## Chair's summary In-session mitigation workshops: Urban planning and development, including transportation Energy efficiency, including industry, and residential and commercial end-use Power generation, including clean fossil fuels and renewable energy

## SBSTA 26

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Three workshops on scientific, technical and socio-economic aspects of mitigation were held during this sessional period. The first one focused on urban planning and development, including transportation, and was held on Friday 11 May 2007. The other two were held on 15 May 2007 and focused on Energy efficiency, including industry, and residential and commercial end-use, and on Power generation, including clean fossil fuels and renewable energy.

All 27 presentations that we heard at the three workshops and their abstracts can be found on the UNFCCC web site. The workshops were open to all participants and were well attended. The question and answer sessions that followed the presentations provided for an active and productive exchange of views and lessons learned between the workshop participants.

The speakers of the workshops addressed a wide range of issues related to mitigation, and shared with us information on a variety of mitigation options and experiences in mitigation efforts in different countries. We heard presentations that covered economic aspects of climate change mitigation options, the associated costs and co-benefits, the role of policies, markets, technology and needs, but also presentations showing that mitigation in these sectors can make a contribution to sustainable development. Other presentations identified possible mitigation options under different national circumstances.

I would like to offer some observations from the presentations and discussions that followed.

- In 2007, 50 per cent of humanity lived in cities. This figure alone demonstrates the important role that urban planning and development has in achieving a more sustainable development, both in developed and developing countries.
- Urban areas and urban transport provide significant potential to reduce greenhouse gas emissions and can contribute to the global mitigation effort through, for example, energy efficient and environmentally sound technologies for the buildings sector, higher insulation standards for new and existing buildings, promotion of public urban transport, walking and cycling, and an integrated approach towards urban transport planning.
- Emissions from the transport sector are growing faster than those from all other sectors. Experience gained on tackling CO<sub>2</sub> emissions from cars shows that voluntary agreements with car manufacturers provided some effects in the EU, but need to be further strengthened and amended by other instruments, if the defined goals are to be met on time.
- Urban areas generally face many pressures other than climate change, including poor air quality, traffic congestion, heat island effects and noise. Policies and measures aiming towards a more sustainable urban transport and urban planning offer a considerable synergy potential in most of these fields. Well planned cities are an efficient use of space and energy. Urban areas in developing countries will increasingly become important in addressing climate change, but will need further technical, logistical and financial support to successfully undertake relevant actions.
- Participation of various stakeholders in urban planning is seen as key to success: governments at the national level can create the overall framework or environment for action, whereas local

authorities can focus on more concrete planning of mass transport, and develop a strategy towards sustainable cities. The private sector can provide new technologies and products or services to urban areas.

- Current trends of energy use are not sustainable. The scenarios of the International Energy Agency highlighted the size of the mitigation challenge that we have ahead of us.
- Energy efficiency measures are of strategic importance in energy policy and planning for all countries as it has the potential to reduce CO<sub>2</sub> emissions and contribute to energy security, to control energy costs, to increase investments in the energy infrastructure and to result in greater national competitiveness in the medium to long-term. Other mitigation options include efficient transformation of primary energy to end-use energy, efficient utilization of end-use energy and increased use of renewable energy.
- Technological solutions such as Carbon Capture and Storage, renewable energy technologies, and second generation of bio-fuels are considered important for future developments in the power generation sector to address climate change.
- Implementation of innovative technologies would offer clear environmental benefits but would also require strong international collaboration to introduce these technologies commercially. Appropriate legal and regulatory frameworks would help progress in technological developments.
- Options for mitigation, however, largely depend on national circumstances and regional differences. In many countries existing technologies can be used to reduce energy demand, especially in the residential and commercial sectors. Although their full potential has not been realized, existing technologies are not enough to address the climate change challenge. New and cost-effective technologies for mitigating GHG emissions in industry, residential and commercial sectors need to be developed further.
- Several non-market barriers impede the further development and diffusion of existing low and high-cost technological options that can be used to reduce greenhouse gas emissions. Strategies should be developed to address these barriers.
- Enabling environments, financial and fiscal mechanisms supporting energy efficient technologies and limiting usage of energy intensive devices, institutional innovations and public awareness activities are some of the instruments available to promote technologies. Further international co-operation as well as the development of global carbon markets can promote the transfer of best available technologies and technological R&D.

Finally, I would like to thank the presenters for their valuable contributions and the secretariat for its support in organizing three productive and interesting workshops.