Summary of the Session on Solid and Hazardous Waste Management¹

- 1. The session on Solid and Hazardous Waste Management, chaired by Mr. Pierre Portas from the Waste Environment Cooperation Centre (WE2C), provided examples of global and national regulatory measures concerning waste management and presented a useful overview of the current technological and economic structure of waste-related industries.
- 2. Ms. Katharina Kummer-Peiry, Executive Secretary of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (BC), introduced the framework of the Basel Convention, which was established in 1989 in response to scandals involving the dumping of hazardous waste in developing countries. The Convention is based upon two fundamental pillars, namely a control system for transboundary movements of hazardous wastes based on the concept of Prior Informed Consent and obligations to ensure the environmentally sound management of hazardous and other waste globally.
- 3. The principle of prior informed consent requires that waste exporters obtain written approval from waste importers, as well as transit States, before shipment can take place. The shipment has to be reported to the BC Secretariat, but only half of their member countries actually meet the reporting requirements. Based on available data, around 170 million tons of BC waste was generated in 2006, with one third of transboundary wastes movements flowing from developed to developing countries, and two thirds flowing between developing countries. An amendment to ban transboundary movements of hazardous wastes from OECD to non-OECD countries has been adopted, but has not yet entered into force. With respect to the concept of Environmentally Sound Management of waste, it was noted that technical guidelines set out best practices to protect human health and the environment with respect to the generation, disposal and recovery of BC waste.
- 4. The BC thus created opportunities for developing markets for goods and services aimed both at reducing the generation of hazardous and other wastes and at conceiving, building, maintaining, and operating disposal facilities for the environmentally sound management of such wastes, including the recycling and resource recovery of waste. Given the scope of the BC, many sectors of the economy were concerned by its implementation, including those industries dealing directly with hazardous waste management, as well as industries related to chemical production, energy generation, mining, leather production and tanning, electric and electronic equipment production and medical equipment and manufacturers.
- 5. Ms. Kummer-Peiry noted that many of the wastes covered under the BC lend themselves to re-use, recycling or resource recovery. Recycling of end-of-life computing equipment and ship dismantling provided two examples of rapidly expanding areas which offer business opportunities. However, the waste market needs to be carefully framed in order to ensure that human health and the environment are preserved.
- 6. Dr. Jean Bogner, President of Landfills Plus Inc. and Research Professor at the University of Illinois, provided an overview of the Waste Management sector, including key technologies and climate change mitigation potential. She noted at the outset that there is no standardized definition of the term "waste". The waste industry includes both private and public sector firms. Its functions cover waste collection and transport, treatment, disposal, recycling, re-use and recovery, minimization as well as the production of energy from waste. Waste management decisions are often taken locally and need to be sustainable and affordable. There is a great variation of costs across cities worldwide, due to variations in available land area, waste quantity, waste characteristics, regulatory constraints,

1

¹ This document has been prepared under the Secretariat's own responsibility and is without prejudice to the positions of Members and to their rights and obligations under the WTO.

local preferences, collection/transport, and policy/planning guidance. It was noted that the transboundary flow of waste has grown significantly in recent years.

- 7. According to the report of the Inter-governmental Panel on Climate Change (IPCC), waste (including wastewater) accounts for less than three per cent of human greenhouse gas emissions, which consists almost entirely of methane emissions. The waste industry nevertheless offers significant climate change mitigation potential at relatively low cost, through a wide range of strategies including direct reduction of GHG emissions, by landfill methane recovery and utilization; avoidance of GHG generation compared to landfilling (composting; incineration and other thermal processes; mechanical and biological treatment); and avoidance of waste generation. Waste-to-energy also maximizes energy recovery from waste. Finally, it was noted that some 17.5 per cent of projects under the Clean Development Mechanism of the Kyoto Protocol are registered as "waste handling and disposal" projects.
- 8. Ms. Marba Visagie from the Environment Directorate of the Department of Trade and Industry of South Africa, presented her government's program to promote recycling as an industry with the potential to offer environmental benefits and socioeconomic gains. She presented some examples of grass-root, small-scale initiatives that could play a role in the future of waste management in developing countries (e.g. coordinated recycling industry fora in support of decentralized, small-to-medium-size companies; employing rural people to weed out trees threatening the local bio-diversity and using this biomass for charcoal and electricity production; and online waste exchange projects).
- 9. Ms. Visagie asserted the need for affordable, labour-intensive environmental technologies and financing to get the wheel of job creation and environmental benefits spinning. In this regard, she pointed out the lack of a level playing field between developed and developing countries as regards the subsidies provided to the environmental industry.
- 10. In summing-up, Mr. Portas noted that the session had provided a broad range of perspectives on waste management and demonstrated the intense level of activities in this sector. The discussion highlighted the variety of sources from which information on environmental technologies could be gathered, including waste technologies that may have a bearing on reducing greenhouse gas emissions. There was a convergence of views on the fact that sound, proven and adequate environmental technologies have the potential to achieve significant progress in terms of social well-being, development goals and environmental protection. Furthermore, the sound management of waste and its minimization present economic opportunities, including recycling and other activities geared towards transforming waste into resources.