

**IEA Technology Platform / ADB:
Training and How2Guide workshops for
Smart Grids in Distribution Networks and Wind Energy
22-25 October 2012, ADB Headquarters, Manila, Philippines**

Day 1: IEA Training session: ETP 2012 & IEA Training session: Smart Grids

Time	Day 1: Monday, 22 October 2012	Length
8:30-9:00	Registration and coffee	30'
9:00-9:30	<p>Session 1: Opening remarks (Seminar format)</p> <p>Comments by ADB: S. Chander, Director General, RSDD, ADB</p> <p>Comments by IEA: David Elzinga, IEA</p>	30'
9:30-10:30	<p>Session 2: ETP 2012 Overview (Seminar format)</p> <p><i>This session will provide an overview of ETP 2012 Global Outlook for energy use and technologies.</i></p> <p>Panel of Speakers: Marie-Laetitia Gourdin, IEA David Elzinga, IEA</p>	1h'
10:30-10:45	Coffee Break	15'
10:45-12:00	<p>Session 3: Smart Grids Introduction (Seminar format)</p> <p><i>This session will focus on the definition of smart grids and the role that these technologies can play in various electricity systems. This will focus on the information developed for the IEA Smart Grids Technology Roadmap</i></p> <p>Session Chair: Marie-Laetitia Gourdin, IEA</p> <p>Speaker: David Elzinga, IEA</p>	1h15'
12:00-13:00	Lunch	1h
13:00-14:00	<p>Session 4: ETP 2012 Focus on Power Generation (Seminar format)</p> <p><i>Focus will be given to results on power generation, including all generation sources, as well as the changing role of gas technologies.</i></p> <p>Panel of Speakers: Yerim Park, IEA David Elzinga, IEA</p>	1h
14:00-15:45	<p>Session 5: Smart Grid Experiences in the region (Group format)</p> <p><i>Experts from the region will present on some of the world class initiatives being carried out in Korea.</i></p> <p>Session Chair: Yerim Park, IEA</p> <p>Panel of Speakers: Mr. Woohyun Hwang, Vice President, Smart Grid Construction and Test Team, KEPCO, Korea Ikeda Takao, Senior Researcher, New and Renewable Energy Group, The Institute of Energy Economics, Japan</p>	45'
15:00-15:30	Coffee Break	30'
15:30-16:30	<p>Session 6: Networks Analysis and Global results (Group format)</p> <p><i>This session will present on the analysis developed in ETP 2012 on electricity networks, discussing future investment needs and the role of smart grids. In addition to a discussion of the results, details on the modelling process, assumptions and limitations will be given.</i></p> <p>Session Chair: David Elzinga, IEA</p> <p>Speaker: Steve Heinen, Analyst and modelling, IEA</p>	1h
16:30-17:45	<p>Session 7: CCS status and analysis (Group format)</p> <p><i>This session will talk about the needs for CCS and its role in electricity generation and industrial applications. The status of the technology will also be discussed.</i></p> <p>Session Chair: David Elzinga, IEA</p> <p>Speaker: Ellina Levina, Analyst and modelling, IEA</p>	1h15'
17:45-18:00	Concluding remarks	15'

Day 2: How2Guide workshop: Smart Grids in Distribution Networks

Time	Day 2: Tuesday, 23 October 2012	Length
8:30-9:00	Registration and coffee	30'
9:00-9:15	Session 1: Opening remarks (Seminar format) <i>Chair: David Elzinga, IEA</i> <i>Speaker: Pil-Bae Song, ADB</i>	15'
9:15-9:30	Session 2: Roadmapping and the How2Guide concept and workshop objectives (Seminar format) <i>This session will introduce the How2Guide concept and methodology as well as workshop objectives and key questions (i.e.: why they focus distribution networks?)</i> <i>Chair/Speaker: Alex Murley, IEA</i>	15'
9:30-10:45	Session 3: Smart Grid Drivers (Group format) <i>This session will consider the categorisation of smart grid drivers and the relation to project types discussed in the previous session.</i> <i>Chair/Speaker: David Elzinga, IEA</i>	1h15
10:45-11:15	Coffee Break	30'
11:15-12:30	Session 4: Smart Grid Project Types and elements (Group format) <i>This session will consider the categorisation of smart grid project types and respective technology elements and provides much of the foundation for roadmap development</i> <i>Chair: David Elzinga, IEA</i> <i>Speaker: Satoshi Nagata, VPEC</i>	1h15'
12:30-13:30	Lunch	1h
13:30-15:30	Session 5: Smart Grid deployment considerations and barriers – Best practice examples (Group Panel and Discussions) <i>This session will identify and itemise the full range of considerations and barriers to smart grid deployment. Several examples will be presented to illustrate how problems can be foreseen and addressed during the planning and deployment stage.</i> <i>Chairs: Alex Murley, IEA David Elzinga, IEA</i> <i>Panel of Speakers: Supasit Amaralikit, Director, WADE Thai Woohyun Hwang, Vice President, Smart Grid Construction and Test Team, KEPCO, Korea</i>	2h
15:30-15:45	Coffee Break	15'
15:45-17:00	Session 6: Smart Grid deployment solutions (Group format) <i>This session discusses and formulates the solutions to the barriers that have been discussed in the previous days' last session, making use of the best practices presented in session 5</i> <i>Chair/Speaker: Alex Murley, IEA</i>	1h15'
17:00-17:15	Workshop conclusions – for Day 2	15'
	Workshop Ends	-

Day 3 (Morning): How2Guide workshop: Smart Grids in Distribution Networks

Time	Day 3 (Morning): Wednesday 24 October 2012	Length
8:30-9:00	Registration and coffee	30'
9:00-10:00	<p>Session 8: IEA, national, and industry experience in roadmap experiences (Panel Discussion) <i>This session will include presentations of including international, national and private sector experience of developing a SG roadma. Discussion will include lessons learnt and recommendations for customisation (national, technology focus).</i></p> <p>Panel of Speakers: David Elzinga, IEA Yong Chen, IRENA Mark Lister, Director at the Australian Alliance to Save Energy</p>	1h
10:00-11:00	<p>Session 9: H2G methodology for roadmap development and implementation (Group format) <i>Presentation of development and implementation approaches for roadmaps, seeking input from participants.</i></p> <p>Panel of Speakers: Noriko Ogawa, Head, Results Management Unit, ADB Sri Arun Kumar, General Manager of RAPDRP, Power Finance Corporation, India Alex Murley, IEA</p>	1h
11:00-11:15	Coffee Break	15'
11:15-12:00	<p>Session 10: H2G methodology for roadmap development and implementation <i>Group exercise on H2G methodology to Smart Grids roadmaps.</i></p> <p>Chair: Marie-Laetitia Gourdin, IEA</p>	45'
12:00-12:15	Workshop conclusions	15'
12:15-13:15	Lunch	1h

Day 3 (Afternoon): GIVAR (Grid Integration of VArIable Renewables) Training

-	Day 3 (Afternoon): Wednesday 24 October 2012	-
13:15-13:30	<p>Session 1: Opening remarks (Seminar format)</p> <p>Speakers: Alex Murley, IEA</p>	15'
13:30-15:00	<p>Session 2: Training on grid integration of variable renewables – Part A (Seminar format) <i>This session will provide training on the key considerations for successfully integrating variable renewable generation within the electricity system. Covering:</i></p> <ul style="list-style-type: none"> • <i>Why is this issue so important? What are the key integration challenges</i> • <i>How to reduce the challenge, and manage the task that remains</i> • <i>Transmission and system operation</i> • <i>Power markets, and assessing flexibility</i> <p>Speakers: Hugo Chandler, New Resource Partners Alex Murley, IEA</p>	1h30'
15:00-15:30	Coffee Break	30'
15:30-17:00	<p>Session 3: Training on grid integration of variable renewables – Part B (Seminar format) <i>This session will provide training on international best practice for successfully integrating variable renewable generation within the electricity system. Covering:</i></p> <ul style="list-style-type: none"> • <i>The cutting edge</i> • <i>Getting the infrastructure right</i> • <i>Evolved system operation</i> • <i>Opening up the power market, and integration economics</i> <p>Speakers: Hugo Chandler, New Resource Partners</p>	1h30'
17:00-17:15	Training conclusions	15'

Day 4: How2Guide workshop: Wind Energy

Time	Day 4: Thursday 25 October 2012	Length
8:30-9:00	Registration and coffee	30'
9:00-9:45	Session 1: Opening remarks and introduction to How2Guide concept (Seminar format) Speakers: Anthony Jude , Director SEEN, Asian Development Bank (ADB) Alex Murley , International Energy Agency (IEA)	45'
9:45-10:45	Session 2: Wind drivers and technologies (incl. business case) (Seminar / Exercise format) <i>This session will examine wind energy technologies, typical project cycles, and related drivers. Presentations will be followed by a group exercise.</i> Chair: Alex Murley , IEA Speaker: Hugo Chandler , New Resource Partners	1h
10:45-11:00	Presentation on IRENA's current projects Yong Chen , IRENA	15'
11:00-11:30	Session 3: Roadmap methodology –development + implementation (Seminar / Group discussion) <i>Presentation of IEA roadmap methodology, followed by group discussion considering its future customisation for wind energy. Presentations will be followed by a group discussion.</i> Speakers: Alex Murley , IEA Hugo Chandler , New Resource Partners	30'
11:30-11:45	Coffee break	15'
11:45-13:00	Session 4: Market status update (Seminar format) <i>Presentations from Asian market representatives, highlighting key issues currently faced.</i> Chair: Alex Murley , IEA Speakers: Jitendra (Jitu) Shah , Advisor, RSDD ADB: "Regional outlook" Roc Xunpeng Shi , Economic Research Institute for ASEAN and East Asia: "ASEAN market perspectives" Takao Ikeda , Institute of Energy Economics, Japan: "Wind market perspectives in Japan" Angarag Myagmar , Ministry of Energy, Mongolia	1h15'
13:00-14:00	Lunch	1h
14:00-15:15	Session 5: Financial support mechanisms (Seminar / Exercise format) <i>This session will examine the various means by which wind energy can be financially incentivised. Presentations will be followed by a group exercise.</i> Chair: Hugo Chandler , New Resource Partners Speakers: Ramon Terrones , Gamesa Corporation: "Sustainable Policies and Support Mechanisms"	1h15'
15:15-16:15	Session 6: Planning and consenting (Seminar / Group format) <i>This session will examine planning and consenting considerations. Presentations will be followed by a group discussion of the salient barriers.</i> Chair: Alex Murley , IEA Speakers: Pramod Jain , Consultant, ADB: "Planning and infrastructure for Wind Energy in Asia" Catherine Way , Renewable Energy South Australia: "Planning and consenting in South Australia – case study"	1h
16:15-16:30	Coffee break	15'
16:30-17:30	Session 7: Wind energy on the electricity system and network (Seminar / Group format) <i>This session will examine system and network considerations for wind energy deployment.</i> Chair: Alex Murley , IEA Speakers: Hugo Chandler , New Resource Partners	1h
17:30-17:45	Closing remarks and next steps Speakers: Alex Murley , IEA Woochong Um , Deputy Director General, Regional and Sustainable Development Department	15'

