA Hyperwall Event: Aerosols & Atmospheric Composition

15:00 - 15:30

**Event:** The Rewards & Challenges for Women addressing Climate Change

**Sponsor:** U.S. Department Of Energy **16:00 – 17:00** 

**Event Summary:** A panel of three high level speakers and a moderator will discuss the professional pathways and unique challenges for women in leadership positions in climate change professions. Women around the world are often the first to feel the effects of climate instability on their communities; accordingly, it is important to encourage women to pursue, and advance in. related fields because their distinct experiences and perspectives are often underrepresented when crafting solutions. The importance of seeking mentors and building professional networks will be discussed. Speakers will address myriad ways and means of women's contributions, current and potential, to addressing human contribution to climate change.

Event: Eyes on Earth 3-D Sponsor: NASA

17:30 - 18:00

**Event Summary:** This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earthobserving satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

**Event:** Unlocking Women's Potential on Climate Change

**Sponsor:** U.S. Department of State **18:00 – 19:00** 

Event Summary: At a time when the UNFCCC is increasingly focusing on the gender-climate nexus, this event will highlight efforts to promote women's leadership and action on climate change. A Senior U.S. Administration Official will join leading voices on women's empowerment, energy and environmental issues to discuss efforts

to unlock women's potential to take action on climate change and increasing energy access. The event will feature a discussion on the Partnership on Women's Entrepreneurship in Renewables (wPOWER), a U.S. Department of Stateled partnership which aims to empower more than 8,000 women clean energy entrepreneurs across India, Nigeria and East Africa to launch small businesses around small-scale energy technologies, including solar lamps and clean cookstoves.

## Wednesday, November 20

**Event:** Creating Business Value by Taking Climate Action

**Sponsors:** Carbon Disclosure Project (CDP) and the White House Council on Environmental Quality (CEQ)

11:00 - 12:00

Event Summary: The U.S. corporate sector is taking action to address global climate change. The Carbon Disclosure Project's (CDP) 2013 S&P 500 report outlines the ways in which the largest corporations in the U.S. are creating significant economic value by reducing emissions profitably, building resiliency into the business model and leading by engaging beyond company walls. This event will feature Nancy Sutley, Chair of the White House Council on Environmental Quality, who will discuss



the importance of public and private sector cooperation to address climate change, and highlight the efforts the Administration is undertaking to engage businesses in climate action. A panel featuring CDP and business leaders will discuss how CDP's report is a framework to map the U.S. corporate sector's action and broader engagement on climate change that is consistent with President Obama's leadership objectives, notably those set out in the Climate Action Plan.

# NASA Hyperwall Event: World of Change & Urbanization

12:30 - 13:00

# NASA Hyperwall Event: Aerosols & Atmospheric Composition

15:00 - 15:30

**Event:** Accelerating the Transition to Clean Energy through the Clean Energy Ministerial

# **Sponsor:** U.S. Department Of Energy **16:00 – 17:00**

Event Summary: To tackle the incredibly complex problem of climate change, we must transition to a global clean energy economy. There are multiple and concurrent paths we can take to achieve this and ways we can cooperate to accelerate this transition. The Clean

Energy Ministerial (CEM) is a forum of the world's major economies working together and achieving high impact, tangible results. Through 13 initiatives, the CEM is helping deploy more clean energy around the world; improve energy efficiency in appliances, buildings and industry; expand energy access to the millions that lack access to electricity, and build human capacity to enable all of humanity to contribute to solving this global challenge. This presentation will highlight the results that have already been realized through the CEM and the work that is taking place to accelerate this progress, providing perspectives from the US and other CEM countries. It will also demonstrate how the U.S. engagement in this forum is contributing to the achievement of President Obama's Climate Action Plan and helping forge global responses to climate change.

# **NASA Hyperwall Event:** Earth Climate from Space

17:30 - 18:00

**Event:** U.S. Leadership in Action: Tackling Climate Change as an Economic Opportunity

**Sponsor: CERES** 

18:00 - 19:00

**Event Summary:** Companies are taking the lead on sustainability issues for the good of their business and the

environment. Over two thirds of the world's top 100 companies have set either renewable energy or greenhouse gas reduction goals, or both. Companies are finding innovative ways to reduce waste, save money, and increase their profit margins by boosting energy efficiency, using renewable energy, and reducing greenhouse gas emissions. Major global companies have signed Ceres' Climate Declaration in order to drive common-sense climate policies that inspire innovation and spur growth. The Climate Declaration states that tackling climate change is an economic opportunity and urges policymakers to take action. Join top global business leaders for an interactive discussion on what companies are already doing to tackle climate change, how it presents a global economic opportunity, and why policymakers and the public must join them in taking action. Your company can join the Climate Declaration at www. climatedeclaration.us

### **Thursday, November 21**

**Event:** New U.S. Action on Short-Lived Climate Pollutants

**Sponsor:** U.S. Department of State **13:30 – 14:30** 

**Event Summary:** The President's Climate Action Plan, in addition to laying out new

ambitious action on CO2, includes a strong focus on short-lived pollutants, both by taking new action domestically as well as enhancing international efforts. These pollutants, including methane, HFCs, and black carbon, have significant impacts on climate, health, and agriculture. A panel of U.S. agencies responsible for developing new programs will lead the discussion.

# NASA Hyperwall Event: Aerosols & Atmospheric Composition

12:30 - 13:00

**Event:** Low Emission Development Strategies: 2013 in Review

**Sponsor:** U.S. Department of State

13:30 - 14:30

**Event Summary:** The Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) is a U.S. government program to support developing countries' efforts to pursue long-term, transformative development and accelerate sustainable, climate-resilient economic growth while slowing the growth of greenhouse gas emissions. As highlighted in President Obama's Climate Action Plan, the U.S. has now partnered with 25 countries globally to tackle the climate issue by providing targeted technical assistance and capacity building aimed at reducing emissions in key economic sectors. As the program is now in its third year, this



event will provide an update on progress made in 2013, hearing from the countries currently in the process of developing and implementing LEDS to get their perspective on what the successes and challenges have been and what opportunities lie ahead. All LEDS partners and practitioners are encouraged to attend this side event and share their experiences, as well as those new to LEDS who would like to learn more about U.S. Government efforts to support low emission development in Africa, Asia, Eastern Europe and Latin America and the Caribbean.

# **NASA Hyperwall Event:** Earth Climate from Space

15:00 - 15:30

**Event:** When the Tunnel Floods: Hurricane Sandy Pre-planning vs. Outcome

**Sponsor:** U.S. Department Of Transportation

16:00 - 17:00

Event Summary: This panel will discuss how the U.S. Government prepared for the impacts of climate change in the northeast region in advance of Hurricane Sandy, and provide an overview of how pre-Sandy planning efforts undertaken by governmental entities successfully predicted much of the destruction inflicted

by Hurricane Sandy. U.S. Government panelists will discuss how they were able to coordinate and support prevention, preparedness, response, recovery, and mitigation activities among stakeholders after Hurricane Sandy.

Event: Eyes on Earth 3-D Sponsor: NASA 17:30 – 18:00

**Event Summary:** This is an interactive virtual reality application that delivers data and images from NASA's fleet of Earth satellites to home computers. Users can ride along with satellites, observing Earth as it sweeps below and view authentic data maps of ozone, carbon dioxide and global temperature mapped onto the surface of the globe. Developed using state-of-the-art, 3D video game engine technology, the application also features a stereographic 3D mode and displays the real-time location of all of NASA's currently operating Earthobserving satellite missions. A companion app called 'Earth Now' is also available for iPhone and Android phones.

**Event:** Local Leadership Creating Resilient Communities

**Sponsor:** California Governor's Office

18:00 - 19:00

**Event Summary:** The importance of local and regional action and cross-sectoral

partnerships cannot be overstated. In order to achieve our most ambitious climate change resiliency goals, international, as well as national, state and regional cooperation must be paramount. This panel will focus on the leadership local and regional efforts can have on climate change through the lens of resilience and how non-governmental organizations, business, federal government and state partnerships are essential in that effort. Through ICLEI's engagement nationwide and around the world, the State of California's emerging regional collaboratives and local government leadership, significant progress is being made on resilience when the tools, resources and support converge on the issue. This session will discuss some of the work taking place throughout the US to address climate change and will outline options which can be translated across the world as a platform for other communities.

### Friday, November 22

**Event:** Our Particulate Atmosphere: Aerosols and Black Carbon in a Changing Climate

**Sponsor:** NASA

11:00 - 12:00

**Event Summary:** Aerosols are an important forcing agent for the Earth's climate given

their ability to both reflect and absorb incoming and/or outgoing solar radiation. Aerosols are highly complex, coming from a variety of sources – either directly emitted from the Earth's surface or formed in the atmosphere from gas phase precursors. They are variable in both space and time, and their composition and thus climatic impacts can evolve with time. Aerosols can affect the optical properties of clouds with which they may come in contact, and may also affect their production of precipitation. Black carbon is a particularly important aerosol, as it tends to be absorbing, potentially leading to warming of the climate – as well as other environmental impacts. such as deposition on snow surfaces with resulting changes in albedo. In this presentation, a summary of what's known about current distributions and temporal evolution of aerosols will be provided, using results of a broad range of observations (satellite, in situ, surfacebased) and models.

NASA Hyperwall Event: World of Change & Urbanization

12:30 - 13:00



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