In the morning and afternoon delegates discussed regional implementation. In a parallel session, thematic discussions continued on access to energy services, and enhancing energy efficiency to address pollution, climate change and industrial development.

CONFERENCE ROOM 4: MORNING
THEMATICAL DISCUSSION: Electrification, including rural electrification: overcoming infrastructure, financing, policy and institutional barriers: This session was chaired by Vice-Chair Yvo de Boer (Netherlands).

Harish Hande, SELCO Solar Light in India, identified key elements such as addressing the supply-chain and the linkages between income generation, poverty and energy services. Noting that electricity in slums is often illegally supplied, Connie Smyser, Smyser Associates, highlighted the importance of social partnerships and regulatory support. To accelerate the challenges of accessibility, Vijay Modi, Columbia University, suggested focusing on institutional access and spreading costs. Lee Yee Cheong, Energy Commission, Malaysia, noted the need to mobilize political will in developing countries and argued that “mega” electrification projects do not benefit the poor.

Discussion: Referring to Monday’s exchanges on energy access in rural and urban areas, AUSTRALIA highlighted a lack of knowledge and community involvement as key constraints. On overcoming problems of infrastructure maintenance, ARGENTINA noted the success of small maintenance companies. SOUTH AFRICA outlined barriers to introducing liquid petroleum gas in rural communities, and TANZANIA noted the link between deforestation and meeting energy needs in remote areas. The SCIENTIFIC AND TECHNOLOGICAL COMMUNITY differentiated between the needs of and solutions for rural communities versus urban slums.

Several countries shared experiences on national electrification and clean energy initiatives, stressing the importance of context-specific solutions, subsidizing supply costs and multi-stakeholder involvement. NORWAY outlined financing options, including secure access to land tenure and micro-finance. Describing an EU energy initiative, the EUROPEAN COMMUNITY (EC) highlighted the need for an integrated energy approach and stakeholder dialogue. The US noted the importance of creating intermediate organizations between the utilities and communities. On barriers to energy access, SENEGAL said enabling institutional environment is needed to attract private sector investors, and VENEZUELA noted the lack of strong energy sector regulations in many developing countries. JAMAICA said its successful rural grid extension programme helped slow rural migration and promote employment creation. NIGERIA highlighted the problem of energy distribution and the high cost of alternative energy sources. WOMEN emphasized the need to put the maintenance of local energy installations in the hands of women. ICELAND advocated utilizing domestic energy sources in developing countries, such as geothermal resources. DENMARK highlighted the role of renewable energies in increasing energy access and mitigating climate change. SAUDI ARABIA maintained that carbon sequestration is a viable GHG reduction technology. GERMANY called for expanding energy efficiency measures worldwide, and noted that economies of scale result in lower costs. WORKERS AND TRADE UNIONS cautioned against privatization of energy markets, and BUSINESS AND INDUSTRY emphasized shared responsibility for combating corruption.

CONFERENCE ROOM 2: MORNING
REGIONAL SESSION: UN Economic Commission for Africa (ECA): This session was chaired by Vice-Chair Azanaw Abreha (Ethiopia). Jaquez Diong, ECA, highlighted the vulnerability of Africa given the high rate of poverty and fragile natural resource-based economies. Blessing Manale, International Sustainable Development Cooperation, South Africa, highlighted inappropriate energy technology and barriers to domestic and foreign investment. Philippe Niyongabo, African Union Commission, emphasized energy access, hydropower and governance. Jacque Moulot, ECA, said better links between industrial development and poverty reduction strategies are needed.

Discussion: The UK highlighted areas of common interest with the ECE region. DENMARK said increased oil prices undermine development. EGYPT noted the need for investments in hydro energy, while the African Union Commission emphasized a lack of investment capacity. The UN Industrial Development Organisation called for efficient energy use. SUDAN called for a holistic approach to energy and external debt. CAPE VERDE underlined the perspective of SIDS. The Chair emphasized that: improved access to energy is needed for poverty reduction; oil and gas prices exacerbate development problems in Africa; regional strategies should integrate poverty reduction plans; the gap between donor promises and delivery needs to be addressed; and, that opportunities should be created for Africa to employ modern sustainable energy technologies.

UN Economic and Social Commission for Western Asia (ESAWA): This session was chaired by Vice-Chair Javad Amin-Mansour (Iran).

Anhar Hegazi, ESCWA, noted the lack of energy access by 21.4 percent of the population in a region dominated by oil-producing countries. Aysar Tayeb, Petroleum Ministry, Saudi Arabia, called for Clean Development Mechanism and ODA support for carbon capture and storage. Sayed Emam, Ministry of accessibility, Vijay Modi, Columbia University, suggested partnerships and regulatory support. To accelerate the challenges of accessibility, Vijay Modi, Columbia University, suggested focusing on institutional access and spreading costs. Lee Yee Cheong, Energy Commission, Malaysia, noted the need to mobilize political will in developing countries and argued that “mega” electrification projects do not benefit the poor.

Discussion: Referring to Monday’s exchanges on energy access in rural and urban areas, AUSTRALIA highlighted a lack of knowledge and community involvement as key constraints. On overcoming problems of infrastructure maintenance, ARGENTINA noted the success of small maintenance companies. SOUTH AFRICA outlined barriers to introducing liquid petroleum gas in rural communities, and TANZANIA noted the link between deforestation and meeting energy needs in remote areas. The SCIENTIFIC AND TECHNOLOGICAL COMMUNITY differentiated between the needs of and solutions for rural communities versus urban slums.

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UN Economic and Social Commission for Western Asia (ESCAW): This session was chaired by Vice-Chair Javad Amin-Mansour (Iran).

Anhar Hegazi, ESCWA, noted the lack of energy access by 21.4 percent of the population in a region dominated by oil-producing countries. Aysar Tayeb, Petroleum Ministry, Saudi Arabia, called for Clean Development Mechanism and ODA support for carbon capture and storage. Sayed Emam, Ministry of
of Energy, Egypt, noted that renewables represent only 0.1 percent of the mix in the region. Fouad Shaker, Union of Arab Banks, outlined the need for mobilizing private investment and developed country cooperation. Emad Adly, Arab Network for Environment and Development, described weak financial support for communities.

**Discussion:** Egypt announced the Third Regional Energy for Africa and North Africa Region conference, to be held from 10 to 12 June 2006, supported by ESCWA and UNDP. Jordan predicted that oil prices will rise to $150 a barrel within a decade, and called for funding initiatives to promote renewable energy partnerships. USAID recalled US support for wind and solar mapping, energy efficiency and other capacity building in the region. Germany inquired about the necessary steps to secure more support for energy for sustainable development from the region’s banks. Panelists acknowledged ESCWA’s potential role in directing regional finance towards renewable energy and cited a Union of Arab Banks initiative on environmental impact assessments.

**CONFERENCE ROOM 2: AFTERNOON**

**THEMATIC DISCUSSION: Enhancing energy efficiency to address air pollution and atmospheric problems, combat climate change, and promote industrial development:** This session was chaired by Vice-Chair Azanaw Abreha. Alfred K. Ofosu-Ahenkorah, Ghana Energy Foundation, outlined supply-and-demand-side barriers to energy efficiency. Mark Levine, Lawrence Berkeley National Laboratory, emphasized end-use energy loss and the success of investment, technical centers, and targets in China. Zhou Dadi, Energy Research Institute, highlighted the need for more research in and incentives for sustainable consumption. To overcome barriers, Steven Wiel, Collaborative Labeling and Appliance Standards Programme, noted the importance of implementing energy efficiency standards and labels.

**Discussion:** Many speakers shared their experience of good practices at the national level, including, *inter alia:* industry partnerships; transportation initiatives; information exchange; and end-use efficiency. The US, with Bulgaria, highlighted the role of partial loan guarantees. Italy emphasized the role of market mechanisms in establishing an infrastructure for renewable energy technology, and Farmers highlighted the need for market incentives to make sugarcane bagasse cogeneration economically viable. Business and Industry emphasized that policies can encourage efficiency by sending strong market signals. South Africa noted that initiatives needed to be put in the context of MDG implementation. Austria said energy efficiency contributes to security of supply, competitiveness and environmental protection. She highlighted the Marrakech Process task forces as key to addressing sustainable consumption and production.

Brazil highlighted a government-industry energy efficiency partnership, and Norway described a government initiative to support energy efficiency and renewable energy. Workers and Trade Unions noted that workplace energy efficiency should be government-led. The EC and NGOs highlighted consumer-based approaches, including energy labeling, while Mexico stressed regulation. Australia noted the need to align product standards worldwide. On energy conservation, Jordan advocated setting a challenge for industry decision-makers. On energy efficiency, Mauritius highlighted a lack of knowledge within industry. Qatar noted the environmental impacts of some renewable energy technologies.

**CONFERENCE ROOM 4: AFTERNOON**

**REGIONAL SESSION: UN Economic Commission for Europe (ECE):** Vice-Chair Yvo de Boer, opened the session and introduced Kai Barlund, ECE, who highlighted a number of regional actions. Eliot Morley, Minister for the Environment, UK, provided a summary of outcomes from the regional implementation forum, noting the need to deploy a mix of policy instruments. Viktor Baranchuk, Ministry of Industrial Policy, Ukraine, discussed lessons learned and best practice. Jean-Christophe Fueg, Federal Office of Energy, Switzerland, discussed variations in energy security concerns.

Williams, Department of Environment, Food and Rural Affairs, UK, noted the successes and challenges of the Convention on Long-Range Transboundary Air Pollution.

**Discussion:** Azerbajian stressed regional cooperation and corporate responsibility, and Turkey highlighted the security of energy supply routes. The EU called for more coherent regional processes. Croatia referred to problems with emissions trading. Children and Youth called for innovations in sustainable development that prioritize consumers, and Sweden focused on lifestyle change. Workers and Trade Unions outlined their role in the energy transition. Barlund highlighted clean technology centers and emissions trading. A number of discussants voiced support for the UNEP-led environment and security project.

**UN Economic and Social Commission for Asia and the Pacific (ESCAP):** Vice-Chair Javad Amin-Mansour (Iran) introduced Liana Bratasida, Ministry of Environment, Indonesia, who underlined the importance of strategic approaches. Xiaohui Wang, National Development and Reform Commission, China, highlighted the importance of micro-level planning, a sound legal framework, active public investment and pricing mechanisms. Padma Lal, Representative of Fiji, reviewed experiences in the Pacific, highlighting cooperative planning, partnerships, regional cooperation and the urgency of disaster preparedness and response. Susumu Okamoto, Ministry of Economy, Trade and Industry, Japan, noted the importance of creating enabling conditions for the successful transfer of environmentally sound technologies. Jyoti Parikh, Integrated Research and Action for Development, warned that with increasing oil prices, women engaged in biomass production could become even more marginalised.

**Discussion:** ESCAP said the crucial question was whether Asia Pacific countries could steer their economies toward sustainability. Korea reflected on “green growth” and the impact of oil prices on development. Sáudi Arabia suggested increasing taxes as a solution to high oil prices. The US described the role of satellite technology in developing renewables, and stressed regional partnership. Kazakhstán called for investment in secure energy supplies. China described industrial adjustment, including pricing and taxation policies. Farmers called for R&D to address the long payback periods and inadequate funding for renewable technologies. Japan underscored the importance of sharing good practice. Women noted their customary role as managers of biomass, and called for recognition of women as social capital, and for equality as a prerequisite for sustainable development.

**IN THE CORRIDORS**

On day two, NGOs are both cautious and ambitious. Some believe the CSD provides a unique home or ‘clearing house’ for debates on the multiple dimensions of one of the world’s most pressing issues: energy security and rising fuel demand in a world that must brace itself for the era of ‘peak oil’. Citing the likelihood of a further escalation in oil prices, some NGO participants sense an opportunity for the CSD to bring coherence and add value to the diverse energy-related discussions, including climate change, renewable energy, the nuclear issue, and equitable development practices. Others fear that the session may already be bogged down in tensions that can be traced back to the debates over the CSD’s multyear programme of work. Elements of the G-77/China seem to be alienated by the current approach to thematic integration, which they regard as a licence to add little or no value to what is already being undertaken on the ground, and turn the CSD into a mere ‘spectacle’.