

# **CALL FOR PAPERS**

**Water, Energy and Climate Conference 2014** 

"Solutions for Future Water Security"

(http://wecmexico2014.org)









inspiring change www.iwahq.org Mexico City, Mexico May 21-23, 2014







# **Water, Energy and Climate Conference 2014** "Solutions for Future Water Security"

olving the interlinked challenges of urban water, energy and climate is critical for cities of the future to prosper. The IWA Water, Energy and Climate Conference 2014: Solutions for Future Water Security (IWA WEC) is an opportunity to bring together knowledge from across the globe to share experiences and information, enable collaboration and build new partnerships. The event combines multiple technical sessions with workshops, panel debates, discussion groups, technical tours, Young Water Professional sessions and industry interaction. The event will bring together expertise from across the water cycle from research to practical application to policy and regulation.

Linkages between water and energy are seen as critical for economies and societies today and increasingly so in the future. The urban water - energy nexus provides a major opportunity for cities and their utilities to lower energy use and costs, along with reducing their carbon footprint contributing to mitigating greenhouse gases. Concurrently, water security is being compromised by changes and variability in climate along with increasing urbanization and change in land use. These shifts are impacting the safety and security of water supplies to cities, industries and agricultural areas. With increasing extreme floods and droughts, cities need to adapt and reassess their approaches to water supplies and urban water storage and drainage. Industries need to work beyond their fenceline and assess water risks along their value chain and farmers need to become more efficient in their water use to reduce their vulnerability. The combination of evolving technologies and adaptive management is needed to achieve water security in cities, industries and agriculture across entire catchments.

IWA WEC conference will provide a platform for discussion of cutting edge solutions to the world's water and energy issues, while also addressing approaches to sustainable and effective adaptation throughout the water sector. Hosting the IWA WEC Conference in Mexico City provides a unique opportunity to learn from exciting innovations in the region such as the 30 tank biodigester scheme currently being developed in the Valley Basin in Mexico City. The biodigester will treat sludge from wastewater and extract energy and fertilizer products for the region.

The overarching goal of IWA's WEC Conference is to identify, showcase and debate practical experiences and examples of how cities, industries and farmers can achieve Water - Energy neutrality, reduce their water related carbon footprint and improve their water security. The overall theme of the 2014 IWA WEC Conference is "Solutions for Future Water Security".

# **International Water** Association



The International Water Association (IWA) is a global network of water professionals, spanning

the continuum between research and practice and covering all facets of the water cycle. Through IWA members collaborate to promote the development and implementation of innovative and effective approaches to water management.

The strength of IWA lies in the professional and geographic diversity of its membership - a global mosaic of member communities, including academic researchers and research centres, utilities, consultants, regulators, industrial water users and water equipment manufacturers. IWA members from each of these communities represent the leading edge in their fields of expertise; together they are building new frontiers in the research and implementation of water and wastewater treatment technologies, with the framework of the total water cycle.

# **Host organization**

**Asociación Nacional** de Empresas de Agua y Saneamiento de Mexico -**ANEAS** 

**ANEAS** The Asociación Nacional de Empresas de Agua y

Saneamiento de Mexico - ANEAS (National

Association of Water and Sanitation Utilities in Mexico) is the main body of operating organizations of Water Supply and Sewerage in the country and has more than three decades of experience supporting efficiency in service delivery improvement and increasing the level of professionalism and autonomy of its members that include water utilities, private companies and bodies involved in the water and sanitation sector, who contribute and share knowledge and experiences to achieve individual and group goals.

### **Conference themes and sub-themes**

The following is a selection of key themes for which we are particularly seeking contributions. However, submissions on any topic in the fields of urban waterenergy, water security and adaptation to climate variability and change with a focus on water issues in the urban environment, industry and related issues in agriculture and catchment management. In line with IWA's commitment to supporting young water professionals and women leaders, submissions from these demographics are welcomed and encouraged.

You can find more detailed information at <a href="http://wecmexico2014.org">http://wecmexico2014.org</a>

#### ◆ Urban water – energy neutrality through efficient utilities, industries and cities

This stream will explore the technology and processes to achieve utility and city water-energy efficiency and energy production. Submissions are welcome on:

- Sustainable technologies and processes for urban and industrial water – energy conservation and alternative energy production
- Information and communication technology to optimize energy and carbon efficiency and energy production in industry and cities
- Water, energy and raw materials recovery from urban and industrial waste water – challenges and opportunities
- Energy demands for water" and "water demands for energy"
- Benchmarking, monitoring and measuring water energy interactions in cities and industries

#### ◆ Policy and finance for energy and carbon neutrality

This theme will explore the enabling environment (institutions, policies, financing mechanisms, etc) to guide the transition to urban and industrial water-energy

# Institutional partner

#### Comisión Nacional del Agua - CONAGUA



The Comisión Nacional del Agua

- CONAGUA (National Water

Commission) is the agency in charge

of water administration in Mexico and looks to manage and preserve national waters and their inherent goods in order to achieve sustainable use, with joint responsibility of the three tiers of government (federal, state, and municipal) and society as a whole. As a part of the Ministry of the Environment and Natural Resources, CONAGUA carries out not only the administration of the National Waters but also the management and control of the hydrologic system and promotes social development and participation.

neutrality. Submissions are welcome on:

- Optimizing urban water and energy cooperation between water and energy utilities and between urban water/energy and industrial water-energy
- Business opportunities in improving water efficiency and water-energy efficiency in industries and cities
- Policy and regulation which supports innovation for energy and carbon neutrality in utilities and industries
- Institutional change/structures needed to support the transition to cutting edge water/energy solutions
- Financing mechanisms for the urban and industrial water-energy nexus

# → Planning and infrastructure for a resilient water sector

This stream will look at how to cities, industries and farmers can improve their water security through building resilience to the impacts of a changing environment due to climate, increasing urbanization and changes in land use as well as economic and social shifts. Submissions are welcome on:

- Asset management to secure resilient and efficient urban water systems
- Improving performance of urban water infrastructure to changes in the hydrologic cycle
- Investing in natural and engineered infrastructure to optimize the water, energy and food nexus
- Strategies for creating a new adaptation landscape across cities, industries and farmers
- Governance and institutional arrangements for urban and watershed drainage
- Planning and decision support systems to improve responses to climate impact including floods and droughts
- Exploring trends in hydro-climatic variables and responses to extreme climatic events

#### Optimising water cycle management for securing urban and industrial water supplies

This stream will investigate how to cope with reduced or erratic rainfall affecting the quantity and quality of critical water supplies to urban areas and industries through integrated urban water management. Submissions are welcome on:

- Securing alternative water sources, including rainwater, reclaimed and treated water through urban and basin management
- Optimizing stormwater opportunities usage for urban development
- Urban and industrial water demand modelling
- Information and communication technology to optimize urban and industrial water management
- Economic approaches to optimizing collection, storage, treatment and distribution of various water sources.

#### **Timeframe**

Abstract submission closes	November 30th, 2013
Authors notified of papers	February 17th – February 21st, 2014
Advance programme	March 7th, 2014
Registration opens	February 7th, 2014
Submission of full papers	March 14th, 2014

Submitting a paper for the Water, Energy and Climate Conference will give you an opportunity to present your work to a global audience and also the opportunity of publication in a leading international peer-reviewed journal. The congress technical programme will consist of platform presentations, poster presentations, and workshops.

#### **Abstract submissions**

Authors may submit abstracts for either oral or poster presentation. Abstract submissions are limited to a maximum of two A4 pages (including figures and tables) and must be submitted online at: <a href="http://wecmexico2014.org">http://wecmexico2014</a>. org. Abstracts must contain adequate information to allow a sound review. Abstracts should be submitted online via the congress website. For guidelines on formatting

abstracts and more information about the conference, visit the website at <a href="http://wecmexico2014.org">http://wecmexico2014.org</a> Submission of abstracts will be open until November 30th, 2013.

On the basis of the abstracts received, a stringent review will be undertaken by the Programme Committee to select papers for the conference and to decide the most appropriate format – oral or poster. The selection criteria include high technical quality, relevance to the themes and depth of content. Papers that are deemed commercial in nature will not be accepted.

# **Conditions of Presenting**

If selected for oral presentation, authors are strongly encouraged to submit full papers which will be further peer reviewed for publication in IWA's relevant scientific journals. Specifications for the formatting of papers are available on the IWAP website at <a href="http://www.iwaponline.com/wst/i2a.htm">http://www.iwaponline.com/wst/i2a.htm</a>. The 8-page full manuscript will be included in the conference proceedings. At least one author of each selected paper or poster must register and attend the conference to present the paper. Authors must meet their own expenses to attend the conference, including the registration fee, travel and accommodation.

# **Programme committee**

Daniel Nolasco	Nolasco Associates (Co-Chair)	Argentina
Roberto Olivares	ANEAS (Co-Chair)	Mexico
Can Wang	Tsinghua University	China
Adalberto Noyola	Universidad Autónoma de México UNAM	Mexico
Adriana Hulsmann	KWR	The Netherlands
Armin Munevar	CH2M Hill	USA
Arturo Pedraza	Watergy México	Mexico
Carol Howe	ForEva Solutions	USA
Chris Perera	Victoria University	Australia
Diego Rosso	Water Environment Federation	Italy-USA
Eduardo Pacheco Jordao	Federal University of Rio de Janeiro	Brazil
Emiliano Rodríguez	CONAGUA	Mexico
Gustaf Olsson	Lund University, Professor Emeritus	Sweden
Ifetayo Venner	Water Environment Federation	USA
Paul Fleming	Seattle Public Utilities	USA
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Rutger de Graaf	Rotterdam University of Applied Sciences	The Netherlands
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## **Contact information**

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#### **Congress Secretariat**

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