



United Nations Environment Programme  
Programme des Nations Unies pour l'environnement

**Economics and Trade Branch**



# **A Preliminary Analysis of MEA Experiences in Identifying and Facilitating the Transfer of Technology**

**What Insights Can Be Drawn for the WTO EGS Negotiations?**

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## **Life Sciences Symposium: Patent Landscaping and Transfer of Technology under Multilateral Environmental Agreements**

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# Multilateral Environmental Agreements

MEAs are negotiated to respond to specific international environmental concerns.

Created through multilateral negotiations and consensus building, MEAs provide a baseline of widely agreed upon environmental objectives.

This presentation provides a summary of the five major MEAs, including:

1. Basel Convention
2. Convention on Biological Diversity (CBD)
3. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
4. Montreal Protocol
5. Stockholm Convention



# Basel Convention

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## Objective:

To protect human health and the environment against adverse effects resulting from the generation, transboundary movement and improper management of hazardous wastes.



# Basel Convention

## Technology identification

The Technical Working Group (“TWG”) later replaced by an Open-ended Working Group (“OEWG”), in 2002, were formed to aid in the preparation of technical guidelines for the environmentally sound management of wastes.

- The TWG and OEWG have prepared a number of technical guidelines for wastes subject to control by the Basel Convention (ex. technical guideline series on PCBs).
- To date, there are more than 30 guidelines, training manuals and methodological guides on the environmentally sound management of waste streams.



# Basel Convention

## Access to and transfer of technology

The Convention calls for the establishment of Basel Regional Centres for training and technology transfer. To date, the following Regional Centres have been established :

- Africa and West Asia (Nigeria, Egypt, Senegal, Basel, and South Africa)
- Asia and the Pacific Region (China, Indonesia, South Pacific Region and Tehran)
- Central and Eastern Europe (Russian Federation, and Slovakia)
- Latin America and the Caribbean (Uruguay, Argentina, El Salvador, Trinidad and Tobago)

A core function of the Regional Centres is to create appropriate conditions to carry out transfer of technology in developing and transition countries (ex. Assisting Senegal to manage and disposal of PCBs in West Africa).



# CBD

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## Objective:

**The conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the use of genetic resources.**



# CBD

## Technology identification

Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) were formed to identify innovative, efficient and state-of-the-art technologies and know-how relating to the conservation and sustainable use of biological diversity.

- SBSTTA divides its work on technology transfer according to particular themes, such as inland waters, forests and agriculture.

CBD also identified several general categories of technologies for implementation:

- techniques for in-situ conservation;
- technology for ex-situ conservation;
- technologies related to the sustainable management of biodiversity resources; and
- monitoring technologies, such as remote sensing.



# CBD

## Access to and transfer of technology

The CBD COP adopted a group of four programme elements on technology transfer and cooperation :

- **Technology Assessments:** identifies technology needs of Parties in response to national priorities and policies.
- **Information Systems:** provides information on the availability of relevant technologies, case-studies and best-practices.
- **Creating Enabling Environments:** aims to create an institutional, administrative, legislative and policy environment for technology transfer.
- **Capacity-building and enhancement:** focuses on effective technology analysis, information systems, and the creation of enabling environments for technology transfer and cooperation.



# CITES

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## Objective:

To ensure that international trade in specimens of wild animals and plants does not threaten their survival.



# CITES

## Technology identification

Strategic Vision and Action Plan:

**That no species of wild fauna and flora becomes or remains subject to unsustainable exploitation because of international trade.**

The Strategic Vision sets objectives relevant to the identification of methods, practices and technologies, related to the conservation and recovery of species.

CITES uses :

- software for computerized permit issuance/reporting,
- security stamps and security paper,
- systems for animals or plants survival in the wild (e.g. ranching, captive breeding, aquaculture, artificial propagation); and
- forensic techniques for the identification of specimens.



# CITES

## Access to and transfer of technology

Harmonization of the methods used to identify, track and monitor CITES-listed species

Examples:

- Universal tagging systems
- Publication of successful Know-how and techniques (ex. Operation Manuals)
- Interactive courses available in different languages.



# Montreal Protocol

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## Objective:

To protect human health and the environment against adverse effects resulting from human activities that modify the ozone layer.



# Montreal Protocol

## Technology identification

Parties are required to assess the control measures **on the basis of available scientific, environmental, technical and economic information.**

To fulfill this obligation, three expert panels have been established:

- Panel for Scientific Assessment (reviews scientific knowledge on the use of CFCs)
- Panel for Environmental Assessment (reviews the environmental effects of ozone depletion)
- Technology and Economic Assessment Panel (TEAP) (provides technical information related to alternative technologies to ozone depleting substances)



# Montreal Protocol

## Access to and transfer of technology

The Montreal Protocol requires each Party to ensure:

- a) that the best available, environmentally safe substitutes and related technologies are expeditiously transferred to developing countries; and
- b) that the transfers occur under fair and most favourable conditions.

In addition, to assist developing countries financially, a **Multilateral Fund** was established **for the purposes of providing financial and technical co-operation, including the transfer of technologies.**



# Stockholm Convention

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## Objective:

To protect human health and the environment through measures that will reduce and/or eliminate emissions and discharges of persistent organic pollutants (POPs).



# Stockholm Convention

## Technology identification

Parties must encourage **appropriate research, development, monitoring and cooperation pertaining to POPs and, where relevant, to their alternatives.**

Information on alternatives to POPs, including information on their risks and their economic and social costs, must be made available through exchange of information (ex. Guidance document, "Reducing and Eliminating the Use of Persistent Organic Pesticides: Guidance on Alternative Strategies for Sustainable Pest and Vector Management.")



# Stockholm Convention

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## Access to and transfer of technology

The Convention calls for establishing technical assistance and promoting technology transfer through the creation of regional and sub-regional centres for capacity building and transfer of technology.

The regional centres are likely to function similarly to or in partnership with those under the Basel Convention.



## Conclusions

- The processes MEAs use for identifying technologies share a similar characteristic in that they are dynamic in nature, designed to respond to the changing environment.
- To ensure this flexibility, MEAs include procedures to amend the text of the Conventions and annexes, establish bodies or panels to carry out regular assessments or include mechanisms for the revision of technical guidelines and other training material.
- The successful completion of the WTO negotiations on environmental goods and services may contribute to current efforts to make environmentally sound technologies accessible to all countries.



## Conclusions con't

Subsequent in-depth analysis has the potential to produce more specific recommendations for trade negotiators in the context of the WTO, regional, or bilateral agreements. Further examination in the following areas may be warranted:

- Identification of specific technologies that support MEA implementation;
- Analysis of the impact of tariffs and non-tariff barriers on the flow of MEA-related technologies and to what extent further liberalization would increase this flow;
- Further examination of the role of technology in MEA implementation at the national level; and
- Examination of the current challenges to increased MEA technology transfer.



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