Seminar of Governmental Experts (16-17 May 2005) Abstract of a presentation by Germany on behalf of the European Community and its member States

The Innovation challenge - Risks, urgency and opportunities

Climate change requires substantial changes in how the world produces and uses energy. As worldwide demand for energy and transport services will continue to grow, the reduction of greenhouse gas emissions will need to be realised through technologies based on lower carbon intensity per unit of service than current technologies.

This risk of rapid further growth in emissions calls for urgent policy responses. Technological change in all economic sectors will be required. How can we make sure that the technological innovation linked to ongoing investment cycles will reflect the needs of tackling climate change? Long lasting effects of today's investment decisions could cause lock-in effects into high-emission pathways. What are cost efficient options to avoid this? Many technologies to reduce greenhouse gas emissions either exist already or are at an advanced pilot stage. However many promising technologies face very limited market up-take. How can be ensured that these technologies are taken up by mainstream markets? How can we enhance the transfer and diffusion of technologies across the world?

Two main complementary strategies will be further elaborated:

- 1. Pulling technological change or: how can we ensure the right incentives?
- 2. Pushing technological change or facilitating technological breakthroughs Another issue that will be elaborated is how the UN process could open up for technological policy opportunities.