

**MINISTERIAL MEETING ON ENERGY AND
GREEN INDUSTRY:
21-22 JUNE 2011**

The Ministerial Meeting on Energy and Green Industry was held from 21-22 June 2011 at the Hofburg Palace in Vienna, Austria. Held in parallel with the Vienna Energy Forum 2011 (VEF), the Ministerial Meeting was attended by one hundred participants, including ministers and high-level officials. The aim of the Ministerial Meeting was to contribute to preparations for the upcoming UN Conference on Sustainable Development (UNCSD or “Rio+20”) in 2012. In this regard, participants at the Ministerial Meeting addressed several relevant issues, including global objectives for access to clean energy, energy and resource efficiency, and promoting green industry as an integral component of the green economy. The meeting considered a set of three proposed goals, referred to as the “30-30-30” goals: (1) achieving universal energy access by 2030; (2) increasing energy efficiency by 40% by 2030; and (3) achieving 30% renewable energy by 2030.

The meeting was chaired by Elizabeth Thompson, Executive Coordinator, Rio+20 Conference, and resulted in a Chair’s summary.

This briefing note provides a summary of interventions made during the formal sessions, including the thematic session on sustainable energy in a green economy, the thematic session on green industry as a key pillar for the green economy, the ministerial statements, and the closing session.

OPENING SESSION

The meeting opened on Tuesday afternoon, 21 June. Kandeh Yumkella, Director-General of the UN Industrial Development Organization (UNIDO) and Chair of UN-Energy, highlighted energy and energy access as central to sustainable development, and identified green industry as a key pillar for the green economy. He explained that the objective of the meeting was to contribute to the agenda of Rio+20. He underscored that the meeting was not intended as a negotiating forum, but rather as a mechanism for energy ministers to send their messages to the Rio+20 process.

In a video address, Gro Harlem Brundtland, United Nations Special Envoy on Climate Change, addressed participants. She commended UNIDO’s work on raising awareness about lack of access to modern energy, saying this condition is unacceptable in the 21st Century. Brundtland said universal energy access is a critical step to reach the Millennium Development Goals (MDGs) and must be encouraged by developing and developed countries. She welcomed the 30-30-30 goals on universal energy access, global energy intensity, and renewables. As a board member, she confirmed the UN Foundation’s deep commitment to the UN International Year of Sustainable Energy for All in 2012.

In her keynote speech, Irene Freudenschuss-Reichl, Director-General for Development Cooperation, Foreign Ministry, Austria, identified a loss of clarity in dealing with sustainable development at the international level since Agenda 21 was agreed. She underscored that the recent crises, particularly rising oil and food prices, have reminded the international community that current patterns of consumption and production are not sustainable. Stressing the need to redefine growth and prosperity and articulate a development paradigm for the world, she said Rio+20 has the opportunity to deliver these aims. She advocated a new architecture for sustainable development to reach the 30-30-30 goals, as well as more work at the regional and municipal levels. She underlined that there cannot be a green economy without sustainable energy and green industry.

Elizabeth Thompson, Executive Coordinator, Rio+20 Conference, underscored the inextricable link between energy, environment and development and said one of the goals of Rio+20 is to catalyze a green economy in the context of poverty eradication and sustainable development. She outlined the 30-30-30 goals, which she said are central to security and development. She underscored the importance of: greening governments; ensuring that the green economy does not result in green protectionism; avoiding conditionalities; and preventing the green economy from becoming a wedge in North-South and South-South relations. She highlighted investment opportunities in clean technologies, some of them indigenous from the South. Citing the case of Brazil, Thompson underscored the potential for oil producers to become energy producers. She concluded that the greatest challenge is not the road to Rio+20, but ensuring that the road from Rio+20 leads to sustainable development and the greening of every economic sector.

Miao Wei, Minister of Industry and Information Technology, China, said the challenge of green industry is not within the industrial sector only, but with society at large. Noting China’s industrialization achievements since the 1980s, he said environment is a bottleneck. Wei stressed China’s plans for reducing pollution and resource use taking full advantage of labor. He said progress will continue in terms of industrialization and industrial optimization, technology transfer among regions, greening industry, ensuring energy efficiency; promoting carbon reduction, and using new technologies to transform and upgrade existing industries. He suggested that climate change will be an important issue at Rio+20, and emphasized that China will work with other countries to address climate change and promote sustainable development.

Adnan Amin, Director-General, International Renewable Energy Agency (IRENA), praised UNIDO for taking the leadership of UN activities on energy. He said IRENA is a young organization that is rapidly approaching universal membership. Amin stressed that IRENA represents a new model for international cooperation on a concrete issue. He

said renewable energies represent a huge opportunity and bold steps will be rewarded in the future. He underscored the need to identify the gaps and bottlenecks, and to assess countries' situations so they can take sovereign decisions with full information. He reminded participants that energy crises can bring down governments and derail sustainable development, and said investment in energy infrastructure has long lifetime. He further suggested that the critical factor for renewable energy is the policy environment. Noting that the technology is currently available, he underscored that investment will only come with the appropriate policies, emphasizing that the future for renewable energy lays in the large-scale attraction of capital. Adnan Amin stated that technology is an endogenous element of investment that will not come from development aid or as a gift, and that countries must take responsibility to ensure that investment happens. He concluded by noting that we can talk about the green economy for months, but what matters are the decisions taken in investment and technology.

Márcio Zimmermann, Vice-Minister of Mines and Energy, Brazil, explained Brazil's experience in increasing the renewable energy mix over the last two decades, to reach its current 46% ratio. He noted Brazil's experience is not a recipe for all countries, but that most countries can probably extract valuable lessons. Zimmermann underscored the importance of hydropower, and said Brazil considers that all countries with hydro potential should consider developing it in a sustainable way. He also stressed the importance of biomass and ethanol, noting that all tropical countries with biomass can have ethanol in their fuel mix. He defined Brazil as a global champion on clean energy, particularly hydropower and biomass. Zimmermann showed a five-minute video on energy production in Brazil.

THEMATIC SESSION ONE: SUSTAINABLE ENERGY IN A GREEN ECONOMY

The thematic session on Sustainable Energy in a Green Economy, moderated by Elizabeth Thompson, took place on Tuesday afternoon. Thompson said the transition to sustainable energy was looking more likely because the political environment is more favorable, but that concerns remain that it is only a fad given past experience that interest in alternative energy increases when oil prices are high, only to fade when oil prices drop.

Keynote speaker Deepak Gupta, Secretary, Ministry of New and Renewable Energy, India, identified energy in all its aspects as the defining development challenge for his country. Noting that renewable energy growth is supported by incentives, he highlighted that global support systems for renewable energy continue to be largely absent. He stressed the mitigation potential of green buildings and green campuses in rapidly urbanizing India.

Fabricio Hernández Pampaloni, Secretary of State for Energy, Spain, underscored energy efficiency and renewables as two aspects of sustainable energy, and noted that energy efficiency was the cheapest and safest energy option. He stressed the importance of moving towards removing subsidies for fossil fuels, underscoring the difficulties and need for a gradual

approach. He also highlighted Spain's "bet" for renewables and energy efficiency a decade ago, resulting in a leading industry and 120,000 direct and indirect jobs. He said the question is not whether to go for renewables, but how to do so, and suggested that renewables can only be fostered through a bottom-up approach. He affirmed that the building and transportation sectors have the greatest potential for energy efficiency.

Vijay Iyer, Director, Sustainable Energy Department, World Bank, stressed the need for a compact that supports collective action. He said such a compact should include a financing element (including both public and private financing), and appropriate incentives (such as feed-in tariffs). He underscored the importance of strengthening the private sector actors and entrepreneurs at the local and regional levels. He said the biggest boost to project financing will take place when local banks can understand the risk and potential of renewable energy projects.

THEMATIC SESSION TWO: GREEN INDUSTRY - A KEY PILLAR OF A GREEN ECONOMY

This session, held on Wednesday afternoon, was moderated by José Antonio Meade Kuribreña, Secretary of Energy, Mexico.

Kandeh Yumkella, Director-General, UNIDO, said every country in the world wants to industrialize, and emphasized the importance of green industry for Rio+20. He stressed the need for industrializing countries to follow low-carbon pathways and focus on resource efficiency.

Bernice Lee, Research Director, Energy, Environment and Resource Governance, Chatham House, highlighted the role of innovation. She said innovation will play a major role in sustainable energy deployment, and includes not only technology, but also innovative thinking, new business models and policies. Based on research of 57,000 clean energy patents, she said most technologies take 19 to 30 years to become widely diffused. She also noted that a majority of top-ten companies in most of the clean energy sectors and subsectors analyzed are from the OECD, and only 2% of patents are the outcome of North-South collaborations. Emphasizing cross-sectoral technology transfer, such as from the car industry to wind turbines, or from consumer electronics to photovoltaics, she underlined the importance of recalling knowledge assets from older industries when investing in the green economy.

Jerry Stokes, President, Suntech Europe, said his company's growth was a result of creating markets rather than following them. He observed that the cost of solar energy has reduced 50% in the last two years and underscored the importance of investing in people. Stokes said companies' green commitments must be open to review, otherwise it is just greenwash. He argued that green sense, common sense and financial sense go hand-in-hand. Noting that more jobs are created after the solar panels leave the factory than in the production process, he underscored the importance of developing sustainable markets in every country.

Hungarian Secretary of State Peter Olajos reported on the approval of 80% greenhouse gas reduction targets by 2050 by EU environment and climate ministers at a recent meeting in Luxembourg. He said the green economy includes

environmental technologies, renewable energies and energy efficiency. Citing the example of chemical companies manufacturing wind turbine components, he said the distinction between green and brown economy is not clear. He underscored the importance of investment banks, small and medium enterprises and the removal of subsidies.

Serge Lepeltier, French Ambassador for Climate Change negotiations, said access to energy is crucial. He emphasized project governance, strengthening capacities, and funding of projects as key themes of the Paris-Nairobi Climate Initiative on Clean Energy for All in Africa. He said climate change funding committed in Copenhagen and Cancun can contribute to energy access measures. He noted that Africa is in a position to move forward on energy.

Mark Radka, Chief, Energy Branch, UNEP, said green industry in the context of the green economy and UN should be socially inclusive, efficient and with low environmental impacts and greenhouse gas emissions. He said the concept of a green economy is not fundamentally different to that of sustainable development, but takes sustainable development concepts and puts them in an understandable language to decision makers. He described green industry as one that produces green products in a sustainable manner, and highlighted the opportunity for developing countries to “leapfrog” to achieve green industry.

José Antonio Meade Kuribreña, suggested that since industry puts a third of emissions up in the air, it is a third of the problem, or the solution. He noted that many opportunities exist to make economies resource efficient, citing cogeneration, transportation, lighting, and waste. He said no landfill should be allowed to exist without methane capture, and no water treatment plant should be allowed to buy electricity, since they can generate it by reprocessing waste.

MINISTERIAL STATEMENTS

Ministers and other high-level national representatives made statements on Tuesday and Wednesday afternoons. Tuesday’s session was chaired by Elizabeth Thompson, and Wednesday’s by Elizabeth Dipuo Peters, Minister of Energy, South Africa.

Majid Namjou, Minister of Energy, Iran, said the challenge of renewables is to compete financially with other sources, particularly in resource-constrained developing countries. Noting that the use of renewable energy in the long term constitutes the best choice, he said renewable energy should have a privileged status when ranked in the national social welfare functions.

Marcin Korolec, Under-Secretary of State, Ministry of Economy, Poland, said the world faces two major challenges: meeting the demands for a better life by the world’s population; and addressing environmental pressures that if left unaddressed will undermine the ability to meet those needs. He said the green economy needs to be framed in the context of a generational contract. Noting the potential of coal, he said it is time to stop criticizing coal and start supporting actions for its environmentally sound use.

Areg Galstyan, Deputy Minister of Energy and Natural Resources, Armenia, said energy security is essential to achieve sustainable development. He stressed the use of renewable

energy sources, energy efficiency and nuclear energy in his country. Noting experience gained during the 1993-95 energy crisis in Armenia, he elaborated on national policies and Armenia’s potential for renewables.

José Antonio Meade Kuribreña, Secretary of Energy, Mexico, outlined three national objectives: access to electrification, preferably in a sustainable manner; low-carbon technologies; and green industry. He stressed Mexico’s 98% electrification rate, and noted that energy efficiency is the fastest and cheapest way to reduce greenhouse gas emissions. He underscored Mexico’s high potential for investment, and outlined Mexico’s support for international activities on renewable energy and climate change.

Gusti Muhammad Hatta, Minister for the Environment, Indonesia, said economic growth is the backbone to wellbeing. He underscored Indonesia’s geothermal potential, which he described as 40% of the world’s total. He highlighted the opportunities to develop biofuel and biomass, while acknowledging that those efforts will create additional pressure on land and forest conservation. He called on UNIDO to provide policy support and capacity building for energy access and deploying renewable energy sources.

Tomas Anker Christensen, Under Secretary for Global Challenges, Ministry of Foreign Affairs, Denmark, said climate goals cannot be reached without involvement of the private sector, and the international community needs to support this development. Stating that large investments are a pre-requisite to sustainable energy deployment, he underscored the importance of public-private partnerships. He said the Rio+20 green economy theme provides a great opportunity to advance green growth, fight poverty and promote sustainable development. He urged the Brazilian government to take on board the spirit of public-private partnerships and the private sector at Rio+20. He reminded participants that Denmark will hold the EU presidency during the first half of 2012, and be coordinating negotiations for 2012. He said setting targets on energy could be a good departure point.

Traycho Traykov, Minister of Economy, Energy and Tourism of Bulgaria, said the question of whether alternative growth is possible is meaningless. He said growth is a question of how you measure it, and that prosperity can be measured in a different way.

Monyane Moleleki, Minister of Natural Resources, Lesotho, provided examples of rural electrification in the south of his country. He noted efforts to involve the private sector and concessions to miners for electrification of nearby villages.

Zhou Changyi, Director General, Department of Energy Conservation and Resources Utilization at China’s Ministry of Industry and Information Technology, emphasized China’s strategy for energy efficiency and resource use reduction. He said effective measures have been taken to phase out obsolete capacity and that industry will remain the main energy and resources consumer during China’s period of accelerated industrialization.

Jose Almendras, Secretary of Energy, Philippines, said the energy sector in his country is substantially green. He underscored energy efficiency, particularly in buildings and the transport sector. He said Rio+20 should discuss recognition and reward for those companies that take the initiative in going green.

Ambassador Tsutomu Osawa, Japan, announced that Japan will hold an international conference in November 2011 on green industry development, with joint sponsorship from UNIDO. He said Japan remains committed to international efforts to develop a green economy and energy technologies.

Dilip Barua, Minister of Industries, Bangladesh, said the building blocks of the green economy in Least Developed Countries (LDCs) should be calibrated according to LDCs' needs, and cautioned against "one-size-fits-all" policies. He underscored that many LDCs, despite their limitations, have decided to take a bold step in the right direction. He noted that access to international financing mechanisms and technology remain barriers.

Morten Wetland, Permanent Representative of Norway to the United Nations, underscored hydropower as a source of development. He said hydropower can be deployed with little harm to the environment, and criticized those who impose restrictions on hydropower resources in developing countries as a means for development. He announced a conference on financing energy projects in Oslo on 10-11 September 2011.

Faycal Abbas, Secretary-General of Algeria's Energy and Mines Ministry, said his country is launching an ambitious programme to develop renewable energy for the period 2011-2030. He underscored Algeria's goal to become independent from hydrocarbons and become a major supplier of green electricity to Europe, with an objective of exporting 10,000MW. He said plans included 60 photovoltaic and 30 concentrating solar power plants.

Nam Viyaketh, Minister of Industry, Laos, underscored the use of hydropower and explained his country's experience with that technology. He emphasized policies to support financing and production of electricity from biomass and hydropower in rural areas, as well as the promotion of private and foreign investment in clean energy.

Xolisa Mabhongo, South Africa's Permanent Representative in Vienna, emphasized the role of energy efficiency to enhance economic competitiveness and security of energy supply.

Sherry Ayittey, Minister of Environment, Science and Technology, Ghana, said the road to a green economy has many challenges, especially for developing countries. She said her country derives energy from hydropower, but faces problems due to climate change, which is depleting water resources. She stressed the need to consider energy issues on a country-by-country basis.

CLOSING SESSION

Elizabeth Dipuo Peters, Minister of Energy, South Africa, highlighted the large potential for renewable energy in her country and the need for technical and financial support. She underscored the need to realize hydro potential in Africa. She supported developing a model of how energy efficiency gains in

developed countries translate into energy access in developing countries. Dipuo Peters stressed that energy access discussions need to include how to educate the public about being ready to pay a tariff.

Marcio Zimmermann, Vice-Minister of Mines and Energy, Brazil, said developing countries face the challenge of meeting the energy needs to achieve high economic growth rates and provide poor populations with access. He said countries should take advantage of the most advantageous energy sources available to them. Noting the importance of hydropower in developed and developing countries, he said Brazil can pass its good practices and expertise to other countries. He stressed that people with no access to energy are entitled to it, and that those countries with access to energy should also ensure that developing countries have such access.

Carsten Staur, Denmark's Permanent Representative to the United Nations, thanked UNIDO for its work chairing UN-Energy and bringing the energy agenda forward and making it a key area for the UN. He said the 30-30-30 goals are a package that cannot be separated out. He outlined opportunities to bring energy into the UN agenda, including at the UN General Assembly and in discussions on the Global Compact later this year. Noting lack of specifics in the green economy discussion within the Rio+20 agenda, he said resource issues, such as energy, water and food, have more political appeal than a theoretical discussion on green economy and institutional framework. He described energy discussions as having two facets: energy and development, and energy and climate change.

Kandeh Yumkella, UNIDO, said he will forward the results of this meeting formally to the UN Secretary-General and his team. He said the meeting had given him the confidence that the 30-30-30 goals are achievable and can help support the development agenda. He expressed hope Rio+20 could take action on energy, and explained that UNIDO is working on such an agenda and will circulate an outline on this topic towards the end of 2011.

Chair Thompson introduced a draft text and made a powerpoint presentation summarizing the meeting. She asked participants whether the document could be presented as a declaration. France said he had no mandate for a declaration, particularly regarding the 30-30-30 goals. China said a "summary" would be more appropriate than a "declaration." Cameroon asked for the inclusion of text on communications. Sierra Leone proposed including references to non-discrimination among energy sources and the urgency of energy transformation. South Africa asked for references to technology transfer and capacity building. Chair Thompson reminded delegates that this was not supposed to be a negotiation. South Africa suggested that the text should be a Chair's report, rather than an "agreed" text. Chair Thompson then proposed adopting the text with the two amendments proposed by Cameroon and Sierra Leone. Portugal said he could not "endorse" the document. Noting that countries were not amenable to adopting text as a declaration, Chair Thompson said it would be presented instead as a Chair's summary. She declared the meeting closed at 6:02 pm.