

Summary of the Session on Technology Transfer¹

1. The session was chaired by Mr. Pedro Roffe from the International Centre for Trade and Sustainable Development (ICTSD).
2. Dr. Heinz Leuenberger from UNIDO made a presentation on transfer of technology for sustainable industrial development. He began by explaining the context and global challenges in the arena of sustainable development, while highlighting that many industries use more materials and energy than their production processes require. One of the main points in the presentation was the need to decouple economic growth from natural resource use. Since many small and medium size enterprises in developing countries continue to use inefficient processes, improvements in resource efficiency could have significant effects in strengthening local enterprises.
3. Based on estimated figures, the global market volume for environmental technologies will more than double from 2005-2020, with greatest gains in the energy efficiency sector. It was noted that the technology transfer process included five steps, namely: assessment, agreement for transfer, implementation, evaluation and adjustment, and replication. The importance of replication of technology was stressed, in that if a project involved only one case of technology transfer without replication, it would likely fail to have significant sustainable effects. In addition, Dr. Leuenberger noted that one should focus not only on the transfer, but also on the deployment and diffusion of technology.
4. Several technology transfer barriers were mentioned, including the lack of knowledge and human resources within countries, as well as the lack of appropriate intellectual property rights protection. It was noted that most of the envisioned technologies are older and are not bound by many patents. However, it has been observed that many companies remain unwilling to transfer technology due to lack of appropriate (IP) protection.
5. Dr. Leuenberger explained that green credit lines (GCTF) could promote long-term investments in cleaner production technologies. These will be provided by local financial institutions and range between US\$ 25,000 and US\$ 1 million.
6. The presentation emphasized the importance of creating an appropriate enabling environment for technology transfer to occur not only by eliminating transfer barriers, but also by developing institutions and human resources.
7. Dr. Muthukumara Mani from the World Bank gave a presentation on the issue of trade and technology transfer in the context of climate change. He emphasized the importance of technology transfer given that climate change will continue to pose increasingly severe challenges to development. As a result, urgent action will be required to foment technology transfer.
8. In describing some of the current mechanisms for climate technology transfer, Dr. Mani mentioned that certain programs, like the Clean Development Mechanism or Joint Implementation under the Kyoto Protocol of the UN Framework Convention on Climate Change, had underperformed due to cumbersome approval processes, issues regarding verification, etc. He said that public financing for clean energy, in the form of official development assistance, is an important catalyst but is expected to contribute only a small share of the total investment needed for low-carbon transition in developing countries. As regards to trade, high tariffs and non-tariff barriers and the lack of complementary policies for market creation (including government regulation, feed-in tariffs, finance and standards) were mentioned as potential obstacles.

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9. In his view, the private sector was operating in a constrained environment. Several factors contribute to driving private sector investment in climate-friendly technologies, for instance: the general climate for doing business; domestic energy policy and regulation; voluntary and binding commitments towards GHG emissions reduction; availability of climate finance; domestic carbon markets; IP regimes; and market-based incentives such as labelling.

10. Lastly, Dr. Mani introduced a new World Bank initiative which involved the creation of a Climate Change Technology Investment Index (CCTII). The Index will comprise data on policy and regulation, as well as information on opportunities for climate investment and financing and on market-based mechanisms. It will allow the World Bank to rank countries across different categories and make cross-country comparisons, and will serve as a transparent tool to stimulate clean investments.
