Summary of the Session on Air Pollution Control and Environmental Technologies[1]

1. The session on Air Pollution Control and Environmental Technologies was chaired by Pedro Roffe from the International Centre for Trade and Sustainable Development (ICTSD).

2. Mr. Xu Quinghua, from the Department of International Cooperation of the Ministry of Environmental Protection in China, described China's efforts and achievements with regard to pollution control and emissions reduction. The five-year national development plan, introduced in 2006, called for: reducing the energy-intensity of production by 20 per cent; SO_2 emissions by 10 per cent; CO_2 discharge by 10 per cent; and achieving a sewage treatment rate of no less than 70 per cent and a waste utilization rate of over 60 per cent. China further adopted a National Climate Change Plan in 2007 that set quantitative targets, such as sourcing 10 per cent of its energy from renewable resources; controlling methane emissions from paddy rice and animals; stabilizing levels of N_2O; and increasing carbon sequestration to 50 million tons by 2010. The programme is also aimed at promoting research and development, public awareness and cross-border technological cooperation and provides for the adoption of co-control measures to achieve co-benefits in terms of local air pollution and greenhouse gas (GHG) emissions reductions.

3. With regard to trade issues, in 2007 China introduced a 5-25 per cent export tariff on high energy and pollution intensive products. Regarding the current CTESS negotiations, Mr. Quinghua suggested to shift the debate towards environmental issues of global, rather than national, concerns calling for more coherence with Multilateral Environmental Agreements (MEAs). It was further suggested to categorize environmental goods based on their contribution to improving the indoor; local and regional; and the global environments.

4. The presentation by Professor Shozo Kaneko, from the Institute of Industrial Science of the University of Tokyo, focused on removal systems and related technologies for Sulphur Oxides (SO_x), Nitrogen Oxides (NO_x) and dust/particles, which could help prevent environmental and health hazards relating to acid rain, photochemical smog and dust and particulates matter. The removal efficiency of such systems was very high and could range between 90-99 per cent. In the case of SO_x, the removal systems create the building material Gypsum, an economically valuable by-product. It was noted that the cost of such systems increases with the degree of reduction and they require a significant amount of energy to operate (which usually increases CO_2 emissions). Professor Kaneko emphasized that private industries are reluctant to employ such systems, as they do not increase output, yet they require money and manpower to operate and maintain. In his view, government regulation was therefore necessary to provide incentives for private firms to use air pollution control equipment.

5. Professor Kaneko pointed out that the removal systems require generic parts, which can be used in other industries as well, as they are not specific to particle removal systems. Effective implementation also requires the training of operating staff, since the systems are care-intensive. Therefore, generic parts and system-specific services had to be taken into account in the current negotiations. An integrated approach to air pollution control goods and services was also necessary to ensure the successful transfer of the technology.

6. Mr. Peter Bruijns, the CEO of the Canadian company Biorem Technologies, presented the perspective of a small-scale start-up company in the rapidly developing field of biofiltration technologies. His company is involved in the design, manufacture and distribution of air emission control systems that remove harmful contaminants from the air, such as hydrogen sulfides, reduced sulfur compounds and volatile organic compounds (VOCs), using biological processes.

[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.

7. Mr. Bruijns highlighted the link between government regulation and market development and expressed the view that regulatory measures were lagging, in comparison with the pace of atmospheric deterioration. According to him, government policies and regulations often contributed to reducing the overall effectiveness of projects. Regulators are reluctant to support new technologies, which typically lack prior performance data. Small companies struggle with import tariffs and the lack of intellectual property rights protection in some countries. In governmental bidding processes, often sub-standard technologies win contracts and emissions equipment is shut off or fails within one year. There were hundreds of small-scale companies worldwide which could contribute to clean air should sufficient governmental support be available.

8. Mr. Thaddeus Burns from General Electric (GE) provided an overview of GE's activities in the air pollution control sector. For instance, GE manufactures and supplies gas engines used next to landfills that convert methane into energy. GE also works on smart grids to handle the volatility of energy produced by renewable sources such as wind turbines. Currently, two thirds of GE's growth is in emerging markets and the company intends to employ more people and open research labs in order to tailor technologies to local customers needs.

9. Mr. Burns noted that trade in environmental goods and services can stimulate the world economy while helping nations achieve their carbon reduction goals. In his view, many countries employ an inefficient mix of tariffs and non-tariff barriers on renewable technologies. For example, nearly 60 per cent of the WTO Members imposed a mean tariff of 7.4 per cent on wind turbines; and nearly 43 per cent imposed a mean tariff of 8.8 per cent on solar panels. It is also important that intellectual property rights protection be enforced world-wide. In his view, the lack of momentum in the DDA should not halt discussions on an agreement on environmental goods and services that could spur innovation and create incentives for carbon reduction.