

MULTILATERAL ENVIRONMENTAL AGREEMENTS AND PRIVATE INVESTMENT: OECD WORKSHOP, HELSINKI, 16-17 JUNE 2005

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Improving cooperation and encouraging private investment to strengthen MEA implementation

How can intergovernmental organisations promote private investment that supports MEA implementation? The example of the United Nations Environment Programme (UNEP)

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- I am both honoured and happy to make this presentation, and would like to congratulate the OECD for organizing this timely workshop. It is clear that we need far more collaboration and innovation between the public and private sectors in support of MEA implementation, and especially on reshaping and redirecting private investment flows. If we do not immediately start to make sustainable investments in the key economic sectors that the MEAs address, these agreements will never be effectively implemented. We must urgently establish the new types of partnerships and mechanisms to deliver those investments.
- UNEP occupies a unique position on the interface between the private sector and MEAs. This agency initiated and hosted the negotiations that gave rise to many of the MEAs, and delivers many capacity building and technology support activities in support of their implementation. We also have an extensive programme of collaboration with the private sector through the Division of Technology, Industry and Economics. This has given us important insights and experience in aligning market based-instruments with regulatory frameworks, and encouraging the private sector to make investments and conduct their business in more environmentally friendly and resource-efficient ways.
- This experience has underlined the importance of making the “business case” for any actions required to protect the environment, which are not clearly set out in regulations. Given the flexibility of MEA frameworks, and the discretion that is left to national policy makers in their implementation, making this business case will be crucial if we are to increase private investment flows which support them.
- I will give examples of how this has been done in the area of cleaner production. This is followed by an examination of how a combination of market creation, financial assistance and technology cooperation is helping to rebuild the ozone layer. I will also survey activities in the energy sector, where UNEP is constructing new incentives and financial mechanisms with the private sector, to stabilize our climate. Finally I will mention the circular economy approach that we are currently developing in China, which will enable us to support a range of MEAs through more balanced industrial and economic development.

Investment for cleaner production

- UNEP's work in the area of Cleaner Production, a proven approach for reducing pollution at source, is designed to influence business decision makers' choice of technologies and investments. Demonstration projects are designed to show the financial and business benefits from cleaner production, including enhanced competitiveness, improved market image, and the development of new business opportunities including new markets. Highlighting resource use efficiency and/or reduced waste treatment or disposal costs encourages business to adopt practices and make investment decisions which support agreements like the UNFCCC and Basel Convention.
- Our experience shows that private investment can be attracted for implementing measures for reducing hazardous wastes, thus leading to higher resource use efficiency and reduced waste treatment or disposal costs. However, many developing countries still lack the capability to design the appropriate policy frameworks, or establish partnerships with industry which effectively combine business objectives with those of MEAs and/or national environmental policies. Much of UNEP's work on Cleaner Production is designed to build that capacity.
- This is best demonstrated by UNEP's experience in a number of projects which support MEA implementation through Cleaner Production.
- **In the Swedish funded project "Greenhouse Emission Reduction from Industry in Asia and the Pacific" (GERIAP)**, UNEP has shown how industry can improve energy efficiency and reduce costs and greenhouse gas emissions by using Cleaner Production. Many **cost-saving** options were identified at the 40 companies involved – options which directly or indirectly support Kyoto Protocol implementation in the nine participating countries. Targeted sectors were steel, pulp/paper, chemicals, ceramics, cement. About 50% of the options identified required no or low investment costs and were implemented by the companies.
- For example, a participating steel plants has improved the energy efficiency of two of its turbo generators in its thermal power plant, by installing a new cleaning technique for the condenser tubes. This led to annual electricity savings of 19,552,320 kWh, resulting in 17,460 tons of CO₂ reductions each year. The new equipment cost USD 23,256 to purchase and install, leading to monthly savings of USD 63,725. In other words, the initial investment was repaid within less than two weeks.
- UNEP assistance during the energy assessment supported the application of the CP methodology to energy efficiency, and explored with management their drivers for investing or not investing in energy efficiency at their plants. A Help Desk for technical questions was set up for companies exploring energy efficiency options. Information provided included getting: names of equipment suppliers, input for the design of alternative fuels equipment, and specifications of

energy efficiency technologies. While UNEP cannot recommend specific suppliers, by providing companies with a list of potential suppliers, offering quotes, we can increase the chance that companies will get a least cost equipment or technology. This service accelerates a search for suppliers which would otherwise not extend beyond very few, due to time limitations.

- UNEP will publish a "Company Energy Efficiency Toolkit" in October 2005, which will include the methodology, company case studies, technical information and training materials for different energy related equipment for the industrial sectors. To replicate the results, UNEP hired a communications specialist to assist with the dissemination and marketing of the Toolkit to Asian businesses and other stakeholders that influence these businesses.
- The toolkit is aimed at company management, listing the benefits that they can secure if they invest in measures to improve energy efficiency. These include:
 - Reduced operating costs and increased profits
 - Reduced impact from rising energy prices and blackouts
 - Improved productivity and product quality
 - Improved reputation with customers, government and public
 - Improved staff health and safety and morale
 - Improved compliance with legislation and ISO 14001 targets
 - Improved environmental performance
- As a result of the GERIAP project, several large companies are also investigating whether Cleaner Production options that have been identified but are currently unaffordable, could qualify for Clean Development Mechanism (CDM) projects. This shows how activities which help business understand the links between their energy efficiency efforts and MEAs, can identify potential new funding sources.
- **In a GEF funded project that integrates Energy Efficiency into Cleaner Production Assessments**, over 80 demonstration projects were carried out by National Cleaner Production Centres in six countries; China, Czech Republic, Hungary, India, Slovak Republic and Vietnam. Participating industries invested \$12 Million over a 2 year period to implement energy efficiency measures. Those industries made this investment because UNEP demonstrated that these measures offered financial savings of up to \$16 million dollars per year. Collectively, these industries were thus able to avoid GHG generation of around 220,000 tons per year.
- These assessments show that the most attractive investment opportunities are the 'low hanging fruits' - those that come from an enterprise's operating budget (internal funds with a payback of less than one year). They act as 'examples of success' generating enthusiasm and commitment to consider more expensive investments. For example, a cement company in India invested \$59,000 dollars, avoided nearly 8,000 tons per year of GHG emissions, and saved running costs of \$124,000 per year. A metal finishing industry in Vietnam invested \$ 13,500

dollars, resulting in savings of energy and raw materials amounting to \$ 68,200 dollars per year.

- UNEP DTIE is also supporting **national MEA implementation capacities in India and Ukraine** by strengthening Cleaner Production Centres activities which address MEA commitments. This project will identify priority industry sectors and tailor cleaner production approaches that have proven success in these fields. Projects are being developed which demonstrate the economic viability of the switch from solvent-based to water-based paints, avoiding generation of solvent based sludge. This contributes directly to implementation of the Basel Convention by reducing the generation of hazardous wastes at source, and avoids the cost of investing in the disposal systems required for such waste by this Convention.

Creating markets and attracting private investment for the ozone layer

- The Montreal Protocol is a chemical management MEA that focuses on technological change and technology transfer to achieve its goal of eliminating the production and consumption of the controlled ozone depleting substances (ODS). Its success relies to a very high degree on the involvement of industry to innovate, invest in and transfer new technologies.
- The treaty includes several measures that encourage private sector involvement and investment:
 - trade-related incentives (trade controls with non-Parties and import restrictions in certain markets);
 - market development for alternatives to ODS; and
 - technology cooperation and technical and financial assistance for industries in developing countries.
- The establishment of the Montreal Protocol effectively created a huge new international market for chemical products and equipment that replace ODS, as well as the related ancillary services (e.g. training, planning, and consultancies). This market creation has been the biggest driver for a massive and indeed global investment by the private sector, leading to development of a wide range of technologies in a very short time span. That wave of investment has also contributed to employment generation.
- IGOs are encouraging additional private investment related to Montreal Protocol implementation in developing countries, in a number of other ways.
- **Provision of international financing and technical assistance.** Through a Financial Mechanism, the Parties provide financial and technical cooperation to eligible developing countries that facilitates the transfer of ozone protection technologies to companies that use or manufacture ODS. The Multilateral Fund covers agreed incremental costs of developing countries on a grant or

concessional basis, to enable compliance with the Protocol's control measures. The private sector in developing countries also contributes co-financing. The Multilateral Fund's Executive Committee has approved over US\$ 2 billion to support over 5,000 projects and activities in 134 developing countries.

- **Strengthening of national capacity to make technology decisions and investments.** Investments in technology are usually seen as insufficient by themselves. UNEP's efforts are focused on strengthening national capacity to meet compliance targets. The most critical persons in the "chain of responsibility" for implementation of this MEA are those who must take specific actions to achieve compliance. These are government officers (National Ozone Units), customs and enforcement officers, industry managers, and specific technical staff in the private sector who must change their behavior to stop releasing ODS or adopt alternatives.
- **Capacity-building to make informed decisions** about investment services that assist developing countries and Countries with Economies in Transition (CEITs) and facilitate technology transfer is also part of UNEP's programme. Direct assistance on specific technical issues is delivered via teams of experts based in UNEP's Regional Offices, known as the Compliance Assistance Programme. This presence and the consequent knowledge of specific regions and countries is crucial to the accuracy and effective delivery of technical and investment-related advice.
- **Support the development of national policy frameworks.** National laws and policies must be conducive to promoting adoption of new technology and discouraging or prohibiting continued or new use of ODS-based technology. For example, Parties must discourage exports of technology for producing and using ODS to non-Parties. They must also refrain from providing new subsidies, aid, credits, guarantees or insurance programmes for the export of products, equipment, plants or technology that would facilitate the production of controlled ODS. Governments can encourage "ozone-friendly" investment through establishment of economic incentives for alternative technologies, and promote use of recycled substances through taxes on newly-produced chemicals. UNEP provides countries with direct assistance in combining regulation and market-based instruments encouraging investment in ozone-friendly technology, in ways that reinforce that each other.
- **Promote voluntary approaches.** UNEP encourages additional investment by the private sector through voluntary corporate initiatives that reach beyond government regulations to improve industry's environmental performance. An example is a UNEP programme under which companies pledge to promote ozone-friendly technologies and practices to other companies (including suppliers and partners), to assist them in phasing out CFCs. Such programmes have been initiated in India and China, and are being promoted in other developing countries. UNEP also facilitates voluntary public-private partnerships on critical

issues such as combating illegal ODS trade by convening workshops and meetings at the regional level, to bring together chemical producers and governments

- **Lessons from the Montreal Protocol experience** show that the factors that have produced a major investment in solutions to this problem are:
 - a comprehensive package of legal measures, which have controlled free-riding;
 - a large financial investment by governments (\$2 billion over 14 years);
 - interagency collaboration - UNEP, UNDP, UNIDO and the World Bank; and
 - a regionally focused capacity building network that spans the globe.
- This formula prioritizing public private partnerships has created a major new market, leveraged finance from the private sector, and made the most of that sector's flexibility, innovation and eye for profitable investment. We need to replicate this kind of market-oriented innovation and collaboration in other contexts, in the context of other MEAs.

Promoting private investment in sustainable energy sources

- In coming decades, trillions of dollars will be invested worldwide in developing energy infrastructure. Primary energy demand is projected to rise by 1.7% per year from 2000 to 2030, reaching 15.3 billion tons of oil equivalent annually at the end of the period. To meet this rising demand, massive investment will be made in every step of the energy-supply chain including production, transformation, transportation, and distribution. In developing countries alone nearly \$1 trillion will be required per year over the next two decades.
- If we are to achieve the objectives and targets set out in the UNFCCC and the Kyoto Protocol, investment decisions taken in these sectors have a crucial role to play in enhancing energy efficiency and reducing GHG emissions. There are enormous opportunities for profitable and sustainable investments in renewable energy and energy efficiency, which have so far scarcely been tapped.
- Such sustainable investment in the sector is discouraged by factors such as elevated transaction costs, policy uncertainty, and basic knowledge gaps in renewable energy and energy efficiency technologies. UNEP has created the **Sustainable Energy Finance Initiative (SEFI)** to provide financial institutions with the information on these technologies, how they work, and whether they're reliable and financially viable. This will inform investment decisions that balance and integrate economic, environmental and social objectives.
- At the core of SEFI is a growing portfolio of tools, guidelines, reports, services, and capacity building activities for financiers to understand the opportunities for sustainable energy investment. This enables them to assess and manage risks, more efficiently structure their business deals, and lower transaction costs of their first investments in the sector. These tools include:

- The **Financing Sustainable Energy Directory** which is an inventory of lenders and investors who provide finance to the renewable energy and energy efficiency sectors. Project developers, entrepreneurs, or consultants looking to source sustainable energy capital can log in to the Directory and search for funds, applying search criteria which specify the types of finance, technology and the geographic focus.
- **Guidelines for Environmental Due Diligence** of Renewable Energy Projects, which provide investors and lenders with practical, standardized procedures for identifying and managing environmental risks associated with particular renewable energy technologies. The guidelines cover biomass, solar, geothermal, wind and hydroelectric investments.
- **A comprehensive overview** of currently available and potential future financial risk management instruments for the Renewable Energy sector is being developed. Investors in developing countries where risk and risk perceptions are highest are particularly in need of this tool. This overview will pave the way for an upcoming GEF assessment of financial risk management instruments that favour the development of renewable energy technologies (RETs).
- Four **UNEP FI CEO briefings on Renewable Energy** which have successively set out risks of climate change, confirmed the financial sector's support for emissions trading, presented the business case for financing renewable energy, and made recommendations on streamlining CDM procedures and building institutional capacities to implement projects.
- The fourth of these CEO briefings on the **Finance Sector and the Clean Development Mechanism (CDM)** made it clear that while the finance sector will have to play a major role in providing project funding and insurance for CDM projects, the current appetite of private banks and insurers for CDM projects is low. This is due to the specific risk structure of CDM projects, various institutional barriers, complexities in implementing a CDM project, and the relatively small size of the market. Consequently, activities to date in the CDM market have been dominated by multilateral institutions (e.g. World Bank) and national governments.
- The UNEP FI study made a number of recommendations to help increase private sector investment in projects which support UNFCCC implementation:
 - the CDM process must be simplified, standardized and streamlined in order to attract more financial institutions - a faster, more efficient and more user-friendly project process should be put in place;
 - prompt and clear guidance on the CDM regulations beyond 2012 is required - without a clear long-term framework for the CDM, and regulatory certainty for the private sector, it will be difficult to attract financial institutions to CDM projects;
 - foster the development of institutional CDM capacities in both host and investor countries; and

- rethink the interpretation of additionality - the current methodology used for additionality assessment often deters private financial institutions from engaging in the CDM.
- The CDM remains a potentially powerful tool to reduce global greenhouse gas emissions. Perhaps the central lesson in this case is the need for intergovernmental organizations to engage and secure input from the private sector in the early stages of MEA design and negotiation. Strong working partnerships can be forged during implementation, but this will proceed faster if implementation mechanisms do not have to be redesigned to reduce risks and costs borne by business.

Developing circular economies

- Adopting an economy wide approach to “decoupling” resource use and pollution loads from economic development could provide a framework to encourage private investment supporting an array of MEAs. Since December 2003, UNEP has been working closely with the municipal government of Guiyang in China, to assess and design alternative development options for the implementation of a “circular economy”. This model combines the closing of the materials loop, with extensive use of cleaner production techniques, and adoption of the 3Rs approach (reduce, re-use, recycle). Initially applied to the extractive and manufacturing industries, this approach will be complemented in the next phase by the expansion of enterprises based on the sustainable use of ecosystems and the services they provide.
- To this end, the municipal government has adopted the “Guiyang Circular Economy Development Plan”. The plan lays out a road map for achieving sustainable economic development in six focal sectors, namely the coal-based industry, phosphorus-based industry, aluminium industry, herbal medicine, tourism and organic agriculture sectors. The expansion of the last three sectors will be based on sustainable management of ecosystem goods and services such as biodiversity, soil fertility, watershed management and visually attractive forested landscapes and natural ecosystems. The plan combines the development of regulatory frameworks and incentives to attract investments into those three sectors, as well as into cleaner production and more energy efficient processes for the manufacturing sectors.
- This approach offers the possibility of attracting investments, both public and private, into a range of enterprises that reflect the diversity of the local resource base. A combination of regulation and investment incentives has the potential to support the implementation of an equally diverse array of MEAs – the UNFCCC, the waste and chemicals conventions (Basel and Stockholm), and the Convention on Biological Diversity (CBD). Designing this combination of tools will be very challenging, but UNEP believes this to be a promising approach, matching an urgent local need for economic development with the local resource base. It is

based on broad stakeholder engagement, including the private sector in the shape of both local producers and transnational companies.

- UNEP-DTIE is interested in finding new partners in its efforts to channel private investment flows into businesses with objectives that are aligned with those of MEAs. I have been able to set out only some of these in this short presentation, and very much look forward to hearing about the models, practices and experience of other public and private sector bodies attending this workshop. I am sure that the diversity, potential for innovation, and financial and technological resources embodied in this group of actors can be combined to generate both profit for business and concrete advances in the implementation of MEAs.

**UNEP,
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