

THE FIRST MI SMART GRIDS INNOVATION WORKSHOP

A SIDE EVENT OF CEM8 & MI-2



MI Smart Grids
1st WS Beijing 2017

4th - 6th of June, 2017 | Beijing | China

Venue:

- 1. Institute of Electrical Engineering, Chinese Academy of Science (IEE CAS)**
- 2. Chinese National Convention Center (CNCC)**

Organized by:

IEE, Chinese Academy of Science (CN)

RSE, Ricerca Sistema Energetico (IT)

IIT, Indian Institute of Technology Roorkee (IN)



Context

The interest in smart grids is worldwide. Research and development in the field of smart grids is needed to develop technological solutions to address challenges related to the design, integration, operation, management and optimization of the power systems of the future, thus enabling a seamless integration of 100% generation from RES. In this view, Business and Investors Engagement (BIE) is important in order to accelerate innovation, commercialization, and deployment in the fields of smart grids and renewable energy sources.

Smart Grids Innovation Challenge (IC) is the first one of seven ICs of Analysis and Joint Research Subgroup in Mission Innovation (MI). The IC#1 on smart grids aims to developing and demonstrating the use of smart grids technologies in a variety of grid applications including demonstrating the robust, efficient, and reliable operation of regional and distribution grids as well as micro grids in diverse geographic conditions. By 2030, the objectives are to develop technological solutions that can accommodate up to 100% renewable based power plants in large scale across the globe and to push forward the implementation of the abovementioned solutions towards reliable clean energy solutions.

The IC#1 on smart grids is co-led by China, India and Italy. Participant countries include Australia, Brazil, Canada, China, Denmark, Finland, France, Germany, India, Indonesia, Italy, Mexico, Norway, Saudi Arabia, South Korea, Sweden, The Netherlands, United Kingdom, United States of America and European Commission.

Goals

MI Smart Grids Innovation Workshop in Beijing, during 4th to 6th June, is a 3.5 days deep-dive workshop of the IC#1 on smart grids. It is the first event to bring together IC#1 international experts for a very focused technical discussion designed to yield deep insights into smart grids main challenges. Moreover, a 1-day public event on 6th June is included as a side event of CEM8 and MI-2 in order to involve key stakeholders for discussing and contributing on smart grids innovation. An official launching ceremony of the IC#1 activity is foreseen as a highlight part of this workshop.

Co-organizers

- Institute of Electrical Engineering, Chinese Academy of Science - IEE CAS (China)
- Ricerca sul Sistema Energetico - RSE (Italy)
- Indian Institute of Technology Roorkee - IITR (India)

Supported by

- Chinese Renewable Energy Society (China)

Participants

- Representatives of Mission Innovation Smart Grids Innovation Challenge
- Representatives of IEA ISGAN and IRENA
- Smart grids stakeholders, such as policy makers and senior advisors, technical experts, and industry representatives and investors, are invited as plenary speaker or panellist in public event, 6th June.
- Broader public / other stakeholders are invited as attendee for the public event.



Sunday, 4th June 2017

Venue: Lecture Hall, 7th Floor in Building #1, IEE CAS

Zhongguancun Bei'ertiao No.6, Haidian District, Beijing

09:00	Registration	
09:30	Welcome	
	IEE CAS	Xiao Liye, Director of IEE
	RSE	Luciano Martini
	IITR	NP Padhy
	IEE CAS	Wang Yibo
09:45	Organisation and Management	
	Participants' introduction	All representatives
	Adoption of agenda	Luciano Martini
	Overview MI IC#1: Smart Grids	Wang Yibo
	Review of MI IC#1 progress and minutes	JBV Reddy Luciano Martini
	Communication and collaboration with IEA TCPs	Luciano Martini
	Other organizational and management issues	co-Leads
10:30	Coffee break	
10:45	Overview innovation activities of member countries and EU (Part 1)	All representatives
11:30	Lunch break	
13:00	Overview innovation activities of member countries and EU (Part 2)	All representatives
15:45	Coffee break	
16:00	Overview MI IC#1 initial results	
	Results of Questionnaire #1	Roberto Zuelli
	Results of Questionnaire #2	Sukumar Mishra
	Draft of MI IC#1 general report	Cao Guoen
	Beijing consensus	Lyu Fang
17:00	End of 1st day meeting	
19:00	Joint dinner - IEE CAS hosting	

Monday, 5th June 2017

Venue: Lecture Hall, 7th floor in Building #1, IEE CAS

Zhongguancun Bei'ertiao No.6, Haidian District, Beijing

09:00	Welcome	
09:05	Discussion and volunteer of IC#1 sub-Challenges (Part 1)	
	Sub-Challenge-I on Regional Grid	Wang Yibo Luciano Martini
	Sub-Challenge-II on Distribution Grid	Luciano Martini N.P. Padhy
	Sub-Challenge-III on Microgrid	Sukumar Misra Wang Yibo
10:30	Coffee break	
10:45	Discussion and volunteer of IC#1 sub-Challenges (Part 2)	
	Sub-Challenge-IV on Cross Innovation	Wang Yibo, Luciano Martini, Arvind Tiwari
	Service platform	Wang Yibo, Luciano Martini, JBV Reddy
11:30	IEA and ISGAN activities and collaboration with MI IC#1	Michele de Nigris, IEA EUWP vice-Chair
11:30	Lunch break	
13:15	MI and the role of ICs	Paul Durrant, MI Analysis & Joint Research Sub-Group
13:30	Brainstorming	
	Key Performance Indicators of success of MI IC#1	Luciano Martini
	Business and Investor Engagement	Amy Qian
	Information sharing	S.C. Srivastava
	MI Prize and Competition of Smart Grids	Lyu Fang
	Distinctive International Collaboration Network	Wang Yibo
15:00	Coffee break	
15:15	Presentations of brainstorm's result	
16:00	Discussion on next deep-dive workshop& meetings	N.P. Padhy
16:30	Wrap up and conclusions	Luciano Martini
17:00	End of 2nd day meeting	
19:00	Joint dinner –no hosting (cost approx. RMB 300)	

Tuesday, 6th June 2017

Venue: Function Room C, in CNCC

No.7 Tianchen East Road, Chaoyang District, Beijing 100105 China

08:00	Registration	
09:00	Welcome speech	Li Meng, Deputy Minister of MOST
09:10	MI Smart Grids Innovation: Road on 100% Renewable Energy	Wang Yibo , Chinese co-Lead of MI IC#1
09:25	Launch Ceremony of Mission Innovation: Smart Grids	
	Moderators:	Luciano Martini , Italian co-Lead MI IC#1, RSE Lyu Fang , Secretary General of PV committee, CRES
	Greeting speech of India	Harsh Vardhan , Union Minister for Science, Technology and Earth Sciences
	Greeting speech of China	Deputy Minister of CAS (tbc)
	Beijing Consensus	Xiao Liye , Director of IEE CAS
	Ceremony& Group Photo	All participants
10:05	Coffee break	
10:20	Session 1: Smart Grids Innovation strategy, vision and plan	
	Moderator:	Sanjay Bajpai , Indian co-Lead MI IC#1
	Innovation activities of Smart Grids in China	Zhou Jifeng , Deputy Director General of High-tech, Ministry of Science and Technology , China
	Innovation activities of Smart Grids in EU	Patrick Child , Deputy Director General of European Commission, Research & Innovation ; Chair of MI Steering Committee
	Innovation activities of Smart Grids in USA	Michael Pesin , Deputy Assistant Secretary, Advanced Grid Research & Development, (OE), U.S. Department of Energy
	Innovation activities of Smart Grids worldwide	Jean-François Gagné , Head, Energy Technology Policy Division, International Energy Agency
11:30	Panel discussion of Session 1: Short statements from IC#1 country representatives and organizations	
	Moderator:	Luciano Martini , Italian co-Lead of MI IC#1 Maria Sandqvist , Executive Director of Swedish Smart Grid Forum

Irene Bonvissuto, Policy Officer, European Commission, DG Research & Innovation

Arvind Tiwari, General Electric India, R&D

12:30 Lunch break

14:00 Session 2: Smart Grids Innovation Challenges

Moderator: **Wang Yibo**, Chinese co-Lead of MI IC#1

Smart Grids Innovation in China **Liu Jianming**, Expert-in-chief of Chinese Key R&D Program Smart Grids

Smart Grids Innovation by ISGAN **Helfried Brunner**, ISGAN Representative, Alternate for Austria

Smart Grids Innovation in India **S.C. Srivastava**, Chairperson, DST Expert Panel on Smart Grids

N.P. Pdahy, Professor of IITR

Smart grids Innovation **Dolf Gielen**, Director of IRENA Innovation and Technology Centre

Smart Grids Innovation in Canada **Alex Bettencour**, Managing Director Smart Grid Canada

15:15 **Panel discussion of Session 2:**
Short statements from IC#1 country representatives and organizations

Moderator: **Sanjay Bajpai**, Indian co-Lead of MI IC#1

Questionnaire 1: Main outcomes on Top R&D topics **Roberto Zuelli**, T&D Technologies Dept., RSE

John K. Ward, Science Director, Grids & Energy Efficient Systems, CSIRO Energy

Envision and balance of power system with high-penetration renewable energy in China **Lu Zongxiang**, Deputy Director of Electrical Engineering, Tsinghua University

Innovation activities of Smart grids in Norway **Birgit Hernes**, The Research Council of Norway

Danish / EU smart energy, RES integration and power systems **Jacob Østergaard**, Head of Center for Electric Power and Energy, DTU Electrical Engineering

16:10 Coffee break

16:25 Session 3: Business and Investor Engagement

Moderator: **Luciano Martini**, Italian co-Lead of MI IC#1

Renewable Energy Innovation 2020 in China **Xu Honghua**, CEO of Beijing Corona Expert-in-chief of Chinese Key R&D Program Renewable Energy

WEF Business and Investor Engagement **Espen Mehlum**, Head Knowledge Management and Integration, World Economic Forum

Smart grids business opportunity in Italy and worldwide **Fabrizio Gasbarri**, New Business Solutions, Global Infrastructure & Networks Division, ENEL

	Business opportunity of integrating storage and renewable energy	Wang Yu , Assistant President, Dynavolt Renewable Energy Technology Co., Ltd
	Technology innovation and application of Smart Grids	Huang Lang , Product Director of Renewable Energy Institute, TBEA
17:40	Panel discussion of Session 3: Short statements from IC#1 country representatives and organizations	
	Moderator:	Lyu Fang , Secretary General of PV committee, CRES
		Ding Jian , vice President of Hanergy Thin Film Power Group Ltd., CEO of Alta Devices
		Cheng Rongxia , Director of Finance and Economics, GCNE
	Innovative financing for emerging technologies	Alison Reeve , Director of Clean Energy Innovation, Department of the Environment and Energy, Australia
		Luo Jianbo , Deputy General Manager of NARI Technology Co. Ltd., NARI Group Corp., State Grid Corp. of China.
	Opportunities in China Southern Power Grid	Dong Xuzhu , Deputy Chief Engineer of Electric Power Research Institute, China Southern Power Grid
18:30	Closing Remarks	
	Innovation activities in Italy and the Italian commitment to IC#1	Ivan Scalfarotto , Deputy Minister of Italian Ministry of Economic Development (MiSE)
19:30	Joint dinner - Hanergy hosting	

Wednesday, 7th June 2017

7:00 Pick up at IEE CAS

8:30 Visit the Great Wall

11:00 Departure from the Great Wall

11:30 Lunch in Yanqin District

13:30 Visit solar thermal generation and microgrid demonstration in Yanqing

14:30 Pick up and return downtown

19:00 Joint dinner –no hosting (cost approx. RMB 300)

Notice:

People who is going to attend the meeting in the China National Convention Centre (CNCC) on 6th June needs to register in the official website:

<http://bjcem8mi2.medcon.org.cn/en/>

The online registration has closed on 18th May, 2017. And site registration will open at CNCC on 6th June. **Please remind to carry passport** for all representatives and, especially for representatives without registration, to register at site in order to enter CNCC.

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On behalf of MI IC#1 co-leads:

Wang Yibo, Sanjay Bajpai, and Luciano Martini