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Development and transfer of technologies

**Summary of the senior-level round-table discussion on international
technology cooperation and partnerships in the development,
deployment, diffusion and transfer of environmentally sound
technologies and know-how**

Note by the secretariat

Summary

The round-table discussion between governments, international financing institutions, the private sector and other stakeholders was organized in order to present different experience and lessons learned, and strategies for short- medium- and long-term international technology cooperation and partnerships in the development, deployment, diffusion and transfer of environmentally sound technologies and know-how. Participants emphasized the importance of government, public-private and private-sector initiatives in technology cooperation and technology transfer, highlighting experiences, lessons learned, and needs and concerns drawn from existing international technology cooperation initiatives, partnerships and agreements.

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I. Introduction

A. Mandate

1. The Conference of the Parties, by its decision 6/CP.11, requested the secretariat to organize a senior-level round-table discussion between Parties, international financing organizations, the private sector and other stakeholders at the twenty-fifth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) to discuss and exchange views on issues, experience and lessons learned, and strategies for short- medium- and long-term international technology cooperation and partnerships in the development, deployment, diffusion and transfer of environmentally sound technologies (ESTs) and know-how to enable more informed decisions on action in the future.

B. Scope of the note

2. This report summarizes the presentations and discussions that took place at the round-table event. The lessons learned on what makes technology cooperation work and the suggestions about possible further activities on technology cooperation and partnership arising from the round-table event could serve as input to ongoing discussions on the potential role of technologies in the short, medium and long term under the United Nations Framework Convention on Climate Change (UNFCCC) process.

C. Possible action by the Subsidiary Body for Scientific and Technological Advice

3. The SBSTA may wish to take note of the information contained in this document and determine what additional action it wishes to take, including when considering possible actions to enhance the implementation of the technology transfer framework, and ways and means for realizing the full potential of technologies in the context of long-term cooperative action to address climate change.

II. The round-table discussions

4. The round table was held on 14 November 2006 in Nairobi, Kenya, and was moderated by Mr. Yvo de Boer, Executive Secretary of the UNFCCC. The event was structured as a panel discussion divided into two sessions:¹

- (a) Three introductory presentations, which set the scene for the discussions by focusing on what worked in technology cooperation and on lessons learned. These presentations covered issues relating to existing national technology programmes and international technology cooperation and partnerships, including the role of governments and the private sector in such activities;
- (b) Moderated panel discussions, which focused on infrastructure and governance, markets, trade rules and investment, and included case studies. During this session, after opening statements by the moderator, each panel member made a statement. These statements were followed by remarks by the moderator and, at the end of the session, by a general discussion.

5. Some 200 participants representing Parties, international organizations, business and industry, non-governmental organizations (NGOs) and the media attended the round-table event. The video

¹ The panellists are listed in the annex to this document.

webcast of the event is available on the UNFCCC website² and the presentations and other related materials are available on the UNFCCC technology information clearing house (TT:CLEAR).³

III. Summary of presentations and discussions

A. General issues

6. Panel members highlighted the importance of the development and transfer of ESTs, under the UNFCCC and other forums, as a key part of global action to combat climate change and to enable people and societies to adapt to changes that may occur. In this context, they underlined the equal importance of technologies for the mitigation of, and adaptation to, climate change, and of hard technologies (e.g. equipment, machinery and tools) and soft technologies (e.g. skills, knowledge, expertise, know-how and “know-why”).⁴

7. The presentations and panel discussions addressed the two broad policy options for stimulating the development of climate-friendly technologies: technology-push approaches, through efforts to stimulate research and development (R&D) of technologies that could lower the cost of achieving long-term mitigation objectives but which are not competitive in existing markets (e.g. through publicly-funded R&D and R&D tax credits); and market or demand-pull approaches, to enhance the demand for lower-emission technologies by increasing incentives to improve such technologies (e.g. through emission taxes, renewable portfolio standards,⁵ adoption subsidies and direct public-sector investment).⁶

8. Several panellists stressed that there is no “silver bullet” for tackling the climate change issue and that a broad portfolio of technologies is needed if we are to meet the world’s growing energy demands. Some of these technologies, such as energy efficiency and renewable energy technologies, have significant potential in addressing the climate change issue in the short term. Others, such as carbon capture and storage and fusion, are expected to contribute in the long term.

9. Although most panellists recognized the important role governments could play in the development and transfer of technologies, the private sector was highlighted as a key partner for the success of technology transfer. It was noted that private-sector participation should be encouraged in technology cooperation activities, including through public–private partnerships (PPPs), through instruments such as subsidies, tax measures and feed-in tariffs for market stimulation, which could attract private funds and thus create a financial multiplier for the limited public funds available for these activities (see para. 19 below). The discussions highlighted the experience of the Global Environment Facility (GEF) in combining public–private finance, bringing this finance to the market, and using it to benefit developing countries, including through technology transfer.

² See <<http://www.un.org/webcast/unfccc/archive.asp?go=110://cop9.str3.com/>>.

³ See <<http://ttclear.unfccc.int>>.

⁴ The panel member from Japan gave the following examples: hard technology – a wind-power plant in Zafarana, Egypt; soft technologies – the Turkish National Energy Conservation Project and a clean development mechanism centre in China; and hard and soft technology – a greenhouse observing satellite to be launched in 2008 to measure the concentration of carbon dioxide and estimate the carbon balance.

⁵ Such standards require a certain percentage of power plant capacity or generation to come from renewable sources by a given date.

⁶ The terms “push” and “pull” are sometimes used in the context of enabling environments for technology transfer: “push” refers to measures in the country from which the technology originates; “pull” refers to measures in the recipient country.

B. Approaches, initiatives and instruments

10. The panel member from Japan emphasized the importance of government, public–private and private-sector initiatives in the development and transfer of technology. With regard to government action, he mentioned official development assistance (ODA) as one source of funding for technology transfer, and reported that Japan’s ODA had more than doubled between 1994 and 2004, while the share of environmental expenditure in its total ODA expenditure had increased from 14 to almost 40 per cent. He stressed, however, that public funds available to combat climate change are limited. For example, the costs of future energy investment needs up to 2030, estimated recently by the International Energy Agency (IEA) at USD 20 trillion, cannot be met without substantial involvement on the part of the private sector.

11. With regard to PPPs, this panel member highlighted numerous successful cooperation activities between the government and the private sector. He mentioned that Japan is participating in 68 clean development mechanism (CDM) projects and four joint implementation (JI) projects which will result in emissions reductions of about 4 million tonnes of carbon dioxide (CO₂) equivalent per year. He also mentioned international initiatives as one of the key elements of technology cooperation. The panellists from Japan and the United States of America gave an example of the Asia–Pacific Partnership on Clean Development and Climate, which was established in July 2005 with the participation of Australia, China, India, Japan, the Republic of Korea, and the United States of America, as a PPP. The partnership is seen as an initiative that is complementary to the Kyoto Protocol, and it has eight task forces which conduct project-based activities focusing on energy technologies by using a sectoral approach.

12. While highlighting that in Japan the private sector is working actively on many international cooperation projects,⁷ this panel member pointed out two important aspects relating to private-sector participation that need to be addressed: ensuring the continuity of private sector R&D on ESTs; and promoting small projects, appropriate for developing countries, which use not only innovative but also conventional technologies.

13. The panel member from the United States of America highlighted his country’s approach to harnessing the power of markets for technological innovation and economic growth, and to encourage global participation. The approach has four basic elements: (1) near-term policies and measures (e.g. financial incentives, standards, regulations and voluntary programmes); (2) improved climate science; (3) advanced technologies; and (4) international collaboration. The Climate Change Technology Program is at the forefront of efforts related to technology cooperation. The main goals of this programme are: to reduce emissions from energy end-use and infrastructure; to reduce emissions from energy supply; to capture and sequester CO₂; to reduce emissions of non-CO₂ greenhouse gases (GHGs); to improve capacity to measure and monitor emissions; and to bolster basic science.⁸ The programme provides a road map for the development of climate change technology in the near, medium and long term for the first five of these goals.

14. He also mentioned partnerships with other governments, NGOs and the private sector as key elements of work on technology development and cooperation. He indicated that this work is carried out through international cooperation, bilaterally using technology development programmes, and multilaterally in technology partnerships (table 1 below provides examples of such technology partnerships initiated by the United States of America).

⁷ Examples given include: waste heat/gas utilization technology – coke dry quenching for the Shoungang group in China; and small wind-power generators in India and Cambodia.

⁸ USD 14.3 billion for the period 2001–2006 and USD 3.0 billion for 2007 were requested to support the programme.

15. The representative from the European Commission, highlighted approaches to make technology cooperation work by using technology “push” instruments to subsidise new technologies (e.g. guarantee demand, setting standards, large-scale demonstrations and PPPs for technology development) and market “pull” instruments (e.g., the European Union (EU) Emissions Trading Scheme, abolition of fuel subsidies and feed-in tariffs, and co-benefits such as security of supply and rising oil prices).

Table 1. Examples of US-initiated international technology partnerships

Name	Participation	Goals
Asia-Pacific Partnership on Clean Development and Climate	Six members (Australia, China, India, Japan, Republic of Korea, United States of America)	Develop and accelerate deployment of cleaner, more efficient energy technologies to meet national pollution reduction, energy security and climate change concerns in ways that reduce poverty and promote economic development
Carbon Sequestration Leadership Forum	22 members	Focus on carbon dioxide capture and storage technologies
Generation IV International Forum	11 members	Focus on research and development (R&D) of the next generation of nuclear systems
Global Nuclear Energy Partnership	Seven members	Develop worldwide consensus on enabling expanded use of economical, carbon-free nuclear energy to meet growing electricity demand, by using a nuclear fuel cycle that enhances energy security, while promoting non-proliferation
Group on Earth Observations	66 member countries, the European Commission, and more than 40 participating organizations	Design and implement a new Global Earth Observation System of Systems that would provide data relevant for climate change as well as disaster reduction activities
International Partnership for the Hydrogen Economy	17 members	Organize, coordinate, and leverage R&D on hydrogen technologies and programmes
Methane to Markets Partnership	18 members	Recover and use methane from landfills, mines, agriculture and natural gas production systems

16. He also highlighted three stages in technology development: research and technology development, demonstration and deployment. He said that in the research and technology development stage, public money may be used when the availability of private-sector funding is limited because there is no return on capital investment and the technical risks are high. In the demonstration stage, a combination of public and private funding is a possible solution, since there is a need for financial support on a large scale but returns are still uncertain and technical and political risks are high. In the deployment stage, substantial financial support is still required, but once technologies are commercially available, and returns on investment and risk have reached normal market levels, there is room for private-sector involvement.

C. Strengthening the participation of the private sector

17. The panel member from the World Business Council for Sustainable Development stated that countries cannot really transfer technologies, because this is primarily a case of cooperation between buyers and sellers. It is a long-term process that requires both hardware and software. He stated that the majority of technology flows take place within multinational companies and their joint ventures, which use hard and soft technologies to train experts, to manage projects and to monitor their performance. In this context, it is important to see technology cooperation as part of a broader process.

18. He mentioned that from a private-sector perspective there are three main reasons to invest in developing countries: access to resources, access to markets and the creation of supply chains. In the

absence of these incentives, it is unlikely that the private sector will participate in technology cooperation. He also noted that more than 90 per cent of economic activity in developing countries is based on small and medium-sized companies, which require approaches to technology cooperation that are different from those that are appropriate to large companies, since these companies are less active in big forums, conferences and events. He further noted the role played by the Expert Group on Technology Transfer (EGTT)⁹ in promoting PPPs and in creating mechanisms for technology transfer and technology cooperation.

19. While the private sector has a major role to play in technology cooperation and transfer, public funds should be used effectively to leverage large private investments and therefore create a financial multiplier. Governments can create incentives for private-sector participation through instruments such as subsidies, tax measures, fiscal measures and feed-in tariffs. The role of public funds is important at the beginning of the cycle when technologies offer only a low return on investment, but then gradually the private funding can take over.

20. The panel member from the GEF indicated five major issues that need to be addressed for successful technology transfer with the participation of the private sector: a favourable policy and regulatory environment; access to high-quality technology; the use of successful and proven business models; increased user awareness of the available technologies and their benefits; and the availability of financing.

21. She noted that, since the inception of the GEF, some USD 2 billion have been provided for the climate change focal area, which has resulted in about USD 12 billion in co-financing over that period, and that most of this funding has supported the transfer of mitigation technologies in projects that reflected the national priorities of the countries involved. Referring to the GEF experience, she said that technology transfer is possible, but it is not an easy task, particularly for the transfer of recently developed technologies.¹⁰ Technology transfer can only be successful with the support of all relevant actors, led by the cooperation of governments with the private sector. The GEF cannot transfer technologies without partnerships, and governments should establish policies that give the private sector the confidence to invest in, purchase and use climate-friendly technologies.

22. Several panel members mentioned the future development and stability of carbon markets as an essential element that can help to increase technology development, investment and diffusion, while strengthening the participation of the private sector. For example, the panel member from Germany said that creating additional investment incentives, such as further development of the flexible mechanisms under the Kyoto Protocol – the CDM and JI – could strengthen the participation of the private sector. This could provide a strong signal concerning the future, as the industry is increasingly worried about global carbon markets after 2012.

23. He mentioned that small objectives will produce modest solutions which would not help – incremental reductions will lead to only incremental incentives.¹¹ He noted three conditions which would create enabling environments and foster investment in developing countries: proper legal frameworks, transparent rules and certainty of investment conditions for short-term planning. Many companies will not invest in developing countries if their intellectual property rights (IPRs) are not protected and if capacity-building in the host country is inadequate. He stressed that the IPRs and

⁹ Established by decision 4/CP.7 with the objective of enhancing the implementation of Article 4, paragraph 5, of the Convention.

¹⁰ The participation of developed countries in the development of such technologies is key for an effective transfer of that technology.

¹¹ For example, industry will be more attracted to investing in efficient coal-fired power plants than by a change of technology.

technologies are in the hands of the private sector; therefore the question is how we can significantly enhance private-sector engagement. Governments can contribute to this by creating platforms for relevant players, establishing business contacts and intensifying the energy dialogue.

24. In response to a question regarding the experience of the GEF with purchasing licences for small coal-fired boilers in China (see para. 31 (d) below) and its relevance to the IPR issue, the panel member from the GEF explained that the approach of purchasing licences could be used if the proper enabling environments are established by the recipient country. The Montreal Protocol on Substances That Deplete the Ozone Layer has been using this approach successfully for the last 15 years to transfer technologies, and this positive experience could be applied to climate change as well. She also highlighted another approach, based on the experience of the United Nations Environment Programme, which consists of encouraging the public and private sectors to develop technologies jointly and transfer them to developing countries. One participant underlined that the licensing agreement to which the panel member from the GEF was referring was part of a commercial transaction under which that technology was accessed under well-defined conditions. It was therefore a commercial practice that did not affect the ownership of the IPRs for that technology.

D. Better use of existing financial instruments

25. The panel member from the World Bank indicated that existing financial instruments could be better adapted to reflect the needs of the market relating to technologies. She stressed that the carbon market had opened a door to PPPs. The World Bank Investment Framework for Clean Energy and Development is an example of the use of existing financial instruments that contribute to tackling climate change. It is, however, a question of scale, as existing instruments may not be sufficient, and more private capital needs to be mobilized in order to achieve the objectives.

26. She mentioned that the World Bank could do more to stimulate demand for low-carbon technologies in developing countries in the future, to strengthen the policy dialogue and to consider the technological dimensions in sectoral policies. A combination of bilateral and multilateral funding could also play a role.

27. The panel member from the GEF noted that the GEF is currently developing the “GEF for private sector initiative” on which it plans to spend USD 50 million, leveraging another USD 250 million to help transfer technologies into developing country markets together with the private sector, which is invited to help design, co-finance and manage this initiative. At present there is a need to support pilot activities in the adaptation area, and the GEF is therefore budgeting about USD 200 million to fund adaptation projects around the world.¹²

28. The panel member from Mexico mentioned that, from the point of view of a developing country, it is important: to assess whether the technology is appropriate for the development of the country concerned; to consider what would be the role of the technology in that development; and to create the markets to make technology transfer easier. Economies of scale also play an important role in bringing down the costs of investment.

29. Mexico, for example, is taking advantage of lowering of costs by the private sector, but is also providing the right policy environment and signals for long-term investment. The country has significant experience in the deployment of energy-efficient appliances for households via energy efficiency funds created by the private sector. Households borrowed from these funds to replace energy-inefficient appliances, and the cost to them was paid for by savings on energy bills. Mexico is building

¹² This amount will be provided by the GEF Trust Fund’s Strategic Priority on Adaptation, the Special Climate Change Fund and the Least Developed Countries Fund.

about 500,000 houses per year on average, and the question remains as to how to ensure the deployment of the proper technologies for these houses.

30. A participant asked how the process of technology cooperation will continue. He noted the importance of PPPs for future debates, while recognizing the complexity of such partnerships. In response, one panel member highlighted the World Bank Investment Framework for Clean Energy and Development as an example of current approaches to meet future energy demand while at the same time addressing the climate change challenge.

E. Potential engagement of the United Nations Framework Convention on Climate Change

31. Panel members mentioned the following areas where the UNFCCC could contribute to technology cooperation activities between Parties:

- (a) Sharing information on successful technology cooperation and partnership, best practices and benchmarks;
- (b) Disseminating expertise in determining the cost-effectiveness of technology options, in order to enable the existing financial resources and environmental expertise to be used in a more efficient way;
- (c) Raising awareness of successful examples of technology cooperation and partnerships, and identifying the gaps in the process (here the role of the EGTT was highlighted, including its proposed new activities on innovative financing and collaborative R&D on technologies);
- (d) Encouraging a broader technology development process, relevant regulations, voluntary programmes and international cooperation;
- (e) Providing support to Parties' work on enabling environments for the development and transfer of technologies, and promoting a dialogue with the private sector and the financial sector;
- (f) Encouraging the participation of the private sector and fostering private investment by promoting or creating an enabling environment.

32. One participant questioned whether the current technology cooperation process is fast enough to achieve the general objectives set. He also questioned the ability of the UNFCCC to share information, disseminate expertise to determine the cost-effectiveness of technology options, or encourage better use of the resources available for technology cooperation. In response, the panel member from the United States said that it is important to realize that the overall cost-effectiveness of a technology depends on where it is implemented and it is not easy to develop a knowledge base with such information. We should therefore rely mainly on information provided by technology developers, financial institutions and project developers.

F. Examples of technology cooperation activities

33. Examples presented during the round-table discussion highlighted experiences with technology cooperation partnerships promoted by government funds, PPPs and private investment. The following positive experiences were mentioned by panel members representing government and international organizations.

- (a) **FutureGen** is a USD 1 billion international PPP to pioneer coal-to-hydrogen and carbon management technologies. FutureGen will be the world's first zero-emission power

plant and an international test facility that pioneers advanced production of hydrogen from coal, emits virtually no air pollutants and captures and permanently sequesters CO₂.¹³

- (b) The **Methane to Markets** partnership, under which 18 countries and about 350 private energy financing institutions and NGOs are cooperating to put together projects for the advanced recovery and use of methane at landfill sites, in gas systems or in animal waste management systems. These projects generate benefits such as promoting energy security, reducing GHG emissions and improving environmental quality.¹⁴ By 2015 it is estimated that the partnership could deliver a reduction of GHG emissions of up to 180 million tonnes of CO₂ equivalent. The United States has committed some USD 53 million over five years (USD 5.4 million in 2005) to implement a range of activities, including training and capacity-building, market development, feasibility studies and technology demonstrations. This relatively small amount has helped leverage more than USD 235 million to finance methane projects globally, and implementation of projects planned in the future is estimated to result in annual emission reductions of approximately 15 million tonnes of CO₂ equivalent per year.
- (c) The **Famine Early Warning System** is an activity funded by the United States Agency for International Development and carried out in collaboration with international, national and regional partners (including some 20 African countries) to provide timely and rigorous early warning and vulnerability information on emerging or evolving food security problems. It also focuses on strengthening African early warning and response networks through capacity development, building and strengthening networks, developing policy-relevant information, and forming consensus about food security problems and solutions. Remotely sensed data and ground-based meteorological, crop and rangeland conditions are analysed to project potential threats to food security.
- (d) Transfer of a few major technologies and technologies at an early stage of development, supported by the GEF. Examples include small-scale coal-fired boilers in China, where the GEF has assisted in the provision of a licence to produce an efficient design (currently used by several different manufacturers in China producing more than 100,000 new, good-quality boilers); and a project on the capture and utilization of methane from organic waste in India. In the latter, a national research institute and a local company developed systems for capturing and using methane from paper and pulp, the GEF supported the government to stimulate a more effective policy, and cash incentives provided for the CDM projects are now leading to methane projects being financed on a large scale throughout India.
- (e) Examples of EU support to technology cooperation activities, grouped according to the three stages of technology development, are given below:¹⁵

¹³ The United States Department of Energy (which has pledged USD 54 million in 2007) is to share the project costs with the FutureGen Alliance (which includes 11 large coal and power producers from Australia, China, the United Kingdom of Great Britain and Northern Ireland and the United States of America and has pledged USD 250 million). India and the Republic of Korea have joined the partnership and each has pledged USD 10 million.

¹⁴ The reduction of methane emissions is beneficial for the ozone layer and human health, reduces the risk of gas explosions in coal mines, provides opportunities to produce power, and enhances local development.

¹⁵ For additional examples of EU-sponsored technology-based activities and partnerships relevant to the Convention, see FCCC/SBSTA/2006/MISC.10, page 19.

- (i) Research and technology development under the 6th Framework Programme (for the years 2002–2006), which provided more than EUR 420 million per year (under energy, transport, and global climate change and ecosystems), and under the 7th Framework Programme (for the period 2007–2013), which provides more than EUR 1.1 billion per year (energy – EUR 2.2 billion, transport – EUR 4.1 billion, and environment – EUR 1.8 billion over the full period of the programme). The EU is also pursuing scientific agreements with the United States of America, China, India and the Russian Federation, as well as technology platforms on hydrogen and fuel cells for zero-emission fossil fuel power plants, and a forest sector technology platform. These activities bundle all research-related EU initiatives together and play a crucial role in reaching the goals of growth, competitiveness and employment;
 - (ii) The examples relating to demonstration projects included information-sharing (REN21) and financial support (COOPENER, LIFE – Third countries, the Environment and Tropical Forest Budgetline, and the EU–China Energy and Environment Programme);
 - (iii) The examples relating to technical deployment included policy dialogues (the EU–Russian Federation Energy Dialogue and the EU–India Energy Panel), policy design/capacity-building (bilateral initiatives, the Renewable Energy and Energy Efficiency Initiative, and COOPENER), joint private-sector initiatives (Asia Pro-Eco), risk capital (the Global Energy Efficiency and Renewable Energy Fund which helps to make the transition from the non-commercial to the commercial stage), investment support (the EU Energy Facility with the African, Caribbean and Pacific countries, and the European Investment Bank Investment Facility), and the CDM (EUR 2.5 billion for the period 2007–2012).
- (f) EU bilateral initiatives (e.g. the EU–India Initiative on Clean Development and Climate Change, the EU–China Partnership on Climate Change, the EU–Russian Federation Working Groups under the Permanent Partnership Council, the EU–United States High-level Dialogue on Climate, Clean Energy and Sustainable Development), international partnerships (e.g. the Carbon Sequestration Leadership Forum and the International Partnership for the Hydrogen Economy) and international policy processes (e.g. the Gleneagles Dialogue and the Johannesburg Renewable Energy Coalition).
 - (g) The German Energy Agency (Deutsche Energie-Agentur – DENA), which is supporting the export of renewable energy technologies from Germany and intends to promote energy efficiency. The agency has a budget of EUR 1.6 billion for bilateral cooperation, and is running projects in 45 partner countries. One group of activities is dedicated to a PPP initiative, and the range of its activities could expand in future.

IV. Topics for further consideration

34. During the round-table discussion, participants proposed a number of topics for further consideration. These are presented below:

- (a) Combining multilateral and bilateral, public and private-sector funding more effectively to continue the carbon finance regime. This could include options to use public funds to leverage large private investments and create a financial multiplier, taking into account the varying context of different technology partnerships, all of which have different design aspects.

- (b) Promoting information exchange on international technology cooperation and partnerships, and providing a forum for the sharing of experiences and good practices, and linkages with ongoing work under the Convention and its Kyoto Protocol.
- (c) Strengthening the participation of the private sector in international technology cooperation and partnership activities. Incentives for such participation could be created through subsidies, tax measures, fiscal measures, feed-in tariffs and other initiatives. The continuity of carbon markets could also safeguard future investment in climate-friendly technologies.
- (d) Strengthening the role of governments in establishing an environment that is conducive to investment in technology development and transfer, building local capacity, and creating cost-competitive technologies.
- (e) Analysing the role licensing and IPRs could play in enhancing technology cooperation activities.
- (f) Enhancing the participation of developing countries in international technology cooperation and partnerships, and replicating the good experience of existing partnerships with other technologies.

Annex

Agenda of the senior-level round-table discussion on international technology cooperation and partnerships in the development, deployment, diffusion and transfer of environmentally sound technologies

[ENGLISH ONLY]

Opening address
<ul style="list-style-type: none"> • Mr. Yvo de Boer, Executive Secretary of the UNFCCC, Moderator
Setting the scene
<ul style="list-style-type: none"> • Mr. Kazuhiko Hombu Deputy Director-General for Energy and Environment, Ministry of Economy, Trade and Industry, Japan • Mr. Harland L. Watson Senior Climate Negotiator and Special Representative Department of State, United States of America • Mr. Thomas Verheye DG Environment, European Commission
Moderated discussion
<ul style="list-style-type: none"> • Mr. Josée Ramon Ardavín Ituarte Undersecretary for Environmental Regulation Mexico • Mr. Hans-Peter Hofmann Head of Task Force on Environmental and Biopolitical Issues of Foreign Affairs, Federal Foreign Office, Germany • Ms. Monique Barbut Chief Executive Officer and Chairperson Global Environment Facility • Ms. Joëlle Chassard Manager, Carbon Finance, The World Bank • Mr. Björn Stigson President, World Business Council for Sustainable Development
Wrap-up
<ul style="list-style-type: none"> • Mr. Yvo de Boer, Executive Secretary of the UNFCCC, Moderator
