AGENDA

GLOBAL WORKSHOP ON LOW CARBON POWER SECTOR DEVELOPMENT

December 10 – 17, 2011 Washington, DC

Managed by
UNITED STATES ENERGY ASSOCIATION (USEA)

Funded by
THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)





Overview

The Global Workshop on Planning for a Low Carbon Power Sector will focus on how utilities are integrating low carbon generation resources into their systems given financial constraints. This activity will be a four and a half day workshop including site visits. Participants will gain understanding of the integrated resource planning process used by electric utilities to plan supply and demand resources to meet future capacity needs for their customers. In particular, they will look at the following low carbon generation options: renewable energy, energy efficiency, energy conservation, demand side management, fuel switching and carbon capture and storage from fossil resources. This workshop will assist participants in formulating plans to address the growing demand for energy services while meeting the ever stringent financial, environmental and reliability requirements.

This program is targeted toward energy policy makers, utilities and regulators. They will meet with their U.S. peers and experts from utilities and other energy organizations to learn policies and techniques for the planning and implementation of low carbon generation. The site visits will allow the participants to observe the methodologies and technologies discussed during the workshop.

PARTICIPANTS

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Participating Organizations

ACEEE

American Wind Energy Association Baltimore Office of Sustainability Constellation Energy Edison Electric Institute (EEI) Embassy of Singapore

ICF
Inter-American Development Bank
McKinsey & Company
National Association of State Energy Officials
(NASEO)
New England ISO

Pepco Holdings Inc.
Solar Electric Power Association
Solar Turbines Incorporated

Southern Company
The Brattle Group

U.S. Agency for International Development

U.S. Department of Defense U.S. Department of Energy

U.S. Environmental Protection Agency





Saturday, December 10, 2011

Delegates arrive from their respective countries and check into the hotel.

Hotel: Washington Plaza

Ten Thomas Circle, NW Washington, DC 20005 Phone: 1-202-842-1300 Fax: 1-202-371-9621

Sunday, December 11, 2011

Executive time

Monday, December 12, 2011

Topics:

8:15 am	Pick up delegates at hotel and escort them to USEA
	Location: USEA Conference Room C, 1300 Pennsylvania Avenue, NW, Suite 550, Washington, DC
8:30 am	WELCOME AND OPENING REMARKS AND PARTICIPANT INTRODUCTIONS
	John Hammond, Program Manager, U.S. Energy Association
8:40 am	WELCOME REMARKS BY UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) Kristen Madler, Clean Energy Coordinator, USAID
8:50 am	Enhancing Capacity for Low Emissions Development Strategies (EC-LEDS) Initiative Dr. Katherine Batten, Global Climate Change Coordinator, USAID
9:10 am	KEYNOTE PRESENTATION: MOVING TOWARDS A LOW CARBON POWER SECTOR: OPTIONS AND CHALLENGES Dr. Lola Infante, Director, Generation Fuels & Market Analysis, Edison Electric Institute Topics:
	What utilities are doing to promote low carbon power
	ApproachesProblems encountered
10:00 am	Break
10:15 am	KEYNOTE: KEY SOURCES OF UNCERTAINTY IN GLOBAL POWER MARKETS AND THE IMPLICATIONS ON LOW CARBON POWER GENERATION
	SPEAKER: MATT PARSONS, Associate Principal, McKinsey





Dec. 10 – 17, 2011

Sources of uncertainty in global power markets

Baseline scenario to 2030

Monday, December 12 (continued)

- Potential deviations from the baseline
- Implications on low carbon power generation

11:30 am State Renewable Energy Incentives: U.S. Experience

Speaker: David Terry, Executive Director, National Association of State Energy Officials

Moderator: Tricia Williams, Senior Program Coordinator, USEA

Topics:

- Existing and proposed State policies and incentives to promote low carbon generation
- Barriers to implementation
- Case studies specific examples
- 12:30 pm Lunch & Discussion
- 1:30 pm INTEGRATED RESOURCE PLANNING (IRP)

Speakers: Bill Prindle, Vice President, ICF International Marc Chupka, Principal, The Brattle Group

Moderator: Marjorie Jean-Pierre, Deputy Program Manager, USEA

Topics:

- Generation planning
- Demand side management
- 2:45 pm *Break*
- 3:00 pm CLEAN CITIES

SPEAKERS: Daryl Sng, Counsellor (Political), Singapore Embassy

Alice Kennedy, Sustainability Coordinator, Baltimore Office of Sustainability

Moderator: Lauren Dickerson, Administrative Program Coordinator, USEA

Topics:

- Resource conservation
- Transportation
- Pollution prevention
- Greening
- Green economy
- Urban planning
- 4:00 pm Discussion of Country Action Plan Exercise
- 4:30 pm *Adjourn*
- 6:30 pm Dinner (TBD)





Tuesday, December 13, 2011

8:00 am Pick up delegates at hotel and escort them to USEA

Location: USEA Conference Room C, 1300 Pennsylvania Avenue, NW, Suite 550,

Washington, DC

8:15 am **ACTION PLAN DEVELOPMENT TIME – 1**ST **MEETING**

9:00 am IMPROVED EFFICIENCY OF FOSSIL FUEL GENERATION, ADVANCED CLEAN COAL TECHNOLOGY AND CARBON

SPEAKERS: Carlton Blue, Program Manager, Southern Company

Bob Wright, Senior Advisor, USDOE

Moderator: Marjorie Jean-Pierre, Deputy Program Manager, USEA

Topics:

 Overview of U.S. Department of Energy programs to improve the efficiency of fossil fuel generation

- Fossil fuel power plants and advanced clean coal technologies
- CCS Storage sites reservoirs, coal beds, deep saline formations
- Current CCS projects

10:30 am **Break**

10:45 am SMART GRID

Presenters: Carlton Blue, *Program Manager, Southern Company* **Moderator: Marjorie Jean-Pierre,** *Deputy Program Manager, USEA* **Topics:**

- What are Smart Grid technologies and approaches?
- Progress toward Smart Grid U.S. and International experience
- Planned Smart Grid projects
- Financing and incentives for Smart Grid
- Regulatory process
- Consumer awareness and acceptance

12:30 pm *Lunch*

1:15 pm **SOLAR AND WIND TECHNOLOGIES**

SPEAKERS: Maggie Lemmerman, Manager of Federal Legislative Affairs, American Wind Energy Association

Chris Tindal, Director for Operational Energy, Office of the Deputy Assistant Secretary of Defense for Energy, U.S. Department of Defense

Moderator: Tricia Williams, Senior Program Coordinator, USEA

Topics:

- Experience with wind project development
- Review of specific projects
- Barriers and solutions siting, financing, interconnection, etc.
- Energy storage
- Review of DOD renewable energy programs (wind, solar, biomass, etc.)





Tuesday, December 13 (continued)

2:30 pm **Depart for site visit**

3:30 pm SITE VISIT: RAPPAHANNOCK REGIONAL SOLID WASTE COUNTY LANDFILL

Location: Rappahannock Regional Solid Waste Management Board, 489 Eskimo Road, Stafford The Rappahannock County Regional Landfill, located on Eskimo Hill Road in Stafford, began producing renewable energy from the landfill gas on Sept. 17, 2008. Usually, landfill gas, which is about 50 percent methane, was extracted through wells and pipes buried in the landfill and combusted in a flare. However, the gas is now diverted from the flare to the landfill gas plant, which is equipped with two specialized GE Jenbacher engines designed to burn landfill gas. The facility can generate 2.14 megawatts of renewable energy — enough to power more than 1,300 homes a day — by using the landfill gas generated by decomposing waste at the landfill.

Dec. 10 – 17, 2011

5:00 pm *Adjourn*

Wednesday, December 14, 2011

8:00 am Pick up delegates at hotel and escort them to USEA

Location: USEA Conference Room C, 1300 Pennsylvania Avenue, NW, Suite 550,

Washington, DC

8:15am **ACTION PLAN DEVELOPMENT TIME – 2ND MEETING**

9:00 am PUBLIC BRIEFING: Low Carbon Programs in Participating Developing Countries

Individual country presentation of ten to fifteen minutes on their country's generation capacity plans and low carbon generation options.

Moderator: Marjorie Jean-Pierre, Deputy Program Manager, USEA

Topics:

- Snapshot of the country's energy sector
- Renewable energy programs
- Energy efficiency and conservation
- Natural gas and clean coal
- Nuclear
- Incentives and policies

12:15 pm *Lunch*

1:00 pm Financing Low Carbon Projects

SPEAKERS: Leandro Alves, Head of the Energy Division, Infrastructure and Environment Department, Inter-American Development Bank

Odin Knudsen, Principal, Real Options International

Moderator: Lauren Dickerson, Administrative Program Coordinator, USEA

Topics:

- Barriers to investments
- Financial approaches
- Market transformation





Wednesday, December 14 (continued)

- Subsidy/grant mechanisms
- Specific plant examples

3:30 pm Break

3:45 pm Cogeneration and Combined Heat and Power

SPEAKERS: Neeharika Naik-Dhungel, US EPA Combined Heat and Power Partnership

Joe Allen, Director, Government Affairs, Solar Turbines

Moderator: Lauren Dickerson, Administrative Program Coordinator, USEA

Topics:

Barriers to deployment

- Connecting to the grid
- Tariff mechanisms
- Specific plant examples

5:00 pm Adjourn

6:30 pm Dinner Sponsored by Solar Turbines (TBD)

Thursday, December 15, 2011

8:15 am Pick up delegates at hotel and escort them to USEA

Location: USEA Conference Room C, 1300 Pennsylvania Avenue, NW, Suite 550,

Washington, DC

8:30 am ACTION PLAN DEVELOPMENT TIME – 3RD MEETING

9:15 am Utility Energy Efficiency Programs and Technologies

Speaker: Sara Hayes, Senior Policy and Utilities Associate, ACEEE Moderator: Tricia Williams, Senior Program Coordinator, USEA

Topics:

Review of state energy efficiency programs

- Incentives
- Role of the regulator
- Public acceptance
- Monitoring and evaluation

10:15 am **Break**





Thursday, December 15 (continued)

10:30 am Integrating Large Scale Variable Renewable Resources in New England

SPEAKERS: PETER WONG, Manager of Resource Adequacy, ISO New England

Moderator: Tricia Williams, Senior Program Coordinator, USEA

Topics:

Intermittency and dispatch

• Backup generation

Interconnection standards

Grid stability and protection requirements

Equipment requirements

11:30 am Overview of Demand Resources in New England

SPEAKERS: PETER WONG, *Manager of Resource Adequacy, ISO New England* **Moderator: Marjorie Jean-Pierre,** *Deputy Program Manager, USEA*

Topics:

Overview of DSM and demand response

Benefits of DSM

Financial and regulatory incentive

Monitoring and evaluation

Case studies of utility DSM and demand response programs

1:00 pm *Lunch*

2:00 pm Depart for site visit

2:30 pm Site Visit: TBD

5:00 pm *Adjourn*

Friday, December 16, 2011

8:15 am Pick up delegates at hotel and escort them to USEA

Location: USEA Conference Room C, 1300 Pennsylvania Avenue, NW, Suite 550,

Washington, DC

8:30 am Finalize Action Plan & Presentations

9:30 am Present Action Plans

South Africa Bangladesh El Salvador Mexico Tanzania





Dec. 10 – 17, 2011

12:30 pm *Lunch*

Delegates return to their respective countries

Saturday, December 17, 2011

Delegates return to their respective countries



