

WORLD FUTURE ENERGY SUMMIT

15-17 JANUARY 2013
ABU DHABI NATIONAL EXHIBITION CENTRE

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ADIREC hosted by World Future Energy Summit 2013 PROGRAMME

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Day 1: Ministerial Panels Tuesday January 15, 2013

Renewable energy targets and support policies continue to be driving force behind increasing markets for renewable energy and sustainability. Our four must-see Ministerial Panels give you access to world class debate on future energy and the water-energy nexus.

KEY QUESTIONS / ISSUES TO BE ADDRESSED

- How to mobilize the required funds to support Sustainable Energy for all from both public and private sectors?
- How can the voluntary commitments made at Rio+20 support the agenda of Sustainable Energy for All?
- Which policies are needed to ensure a smooth transition towards the technical integration of large shares of renewables into energy systems?
- What new renewable support policies have developed recently?
- How to overcome the challenges of existing support mechanisms?
- How is the nexus perspective best integrated into domestic policies?
- How to create an enabling environment- what framework conditions are needed?
- How can desalination with renewable energy contribute to overcoming freshwater supply shortage?
- What regional efforts can be made to further attract investment in renewable energy?
- What inter-governmental opportunities are there in manufacturing, infrastructure sharing and knowledge sharing?

11:00-12:00	<p>Opening Ceremony (Doors close at 10:30 am)</p> <p>Welcome Message from the Host</p>
12:00-13:00	Delegation Tour- Exhibition
13:00-13:30	Buffet Lunch in the Private Dining Area, in Hall 10
13:30-13:40	Welcome and Keynote Address
13:40-13:50	Keynote Address
13:50-14:30	<p>Ministerial panel 1: Sustainable Energy for All The high-level ministerial panel on Sustainable Energy for All will give an overview of the highlights of the 2012 International Year of Sustainable Energy for All. It will take stock of concrete actions of the UN Secretary General's initiative Sustainable Energy for All, which calls to promote action around three inter-linked and complimentary objectives to be reached by 2030:</p> <ul style="list-style-type: none"> • Ensure universal access to modern energy services; • Double the rate of improvement in energy efficiency; • Double the share of renewable energy in the global energy mix. <p>This session will also look at the challenges and opportunities in reaching these objectives, which will depend on close collaboration between the public and the private sector.</p>
14:30-14:40	Keynote Address

14:40-15:30	<p>Ministerial panel 2: Building National Frameworks for Renewable Energy</p> <p>Policies have played a major role in driving renewable energy markets, investments, and industry growth at the state and regional levels. The success of these national frameworks has often rested on the quality of their design and then implementation. For continued success it is consequently paramount Governments continue to update and revise policies in response to technology improvements and adaptation in market needs and drivers.</p> <p>This session will discuss renewable energy policy developments and best practice implementation. It will also address the need for renewable energy policy design to evolve as renewable energy becomes an integral part of the energy mix.</p>
15:30-15:40	<p>Keynote Address</p>
15:40-16:30	<p>Ministerial panel 3: Renewable Energy in an Evolving Global Energy Market</p> <p>The renewable energy sector, a global, long term growth story, represents a significant catalyzing opportunity to nation states, offering both sector job creation, and the prize of new, export oriented industrial sectors in an increasingly competitive world market elsewhere.</p> <p>But to win that prize renewable energy needs long-term, transparent and fair policy frameworks. Ever changing legislation and policy uncertainty is, increasingly, a threat to both investment and market momentum.</p> <p>This session will identify and discuss best practices for achieving a practical, constant policy framework to harness renewable energy, to support sustainable economic growth, and to deliver energy security and industrial diversification.</p> <p>In 2013, countries around the world have accepted renewable energy policy will increasingly be an integral pillar of their industrial, climate change and energy security policies, and that now is the time to devise and implement policies to achieve successful integration.</p>
16:30-16:40	<p>Keynote Address</p>
16:40-17:30	<p>Ministerial panel 4: Water-Energy Nexus</p> <p>Water and energy are mutually dependent resources: Producing energy requires water and water infrastructure requires large amounts of energy. The amount of water needed by our existing consumption growth is increasing constantly.</p> <p>To sustain both dependable energy production and water supply, governments must manage these resources in tandem, simultaneously, and achieve a higher level of understanding of their interdependence.</p> <p>Technologies that increase efficiency and reduce consumption for both water and energy systems is both a promising, and necessary area for future investment.</p>
19:00	<p>Reception for Zayed Future Energy Prize</p>

ADIREC hosted by World Future Energy Summit 2013

Day 2: Unlocking Potential: Scaling Up of Renewable Energy through Coordinated Public and Private Sector Actions



Wednesday January 16, 2013

On Day 2, some of the most renowned economists, financiers and industry experts will give deeper insights on how to scale up renewable energy through coordinated public and private sector actions.

KEY QUESTIONS / ISSUES TO BE ADDRESSED

- The effect of global economic instability on energy policy
- Energy system transformation and integration: New actors and structures on the energy market
- What new financing mechanisms are being put in place to support renewable energy projects during the global economic crisis?
- How do policy frameworks impact on your investment patterns?
- How do development banks respond to policy decisions in the market?
- What are new and innovative financing instruments for renewable energy projects?
- How is the industry responding to global economic instability?
- What are the key challenges facing the sector over the coming year?

9.00 – 9.30	<p>Opening and Welcome to ADIREC hosted by WFES Conference Chair: Christine Lins, Executive Secretary, REN21, France H.E. Dr Sultan Ahmed Al Jaber, Assistant Minister of Foreign Affairs and Special Envoy for Energy and Climate Change, and CEO, Masdar, UAE Mohamed El-Ashry, Chairman of REN21 and Senior Fellow, UN Foundation, USA HE Raşit Öwezgeldiyewiç Meredow, Deputy Prime Minister, Turkmenistan Dr. Farooq Abdullah, Minister of New and Renewable Energy, India H.E. Liu Qi, Vice-Minister National Energy Administration, China</p>
9.30 – 10.30	<p>Renewable Energy Outlook – What is in the Cards? The opening session will set the stage for subsequent conference discussions by providing high-level perspectives on the global renewable energy outlook in view of existing economic instability and the range of credible possibilities for renewable energy in the long-term. Includes opening interview with Fatih Birol, International Energy Agency and Eric Martinot, REN21.</p> <p>Moderator: Nart Bouran, Head of Sky Arabia, Sky News Arabia, UAE Speakers:</p> <ul style="list-style-type: none"> • Fatih Birol, Chief Economist and Director Global Energy Economics Directorate, International Energy Agency, France <i>The Changing Energy Landscape- Implications for the Renewable Energy Industry</i> (9:30 - 10:00) • Eric Martinot, Report Author REN21 Renewables Global Futures Report, Japan <i>The Future of Renewable Energy - Contemporary Thinking on Credible Options</i> (10:00 - 10:30)
10:30-10:40	<p>Keynote Address: Renewable Energy in Times of Economic Turmoil: The Role of International and Domestic Policies H.E. Christiana Figueres, Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC), Germany</p>
10:40-10:50	<p>Keynote Address: Renewable Energy in Times of Economic Turmoil: The Role of International and Domestic Policies Steve Howard, Chief Sustainability Officer IKEA Group, Sweden</p>
10:40-11:00	<p>Question and Answer Session</p>
11:00-11:15	<p>Coffee Break</p>

For an updated list of speakers please visit www.WorldFutureEnergySummit.com

Plenary Sessions : Renewable Energy Financing – Growth Amidst Economic Turmoil	
11:15- 11:45	<p>Private Sector Finance</p> <p>Current financing models and sources such as private equity, bank lending and utility balance sheet finance are reaching their limit. New structures and models including pension funds and institutional investments are gaining ground</p> <p>This session will hear from new market players on innovative finance mechanisms and how the renewable energy sector can unlock these funds to scale up investments. It will also explore the role of smaller scale investments and their associated financial structures.</p> <p>Moderator: Dana Younger, Chief Renewable Energy Specialist , International Finance Corporation, USA</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Vivek Mehra, Managing Director, Aloe Private Equity, India • Craig O’Connor, Director of the Office of Renewable Energy & Environmental Exports, Export-Import Bank of the USA, USA • Torben Möger Pedersen, CEO, PensionDanmark, Denmark • Jonathan Plowe, Managing Director, New Energy & Infrastructure Solutions, Bank of America Merrill Lynch, USA
11:45–12:15	<p>Public Sector Finance</p> <p>The role of multi-lateral and national development banks in filling the gap in private sector investment in the wake of the economic crisis and slowed commercial lending will be discussed in this session, with the banks weighing in on how they foresee opportunities in the global market over the coming year.</p> <p>Moderator: Frank Wouters, Deputy Director-General, International Renewable Energy Agency (IRENA)</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Arnaldo Vieira de Carvalho, Sustainable Energy Lead Specialist, Inter-American Development Bank, USA • Seethapathy Chander, Director General, Regional and Sustainable Development Department, Asian Development Bank, The Philippines • Philippe de Fontaine Vive, Vice President, Innovation, European Investment Bank, Luxembourg • Manfred Konukiewitz, Deputy Director General, Global and Sectoral Policies, Federal Ministry for Economic Cooperation, Germany

Plenary Sessions : The View from Industry	
12:15-12:45	<p>CEOs of Renewable Energy Companies</p> <p>The decline in costs in deploying renewable energy is fostering the investment boom and creating new business opportunities. At the same time, the steep decline in renewable energy costs is also increasing competition in the sector; some players are leaving the game and new players are emerging, including global competitors from emerging economies.</p> <p>Moderator: Paolo Frankl, Head of Unit, International Energy Agency, France</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Roy Adair, CEO of Hydro Tasmania, Australia • Bader Al-Lamki, Director Clean Energy, Masdar, UAE • Santiago Seage, CEO, Abengoa Solar, Spain
12:45 – 13:15	<p>CEOs of Utilities</p> <p>At the same time, the rapidly growing share of renewable energy in many markets around the world is putting the business models and revenue streams of many existing utilities and energy companies under stress. Some utilities and manufacturers are re-evaluating their strategies and finding new ways to create value. This session will explore how the different industry players are responding to these changing dynamics in the renewable energy sector.</p> <p>Moderator: Henning Gloystein , Power and Gas Editor, Thomson Reuters, UK</p> <p>Speakers:</p> <ul style="list-style-type: none"> • H.E Abdulla Saif Al Nuaimi, Director General, Abu Dhabi Water and Electricity Authority (ADWEA), UAE • Francesco Starace, CEO, ENEL Green Power, Italy • Arthouros Zervos, Chairman and CEO, Public Power Corporation of Greece, Greece
13:15 – 13:30	Audience Participation
13:30 – 15:00	Lunch Break and Exhibition Viewing

Parallel Sessions	
15:00 – 16:00	<p>Session A1: Energy Efficiency – The Second Pillar of Sustainable Energy</p> <p>Efficiency and renewables are the twin pillars of sustainable energy future. The two have a special synergy wherein the more efficiency energy services are delivered, the faster renewables can become a significant contributor to primary energy; and the more energy from renewables the less primary energy required to provide those same energy services. Countries are slowly beginning to wake up to the importance of this synergy and link the two through targets and policies.</p> <p>This session will explore the challenges of adopting energy efficiency measures and discuss how new policy innovations can help to promote them.</p> <p>Moderator: Kornelius Blok, Director of Science, Ecofys, The Netherlands</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Jacob Fontijne COO, DNV KEMA Benelux, Middle East & Africa • Carole Le Gall, Director General Centre Scientifique et Technique du B timent3(CSTB) (Scientific and Technical Research Center for the Built Environment and Construction, France) • Yamina Saheb, Head of the Sustainable Buildings Centre, IEA, France • Harry Verhaar, Head of Global Public & Government Affairs, Philips Lighting, The Netherlands • Bashar Zeitoun, Program Director, Arab Forum for Environment and Development (AFED), Lebanon
16:00 - 16:30	<p>Networking Refreshments</p>
16:30 – 17:30	<p>Session A2: Integration of Renewables – The Role of Power Grids & ICT</p> <p>The intake of more and more renewable energy in the electric system has spurred the use of a more intelligent, responsive and efficient system characterized by smart grids, which includes the extensive use of information and communication technologies (ICT). Across Europe and in US, smart grids are being developed with much success and the same step is being undertaken by emerging countries. ICT is seen to play a distinct role in the process of greening the current infrastructure – building, grids and transport – by ensuring reliability as increasing amounts of variable renewable energy from decentralized sources are incorporated in the energy system (e.g. excess power) while encouraging behavioural change among citizens (demand side management). This session will provide an overview of smart grids developments and their future contribution to the greater intake of renewable energy. This, will include the role of ICT in enabling electric vehicles to grid as well as home applications, energy storage, tailored energy services for citizens and greater flexibility, efficiency and transparency in the distribution grid.</p> <p>Moderator: Philippe David, Head of Energy, Utilities, Chemicals, Cap Gemini, France</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Sjaak Antheunisse, Market Leader, ME Energy Markets, Alcatel Lucent, The Netherlands • Jeung-Soo Huh, President & CEO, Korea Energy Management Corporation (KEMCO), Republic of Korea • Kaisa Kosonen, Climate Policy Advisor, Greenpeace, Finland • Hiroshi Ogawa, General Manager, Strategic Business Development, Mitsubishi Heavy Industries, Japan • Olivier Orsini, Senior Executive Vice President, EDF Group, France

<p>15:00 – 16:00</p>	<p>Session B1: MENA, A Rising Star in Renewable Energy Investment</p> <p>The MENA region offers high potential for Renewable Energy and could supply up to 45% of the world’s renewable energy potential. Helped by very favourable climatic conditions and geography, the region is likely to remain one of the major global producers of renewable energy, even after the predicted demise of oil. With its strong demographic growth, rapid urbanization and expanding economy, the MENA is experiencing a strong growth in demand for energy and electricity. This growth will become even more pronounced over the years to come. The use of renewable energy could meet this growing demand and limit the dependence of those countries in the region on fossil fuels, the diversification in the economies of oil and gas producing countries, and the reduced dependence on external sources for the countries importing these fuels. It also presents an opportunity for the region to achieve a globally-important position in the renewable energy market which is likely to become the cornerstone of the low-carbon green economy of the future.</p> <p>Moderator: Emanuela Menichetti, Director Renewable Energy, Observatoire Méditerranéen de l’Energie (OME)</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Yousif Al Ali, Shams Director, Shams, UAE • Tareq Emtairah, Executive Director, Regional Centre for Renewable Energies and Energy Efficiency (RCREEE), Egypt • Marc Févre, Partner, Baker &McKenzie LLP, UK • Stefan Singer, Director, Global Energy Policy, WWF International, Belgium • Nejib Zaafrani Senior Executive Energy Advisor and Adjunct Professor, Masdar Institute, UAE
<p>16:00 - 16:30</p>	<p>Networking Refreshments</p>
<p>16:30 – 17:30</p>	<p>Session B2: Powering Ahead, Leadership in Renewable Energy</p> <p>Leadership in renewable energy markets and manufacturing is shifting to developing countries, largely concentrated in the BRICs as the fastest growing and largest emerging market economies. Home to over a quarter of global non-hydro renewable electric capacity, BRIC countries have emerged as potent global competitors and are playing a crucial role in the changing renewable energy market dynamics, as was seen most dramatically in the rapidly falling costs of PV and wind 2011 and the ripples it sent through the industry. Europe and North America, however, have pioneered renewable energy technology developments as well as policy design and continue to play a leading role. In addition, strong growth in demand for energy in the GCC region is stimulating interest in adoption of cutting edge renewable energy technologies. This session will look at key success factors of renewable energy leaders and explore key technology trends as well as the future of renewable energy growth globally.</p> <p>Moderator: Ben Warren, Energy & Environmental Infrastructure Leader, Ernst & Young, UK</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Abdullah Awadh Al Gahtani, Consultant – Strategy Team King Abdullah City for Atomic and Renewable Energy (K.A.CARE), Saudi Arabia • Michael Eckhart, Managing Director, Global Head of Environmental Finance Citigroup, USA • Li Junfeng, Director General of Climate Change Center under National Development and Reform Commission (NDRC), Secretary General, China Renewable Energy Industry Association (CREIA), China • Vinud Kala, Founder, Emerging Ventures, India • Rainer Hinrichs-Rahlwes, President, European Renewable Energy Council (EREC), Belgium

<p>15:00 – 16:00</p>	<p>Session C1: Regulatory Policies - Fiscal Incentives and Evolving Regulatory Approaches</p> <p>Renewable energy targets and support policies continue to be a driving force behind increasing renewable energy market deployment. This session will shed a light on the instruments that work best to ensure rapid renewable energy growth and recently evolving regulatory approaches such as auction-based mechanisms.</p> <p>Moderator: Hans-Jorgen Koch, Deputy Permanent Secretary, The Energy Agency, Ministry of Climate, Energy and Building of Denmark</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Nick Carter, Director General: Regulation and Supervision Bureau, Abu Dhabi, UAE • Tarun Kapoor, Joint Secretary, Ministry of New and Renewable Energy Sources of India, India • Dennis McGinn, President, American Council on Renewable Energy (ACORE), USA • Karsten Sach, Deputy Director-General for International Cooperation in the Federal Ministry for Environment, Nature Conservation and Nuclear Safety of Germany, Germany • Gauri Singh, Director of Knowledge Management and Technology Cooperation, International Renewable Energy Agency (IRENA)
<p>16:00 - 16:30</p>	<p>Networking Refreshments</p>
<p>16:30 – 17:30</p>	<p>Session C2: Cities and Community Power</p> <p>In order to cope with pressures of climate change, resource scarcity and the rising costs of energy, cities around the world have in varying degrees committed to a transition to renewable energy and a low carbon paradigm. Increasingly, cities are employing initiatives that integrate distributed renewable energy systems across all sectors, such as zero energy buildings, efficient district heating and cooling systems that use renewable energy (biomass or waste), and renewable driven electric transport systems.</p> <p>In this session, local government representatives will discuss about renewable energy focused innovations on buildings, electricity generation and the transport sector, including the smart city paradigm, the role of ICT, standards and building codes, and enabling policy measures that are shaping the energy transformation of their cities</p> <p>Moderator: Dr Benjamin Sovacool, Visiting Associate Professor and Senior Researcher for Energy Security and Justice, Vermont Law School, USA</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Michael Geissler, CEO Berlin Energy Agency, Member of C40, Germany • Jonathan Kendall, Director Urban Design, Fletcher Priest, UK • Hugo Lucas, Director of Policy Advisory Services and Capacity Building, International Renewable Energy Agency (IRENA) • Domingos Pires, Former Deputy Secretary for Urban Development and Coordinator of USP Cities Research Centre, Sao Paulo, Brazil • Christopher Sorenson, Strategic Partnerships, New Ventures, Masdar, UAE

<p>15:00 – 16:00</p>	<p>Session D1: Rural Renewable Energy</p> <p>Modern renewable energy plays an important role in providing energy services to the billions of people who depend on traditional sources of energy. Access to modern renewable energy not only counters the health and environmental hazards associated with current energy sources, but can also increase the quality and efficiency of providing basic necessities like lighting, communications, heating, and cooling. In addition, modern renewable technologies, such as wind turbines, provide additional services using motor power, such as water pumping, which can improve quality of life and promote economic growth.</p> <p>Significant technological innovation and cost reductions, along with improved business and financing models, are increasingly creating clean and affordable energy solutions for people and communities in developing countries, providing them with sustainable rural electrification, heating, and cooking solutions.</p> <p>Moderator: Richenda Van Leeuwen, Executive Director Energy and Climate, Energy Access Initiative, United Nations Foundation, USA</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Daniel Bouille, President, Fondation Bariloche, Argentina • Ernesto Macias, President, Alliance for Rural Electrification (ARE), Belgium • Pradeep Monga, Director of Energy Branch, UNIDO, Austria • Arne Schweinfurth, Advisor, German International Cooperation (GIZ)/ASEAN Centre for Energy • Jean-Marc Otero del Val, Deputy Senior VP Renewable Energy, Total, France
<p>16:00 - 16:30</p>	<p>Networking Refreshments</p>
<p>16:30-17:30</p>	<p>Session D2: Energy in Transformation</p> <p>With the share of renewable energy rapidly growing, existing energy companies and utilities are confronted with the need to innovate and adapt their current decision models and strategies to a changing business environment. This session will explore the role of existing energy companies in boosting the intake of renewable energy and discuss how the energy transformation is changing the way that existing energy companies are conducting business.</p> <p>Moderator: Robert Bradley, Senior Advisor Climate Change Directorate of Energy & Climate Change, UAE</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Aldo Flores-Quiroga, Secretary General, International Energy Forum, Saudi Arabia • Robert Kleiburg, Director, ECN, The Netherlands • Saif Al Sayari, Executive Officer - Head of Energy Solutions, Abu Dhabi National Energy Company, UAE • Henri Winand, CEO Intelligent Energy, UK Saudi Arabia

Day 3: The Future Energy Innovation Forum

Thursday January 17, 2013

Must-see session offering you access to insight about the future of energy innovation technologies

KEY QUESTIONS / ISSUES TO BE ADDRESSED

- What's over the horizon for Renewable energy?
- How to combine the different renewables and which storage etc technologies will be required?
- What role will new players and emerging countries play as markets and as technology suppliers (e.g. China, Brazil, India)?
- Future demand of energy and its implications on water consumption.
- Which energy technologies are best from a water perspectives.

9.00 – 9.30	Keynote Lecture Dan Arvizu, Director, Director, National Renewable Energy Laboratory, USA
9.30 – 10.30	How Technology and Innovation Will Shape the Future Innovation on all fronts is necessary to meet the economic, environmental and energy security challenges of the 21st century. Our distinguished panel of policymakers, entrepreneurs, investors, and engineers will discuss the innovations in technology, policy and legal frameworks, financial instruments and mindsets required to support future clean energy development and deployment for decades to come. Moderator: James Cameron, Founder and Chairman, Climate Change Capital, UK Speakers: <ul style="list-style-type: none">• Nawal Al Hosany, Director Sustainability and Director Zayed Future Energy Prize, Masdar, United Arab Emirates• Morgan Bazilian, Deputy Director, Joint Institute for Strategic Energy Analysis, National Renewable Energy Laboratory, USA• Harish Hande, Founder, Selco; Social Entrepreneur, India• Martin Hiller, Director General, Renewable Energy and Energy Efficiency Partnership (REEEP), USA• Richard Kauffman, Senior Advisor to the Secretary, US Department of Energy, USA
10:30 – 10:45	Coffee Break

11:00-12:00	<p>What is Driving Innovation in Future Energy Technologies?</p> <p>Continued innovation and development in technology is still required to meet the economic, environmental and energy security challenges of the 21st century. Our distinguished panel of scientific experts, innovators and entrepreneurs will discuss the cutting-edge technologies currently making a difference, and the frameworks and funding strategies required to support future energy innovation for decades to come.</p> <p>Moderator: Jason Pontin, Editor-in-Chief and Publisher, MIT Technology Review, USA</p> <p>Speakers:</p> <ul style="list-style-type: none">• Sven Alkalaj, Under-Secretary-General and Executive Secretary of the United Nations Economic Commission for Europe, Switzerland• Dolf Gielen, Director of the Innovation and Technology Center, International Renewable Energy Agency (IRENA)• Bjorn Haugland, Group Chief Technology & Sustainability Officer, DNV Group, Norway• Morten Mauritzen, President, ExxonMobil affiliates in Abu Dhabi, UAE• Brian Shaad, Co-Founder, Mera Gao Power, New Dehli, India
12:00-13:00	<p>Future Perfect?</p> <p>This session will examine the role that various renewable energy technologies will play in the future world generation portfolio. Will there be a wider range of technologies, or has the world picked its 'winners' already? The session will also examine the potential 'hubs' of deployment and manufacturing of renewable energy technologies.</p> <p>Moderator: Chris Hartshorn, Director, Lux Research, USA</p> <p>Speakers:</p> <ul style="list-style-type: none">• Mark Kenber, CEO, The Climate Group, UK• Daniel Kammen, Director, Renewable and Appropriate Energy Laboratory, UC Berkley, USA• Eddie O'Connor, CEO Mainstream Renewable Power, Ireland• Jerome Pecresse, President Renewable Power, Alstom, Switzerland• Wim Thomas, Chief Energy Advisor, Shell, The Netherlands

Parallel Sessions

14:30-15:30

Session A3: Solar Energy – The Technologies

This panel debates the key challenges in the solar energy sector today and beyond. This will involve discussing the outlooks of the various technologies within solar energy, in particular the cost dynamics between concentrated solar power, crystalline silicon and thin film technologies. More nascent technologies, such as concentrated photovoltaic technologies, will be examined and their future impact will be discussed. This session will also focus on the effects of research and development on the sector and the outcomes of research focused and deployment focused policies.

Moderator: Dave Renné, President, International Solar Energy Society (ISES), USA

Speakers:

- Alvin Compaan, Distinguished University Professor of Physics, Emeritus and Chief Technology Officer and Co-Founder, Xunlight 26 University of Toledo, USA
- Raffi Garabedian, CTO First Solar, USA
- Sam Shakir, COO AREVA Solar, USA
- Wu Zhenyu, Senior Engineer, Hanergy, China

14.30 – 15.30

Session B3: Wind Energy

With continued pressure on costs and a number of companies downsizing in response to the global economic crisis and the increased competition in manufacturing, spearheaded by China, are there bumpy times ahead for wind manufacturers? Our panel of experts from across the wind energy industry will cover the key issues concerning wind energy in 2013 and beyond.

Moderator: Steve Sawyer, Secretary General, Global Wind Energy Council (GWEC), Belgium

Speakers:

- Morten Albaek, SVP Marketing & Corporate Affairs, Vestas, Denmark
- Adam Bruce, Mainstream Renewable Power, Ireland
- Stefan Gsänger, Secretary General, World Wind Energy Association (WWEA), Germany
- Ronald Heyselaar, Head of Business and Project Development, Masdar Clean Energy, UAE
- Zhou Jianqing, VP International Business Cooperation, Goldwind, China

14.30 – 15.30	<p>Session C3: Geothermal Energy</p> <p>This session will present an overview of the global trends and future opportunities that geothermal energy holds. Geothermal applications, projects and future technologies are outlined and best practices explained. The specific characteristics in geothermal project development are described and the role of multi-lateral development banks, private sector investment and governmental stakeholders will also be discussed. Case studies complete the session.</p> <p>MODERATOR: Roland Horne, President of the International Geothermal Association (IGA) & Professor of Earth Sciences, Woods Institute for the Environment, Stamford University, USA</p> <p>Speakers:</p> <ul style="list-style-type: none">• Surya Darma, Indonesian Director, International Geothermal Association, Indonesia• Agnes De Jesus, Senior Vice President of Environmental and External Relations and Compliance Office, Energy Management Company, The Philippines• Albert Genter, Scientific Manager, GEIE Exploitation Minière de la Chaleur, France• Ladislaus Rybach, Director, International Geothermal Association; Scientific Advisor GEOWATT AG, Switzerland
14:30-15:30	<p>Session D3: Energy Storage</p> <p>This session will focus on the perspectives in the area of energy storage and how their role in the low carbon transition can be enhanced. The session will thus seek to explore the energy storage potential and understand from the stakeholders' perspectives what current and future developments will allow the technology to play a greater role in the energy revolution. The session will also try to address policy and marketing barriers that withhold the potential use of energy storage technologies.</p> <p>MODERATOR: Peter Rae, President REN Alliance</p> <p>Speakers:</p> <ul style="list-style-type: none">• Alex Lu, Senior Business Director, BYD, China• Brent Perry, President and CEO, Corvus Energy, Canada• Christoph Stiller, Clean Energy Technology, Linde Innovation Management, Germany• Richard Taylor, Executive Director, International Hydropower Association (IHA), UK

Parallel Sessions	
16:00-17:00	<p>Session A4: Innovation and Entrepreneurship</p> <p>MODERATOR: Fred Moavenzadeh, President, Masdar Institute of Science and Technology, UAE</p> <p>Speakers:</p> <ul style="list-style-type: none"> • H.E. Dr Adnan Badran, President Petra University, Jordan • Mohammed Baniyas, Provost, UAE University, UAE • Tod Laursen, President, Khalifa University, UAE • Larry Wilson, Provost, Zayed University, UAE
16:00-17:00	<p>Session B4: Sustainable Use of Bioenergy</p> <p>This session will examine established technologies within bioenergy, their relevance to the future, present obstacles and lessons to be learned from the past. In addition, new technologies that will come to the fore will be examined for their potential robustness within the global markets. Focus points will include feedstock sourcing, electricity generation potential and fuels as well as required enabling policies.</p> <p>MODERATOR: Heinz Kopetz, President, World Bioenergy Association, Sweden</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Salem Al Kaabi, Deputy General Manager, Centre of Waste Management, UAE • Michelle T Davies, Partner, Head of Clean Energy and Sustainability, Eversheds LLP, UK • Jose Goldemberg, Institute of Electrotechnics and Energy, Brazil • Fleming Voetnam, Positioning Director, Novozymes
16:00-17:00	<p>Session C4: The Evolution of Hydropower</p> <p>With the increasing need for hydropower to serve many purposes, such as water storage to help adapt to climate change and energy storage to balance variable energy sources, how can hydropower be developed to address each of these needs? This session will present the three main hydropower typologies (Run of River, Storage, and Pumped Storage) and will explore how these fit into smart water and energy systems of today and tomorrow.</p> <p>MODERATOR: Tracey Lane, Programme Director, International Hydropower Association (IHA), UK</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Vivien Foster, Manager, Energy Unit, World Bank, USA • Øivind Johansen, Assistant Director General, Ministry of Petroleum and Energy, Norway • Óli Grétar Blöndal Sveinsson, Partner, Executive Vice President of R&D at Landsvirkjun, National Power Company, Iceland

<p>16:00-17:00</p>	<p>Session D4: Progress Towards Sustainable Transportation</p> <p>This session will focus on the perspectives in the area of energy storage and how their role in the low carbon transition can be enhanced. The session will thus seek to explore the energy storage potential and understand from the stakeholders' perspectives what current and future developments will allow the technology to play a greater role in the energy revolution. The session will also try to address policy and marketing barriers that withhold the potential use of energy storage technologies.</p> <p>MODERATOR: Moderator: Jan-Olaf Willuns, Inspire Invest, Norway</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Andy McDonald, Senior Director, Renewable Energy and Low Carbon Technologies, Scottish Enterprise • Abdulla Nasser, Head of UITP, MENA Regional Office, UAE • H.E. Dr. Iyad Abumoghli, UNEP Regional Representative, UAE
<p>17:00-17:30</p>	<p>Water/Energy Nexus Joint Plenary Session with the International Water Summit</p> <p>This closing session will discuss joint strategies for water and energy security and how the natural competition within the water-energy nexus may be aligned to enhance resource optimisation. Panellists from the energy and water sectors will reflect on the outcomes of both the World Future Energy Summit and International Water Summit to summarise findings and draw conclusions for reflection.</p> <p>MODERATOR: Tarek El Sayed, Principal Booz and Co, Lebanon</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Wael Almazeedi, Co-Founder and CEO, FATE Consortium, USA • Peter Gleick, President, Pacific Institute • Raghubir Gupta, Senior Research Director, Centre for Energy, RTI International • M. El Haffidi, Renewable Energy and Electricity Director Ministry of Energy, Mines, Water and Environment, Morocco

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