



World Future Energy Summit Bulletin

A Daily Report of the World Future Energy Summit (WFES) 2012

Published by the International Institute for Sustainable Development (IISD) in collaboration with Masdar

iisd Reporting Services

ONLINE AT [HTTP://WWW.IISD.CA/YWB/ENERGY/WFES/WFES2012/](http://www.iisd.ca/ywb/energy/wfes/wfes2012/) ISSUE #1, VOLUME 187, NUMBER 8, TUESDAY, 17 JANUARY 2012



WORLD FUTURE ENERGY SUMMIT 2012 HIGHLIGHTS: MONDAY, 16 JANUARY 2012

The fifth World Future Energy Summit (WFES) 2012 opened in Abu Dhabi, United Arab Emirates (UAE), on 16 January 2012. The first day of this four-day event was organized around the theme “Policy and Strategy Forum,” and comprised opening statements from Sultan Ahmed Al Jaber, CEO Masdar, Wen Jiabao, Premier, China, Kim Hwang-sik, Prime Minister, South Korea, UN Secretary-General Ban Ki-moon, and other dignitaries, followed by special addresses and ministerial panels. The WFES program also includes roundtable discussions, an exhibition hall, and numerous other side events and activities.

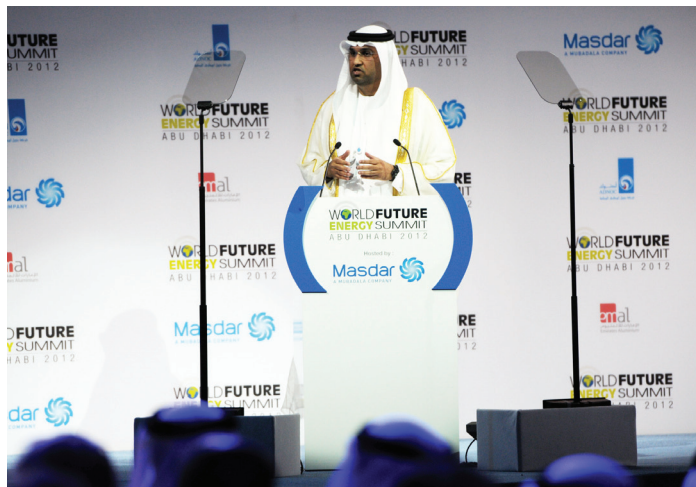


Wen Jiabao, Premier, People's Republic of China

OPENING CEREMONY

Sultan Ahmed Al Jaber, CEO Masdar, opened the Summit. Describing WFES as a platform for sharing experience and vision, Al Jaber offered examples of innovation and growth in the renewable energy sector including increases in wind power, greater solar capacity, and parallel cost reductions and technology improvements. He noted that despite budgetary cuts due to the global financial crisis, the renewable energy industry and green economies are important contributors to economic activity and growth. He highlighted the importance of regulatory frameworks to improve the efficiency of renewable energy technologies and reduce their costs, adding that renewable energy makes strategic sense.

Wen Jiabao, Premier, China, stressed the historic connection between harnessing energy and human progress. He explained China's efforts to drive sustainable economic development, reduce greenhouse gas emissions despite already lower emissions per capita than developed countries, reduce energy consumption across several sectors, create new jobs, develop and install clean and efficient energy facilities, launch national energy conservation projects, and advocate low-carbon lifestyles. He said that China's energy consumption per GDP has fallen by about 20% between 2005 and 2010, and there are plans to cut energy and carbon intensities by 16% and 17%, respectively, between 2010 and 2015. Wen said China plans to rely on domestic energy supplies and to keep energy consumption at a “reasonable level,” gradually increasing the contribution of renewable and nuclear energy. He said that China will continue to strengthen exchanges and cooperation with International Renewable Energy Agency (IRENA). He complimented UAE's efforts in building a green economy, and said that China will work with the international community to foster sustainable innovation and energy.



Sultan Ahmed Al Jaber, CEO, Masdar

Kim Hwang-sik, Prime Minister, Republic of Korea, described Korea's low carbon, green growth strategy and shared Korea's experience in green growth. He underscored that Korea invests 2% of its GDP annually in green technologies and aims to become the world's fifth largest producer of green energy by 2030. He emphasized accelerating the worldwide spread of renewable energy and the replacement of fossil fuels. He commended the role of IRENA in promoting renewable energy technology and said Korea will continue to work with the UAE to further promote the use of renewable energy.

The *World Future Energy Summit Bulletin* is a publication of the International Institute for Sustainable Development (IISD) <info@iisd.ca>, publishers of the *Earth Negotiations Bulletin* © <www.iisd.org>. This issue was written and edited by Catherine Benson, Tallash Kantai, Jonathan Manley, Miquel Muñoz, Ph.D., Delia Paul and Ari Daniel Shapiro, Ph.D. The Photographer is Diego Noguera. The Digital Editor is Brad Vincelette. The Editor is Leonie Gordon <leonie@iisd.org>. The Director of IISD Reporting Services is Langston James “Kimo” Goree VI <kimo@iisd.org>. Funding for coverage of this meeting has been provided by Masdar. IISD can be contacted at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada; tel: +1-204-958-7700; fax: +1-204-958-7710. The opinions expressed in the *Bulletin* are those of the authors and do not necessarily reflect the views of IISD. Excerpts from the *Bulletin* may be used in other publications with appropriate academic citation. Electronic versions of the *Bulletin* are sent to e-mail distribution lists (in HTML and PDF format) and can be found on the Linkages WWW-server at <<http://www.iisd.ca/>>. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 300 East 56th St., 11D, New York, New York 10022, United States of America. The IISD team at WFES 2012 can be contacted by e-mail at <miquel@iisd.org>.



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Kim Hwang-sik, Prime Minister, Republic of Korea

Nassir Abdulaziz Al-Nasser, President, UN General Assembly, highlighted the UN 2012 International Year of Sustainable Energy for All. He described providing low-cost energy as a tool to limit poverty, increase welfare, improve quality of life, and realize sustainable development. He encouraged capacity building and technology transfer for limiting greenhouse gas emissions and combatting climate change. He identified Rio+20 as an opportunity to promote the use of clean and renewable energy to create a more peaceful and sustainable world.

Ban Ki-moon, UN Secretary-General, stressed the need to end energy poverty to ensure equal opportunities. He underscored the need for universal energy access and innovation to scale up clean energy and energy efficient technologies. He stressed reducing greenhouse gas emissions and improving energy efficiency. He described the Rio+20



Bertrand Piccard, President, Solar Impulse

meetings as the beginning of a multi-year mission to achieve sustainable energy for all, and called for a new energy future that harnesses the power of technology and innovation in the service of people and the planet.

Bertrand Piccard, President, Solar Impulse, highlighted the flight of a manned solar airplane over a day-night cycle requiring no fossil fuel. He said the goal was to create a revolution in the way people think about renewable energy.

He underscored that innovation

and clean technologies are profitable and create jobs. He noted that while renewable energy has a higher price, it has a lower



Nassir Abdulaziz Al-Nasser, President, UN General Assembly



Ban Ki-moon, UN Secretary-General

cost than fossil fuels, because the price of fossil fuels does not include their environmental or geopolitical costs. He stressed that political courage is needed to create regulatory frameworks that minimize energy waste.

Aiden Dwyer, a 14-year-old American innovator, shared his story: when he learned that tree branch growth followed the Fibonacci Sequence, a common pattern in nature, he applied this concept to improving the efficiency of solar panels.

MINISTERS' PANEL ON SUSTAINABLE ENERGY FOR ALL

Moderated by Kandeh Yumkella, Director General, United Nations Industrial Development Organization (UNIDO), this panel took place on Monday afternoon.

Ban Ki-moon and Kandeh Yumkella discussed energy access. Ban Ki-moon underlined that energy is a key tool to achieve the Millennium Development Goals (MDGs), and lamented that large portions of the world still lack decent and reasonable access to energy. Underlining linkages between energy poverty and achieving the MDGs, Ki-moon announced his energy access initiative targets for 2030, which are: providing energy access to all people around the world; doubling energy efficiency; and 30% of renewable energy.

Farooq Abdullah, Minister of New and Renewable Energy, India, said that his ministry was using renewable energy in villages to provide jobs in rural areas as a way to slow migration into urban areas. He noted that his country is creating a stable environment to promote private investment in renewables to help provide the energy India needs to sustain its growth, and encouraged UAE's spending on sustainable energy.

Adnan Amin, Director General, IRENA, noted that although the targets of the UN Secretary-General's 2030 Initiative seem ambitious, significant cost reductions in technologies like solar photovoltaic have made renewables cost-competitive with fossil fuels. Amin highlighted that some countries, including Senegal and South Africa, are proactively adopting renewable energy. He described initiatives where countries are positioning themselves for transitions in the global energy system, including UAE's focus on renewables and sustainable cities, and Japan's investment in research and development on reducing transmission line losses and boosting energy storage technology.

Maria van der Hoeven, Executive Director, International Energy Agency (IEA), explained that IEA gathers and translates information into practical solutions. She identified funding and political will as crucial for removing barriers to universal energy access. She added that IEA provides the building blocks to determine effective policies and solutions for Organisation for Economic Cooperation and Development



Ministers' panel on Sustainable Energy for All

(OECD) countries and, increasingly, non-OECD countries. She also encouraged the implementation of geographically-relevant green technologies, and underscored the need for both large companies and small and medium enterprises to finance energy solutions.

Andrew Steer, Special Envoy for Climate Change, World Bank, emphasized the need to triple the present level of financing for renewable energy. He said that large investors are seeking opportunities with low risks and “decent” returns. He described the importance of injecting smaller amounts of public money strategically and wisely into projects to attract larger private investments. He added that countries must learn from one another to establish an appropriate balance of political power, financial muscle, and technical expertise.

Charles Holliday, Chairman, Bank of America, US, stressed the role of the private sector in sustainable energy. He noted the importance of electrical and mechanical engineering, sustainable natural resource use, and turning data into information for communication to the public. He identified those issues as the biggest market opportunity for the next decade. He said banks are interested in taking calculated risks, particularly in partnership with international agencies.

MINISTERS' PANEL ON ACTION TOWARDS UNIVERSAL ENERGY ACCESS

Moderated by Helen Clark, Administrator of the United Nations Development Programme (UNDP), this panel took place on Monday afternoon. Clark said that many countries without universal access to energy have good strategies and plans, but business as usual is not sufficient; instead, she called for business unusual.

Daniel Johansson, Vice-Minister of Energy, Sweden, emphasized that sustainable energy is a moral and political issue related to democracy. He described Swedish-funded energy projects, including installation of solar panels in households in Mozambique and Bangladesh. He also called attention to local, functional solutions, and noted the importance of services to maintain equipment throughout its lifecycle.

Carlos Pascual, Special Envoy and Coordinator for International Energy Affairs, US, stressed the importance of creating an environment that attracts investors and stimulates private, commercial activities. For grid solutions, he said countries need to create a policy environment that allows the electricity sector to be run as a business. He said that poor people often pay the highest price for electricity, noting that this is a business opportunity for the renewable sector.

Andris Piebalgs, Commissioner for Development, European Commission, stressed the importance of universal access to sustainable and renewable energy and achieving this goal through clever and coherent actions. He added that developed countries have relied heavily on energy from fossil fuels, a mistake that developing countries can bypass by creating sustainable energy goals from scratch, which would grant these countries a competitive advantage. Describing 2030 as a realistic deadline, he encouraged governments to develop comprehensive policies for universal energy access.

Alex Salmond, First Minister, Scotland, noted the importance of: investing in grid technology to decrease transmission losses over long distances; narrowing the gap between technological breakthroughs and the broad use of these technologies; and redistributing assets to those who lack or cannot afford access to energy. He described that certain islands on the west coast of Scotland have become entirely energy self-sufficient with micro-hydropower, a notion that may be applicable to numerous developing countries with significant marine resources. He praised the UN Secretary-General's energy access initiative as a rallying call for energy justice.

Mitsuyoshi Yanagisawa, Vice Minister of Economy, Trade and Industry, Japan, said steady progress has been made in Japan's recovery efforts following the 2011 earthquake and Fukushima disaster. He underlined that Japan is reconsidering its energy policy from scratch to incorporate more renewables. He said Japan intends to share its state of the art technologies with the international community in appreciation of their generous support in the earthquake's aftermath.



Ministers' panel on Action towards Universal Energy Access



Ministers' Panel on the Role of the Government Institutions in Accelerating the Transition to a Global Clean Energy Economy

In a keynote address, Bjørn Lomborg, Copenhagen Consensus Center, said that the current focus on fossil fuel subsidies is not sustainable and global warming, green jobs, and energy security have all been misrepresented. He stressed creating effective technologies for the future. Lomborg recommended focusing on innovation that will lead to technology breakthroughs and dramatically increasing research and development investment in green energy.

MINISTERS' PANEL ON THE ROLE OF THE GOVERNMENT INSTITUTIONS IN ACCELERATING THE TRANSITION TO A GLOBAL CLEAN ENERGY ECONOMY

Moderated by Achim Steiner, Executive Director, United Nations Environmental Programme (UNEP), this panel took place on Monday afternoon.

José María Figueres, former president, Costa Rica, said governments must focus their efforts on tackling poverty and climate change over this decade. He also said governments should take the lead by harvesting "low-hanging fruit," such as demand-side management, reversing bad policies such as perverse subsidies on fossil fuels, and sending signals to industry by reducing taxes on green technology. He said fossil fuel subsidies need to be replaced by effective policies that incentivize good alternative energy sources.

Jordy Herrera, Minister of Energy, Mexico, described a government program to reduce domestic energy consumption in Mexico by swapping out inefficient home appliances for new energy efficient appliances, noting that this change also saves the government money because energy is heavily subsidized.

Lord Howell of Guildford, Minister of State, UK, noted that the world's energy situation has changed significantly over the last 30 years since he served as Energy Secretary to former Prime-Minister Margaret Thatcher. He highlighted the UK's investment in low-carbon technology, including investing £2.5 billion in renewable energy research, incentivizing efficient home energy consumption and development, and planning for an additional 16GW of nuclear capacity by 2025 that will provide 30,000 jobs. He said governments have the responsibility to provide an environment that promotes clean technologies.

S. Iswaran, Minister in the Prime Minister's Office, Singapore, highlighted the importance of balancing and integrating public policy, government research, and private sector initiatives to achieve energy goals. He noted that Singapore has liberalized its electricity market, used price as a clear signal of the cost of energy to the consumer, offered targeted assistance to low income households, avoided subsidizing consumption, worked with the petro-chemical sector to reduce its carbon footprint, and cultivated itself as a test bed for research, development, and new energy ideas.

David Sandalow, Assistant Secretary for Policy and International Affairs, US, used the example of refrigerators being four times more efficient now than they were in the

1970s to demonstrate the important role of standard-setting and government regulation. He added that because energy transitions take time, visionary leaders who are willing to chart a new course are crucial for achieving clean energy initiatives.

Georg Schütte, State Secretary, Germany, described Germany's energy revolution and long-term perspective on research and innovation. He said Germany aims to reduce its greenhouse gas emissions by 80% to 90% from 1990 levels by 2050, while simultaneously transforming its energy supply system to increase renewable energy generation to 80% by 2050. He said Germany will focus on energy efficiency, particularly within its manufacturing sector. He stressed that Germany hopes to be the first modern advanced economy to reinvent itself as a green society.

Walter Steinmann, State Secretary for Energy, Switzerland, stressed the importance of clear, ambitious targets, compromise, and consultation. He explained that Switzerland encourages citizens, municipalities, and cities to make progress in energy consumption at the local level every year, and said one of the driving forces in Switzerland is "you have to do more every year."

AROUND WFES

In addition to the Plenary Sessions, delegates attended numerous events throughout WFES, including: roundtable discussions on issues such as an international technology roadmap for photovoltaic and clean technology in the Gulf Cooperation Countries; the opening of the Project Village; discussions at the Young Future Energy Leaders pavilion; displays at Innovate@WFES, the hub for startup clean tech companies; and numerous side events at national, institutional, and company pavilions.

Other highlights included a Press Conference on the official launch of the UN 2012 International Year of Sustainable Energy for All, and the signing of a letter of intent between IRENA and the IEA.



Signing of a letter of intent between IRENA and the IEA