

# Environmental Services: Challenges and Opportunities

Training Course on “Environmental  
Goods and Services Negotiations”

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# What are environmental services? (1)

- Environmental Infrastructure-related service
  - Waste-water treatment plant
  - Waste collection plant
  - Rain-water drainage system / network / construction
  - Etc.
- Environmental Non-infrastructure, professional environmental services
  - site clean-up and remediation,
  - cleaning of exhaust gases,
  - noise abatement,
  - nature and landscape protection

# What are environmental services? (2)

- Environmental-related commercial services
  - Services for waste-water treatment
  - Services for waste collection / separation
  - Services for controlling / monitoring environmental quality
  - Services for environmental risk assessment
  - Etc.
- Related services with an environmental component
  - Engineering Services
  - Etc.

# Environmental Services in WTO

- Sewage Services (CPC 9401)
  - Sewage removal, treatment and disposal services. [Excludes collection, purification and distribution services of water (in CPC 18000) & construction, repair and alteration of sewers (in CPC 51330)]
- Refuse Disposal Services (CPC 9402)
  - collection services of garbage, trash rubbish and waste (household, commercial and industrial); transport services and disposal services; waste reduction services.
- Sanitation & Similar Services (CPC 9403)
  - Sanitation and similar services including outdoor sweeping, snow and ice clearing.
- Other Services - e.g. Cleaning Services of exhaust gases (CPC 9404)
- Noise Abatement Services (CPC 9405)
- Nature and Landscape Protection Services (CPC 9406)
- Other Environmental Protection Services (CPC 9409) including Environmental Consultancy Services, Environmental R &D, Engineering Services, Education and Training Services, etc.

# Negotiation: Definitions (1)

- Traditional Environmental Goods
  - main purpose of addressing or remedying an environmental problem
  - considering climate change issues, e.g., carbon capture and storage technologies
- Environmentally preferable products (EPPs) developed by UNCTAD
  - include any product with certain environmental benefits arising either during the production, use or disposal stage relative to a substitute or “like” product.
  - differentiation of products with less environmental impact during their life-cycle compared to their conventional counterparts, often implies the consideration of processes and production methods (PPMs).
  - Non-product related processes and production methods (NPR-PPMs) are defined as processes and production methods that do not affect the characteristics of the final product put on the market.
  - Examples are the consideration of sustainability criteria, carbon footprints of products and GHG life-cycle assessment.

[Monkelbaan (2011) “Trade Preferences for Environmentally Friendly Goods and Services”, ICTSD Global Platform.]

# Negotiation: Definitions (2)

- Environmental Services:
  - The OECD/ Eurostat definition includes services provided to “measure, prevent, minimize or correct environmental damage to air, water, soil and problems relating to waste, noise and ecosystems”
  - Grouping of Services
  - Including Climate Change Issues, such as carbon footprint, ecological footprint (or life-cycle consideration)
  - Process and Production Methods (PPM) vs Non-product-related process and production methods (NPR-PPMs),

# Negotiation: Definitions (3)

- The OECD classification of Environmental Goods & Services (EGS):
  - Group A: *Pollution Management*;
    - Environmental equipment and specific materials
    - Environmental services
  - Group B: *Cleaner Technologies and Products*;
  - Group C: *Resource Management*
    - Indoor air pollution control
    - Potable water treatment and distribution
    - Water supply and sustainable water management
    - Recycled material
    - Renewable energy
    - Heat/energy saving and management
    - Sustainable agriculture and fisheries
    - Sustainable forestry
    - Sustainable Biodiversity and Landscape
    - Sustainable Tourism and eco-tourism
    - Natural Risk Management

# Negotiation: Definitions (4)

- However, there is a lack of final agreement on the *classification* of environmental services and the existing classification is limited to end-of pipe services and does neither cover pollution prevention nor sustainable resource management.
- An EU proposal suggests updating and extending the W/120 based on the OECD/ Eurostat definition of environmental services to include the entire water cycle and the protection and preservation of landscape, ecosystems and biodiversity (the inclusion of water for human use and wastewater is the most controversial point of this proposal).

[Monkelbaan (2011) “Trade Preferences for Environmentally Friendly Goods and Services”, ICTSD Global Platform. P.6]



# Negotiation: Market Access

- Mode 1 Cross-Border Supply
  - Company in Country A monitors wastewater treatment in Country B online
- Mode 2 Consumption Abroad
  - Scrap metal produced in Country A is sent for recycling in Country B
- Mode 3 Commercial Presence
  - Waste management company in Country A establishes a subsidiary office in Country B
- Mode 4 Movement of Natural Persons
  - Environmental consultant from Country A temporarily moves to Country B to provide advisory services to a wastewater treatment company

[source: UNEP, ITC & ICTSD “Trade and Environment Briefings: Environmental Services” Policy Brief 7, June 2012]

# Freer Trade in Envi. Services: Economic & Development Benefits

- Relief of pressure on government budgets, including at state and municipal levels. Savings may be reallocated to environmental policy, inspection and enforcement budgets, to other social services, or to the overall budget balance.
- The creation of skilled and unskilled jobs for local workers, in design, construction and long term operation of the facilities.
- The provision of water and waste management systems attracts foreign and local investment to the community, bringing more jobs, stable economic growth and an increased local tax base.
- Local private sector partners extend their experience in large and/or very specialized projects which are then exported to other countries with similar needs and operating conditions.
- Build-operate-transfer operations revert to local ownership at a specified time, and include significant environmental resources and sources of jobs, which continue into the future.

# Opportunity

Segment	\$billion (2004)
Solid Waste Management	120.7
Water treatment	78.6
Consulting and engineering	31.5
Site remediation	29.4
Hazardous waste management	17.8
Analyses	3.8

*Source: B. Sinclair-Desgagne (2008), citing Environmental Business International (EIB)*

[source: UNEP, ITC & ICTSD “Trade and Environment Briefings: Environmental Services” Policy Brief 7, June 2012]

## Challenges

There are, however, a number of challenges to enhanced trade in environmental services. A major one is access to markets. Although it is generally accepted that gradual liberalisation of the sector can provide substantial benefits for sustainable economic development, the services sector remains relatively closed off. Since commercial presence (e.g. establishing a subsidiary office in a foreign country) is the most common form of trade in environmental services, restrictions, such as those on foreign investment or limitations on foreign equity participation, are particularly detrimental to trade. Likewise, the movement of natural persons is often hindered by immigration policy or particular labour

market requirements (e.g. country specific standards and certification for engineering services).

Moreover, because many infrastructure environmental services are provided by the public sector, liberalisation is not always straight forward. The full or partial privatisation of these sectors has enabled some trade in environmental services. However, the success of such initiatives depends to a large degree on the quality of the regulatory environment in place, which in most developing countries needs to be strengthened. Likewise, in a liberalised market, a key concern for many developing country firms is the challenge of competing with more established environmental services firms from developed countries.

[source: UNEP, ITC & ICTSD “Trade and Environment Briefings: Environmental Services” Policy Brief 7, June 2012]

*Table 7: General ('Horizontal') Foreign Investment Provisions and Requirements*

- Full foreign ownership not permitted, joint venture with local partner mandatory
- Foreign investment approval based on policy guidelines and overall national interest considerations
- Foreign investment approval based on economic needs test or 'net national benefit' criteria
- Foreign investment approval subject to agreeing to specific performance requirements, e.g. export achievements, use of local goods, services or personnel, transfer of technology
- Only acquisition of existing companies permitted, with foreign equity limited to minority stake
- Reservations of some sectors or activities, privatised state-owned enterprises, or government-contracted services, for investment only by nationals.

*Source: OECD 2000:39*

Kirkpatrick (2006) — “Trade in Environmental Services : Assessing the Implications for Developing Countries in the GATS” ICTSD Project on Environmental Goods and Services.

*Table 8: Environmental Services: Sector-specific Requirements Relating to Foreign Establishment/Investment*

- Economics needs test for approval of foreign investment in solid waste management services, air pollution services, and technical testing and analysis services;
- Numerical quotes for the number of operating licenses available for providers of industrial waste water treatment services, applies to local and foreign investors;
- Only joint ventures permitted for supply of environmental, architectural and engineering, construction and related engineering services
- Regulation of contracts by value and number through an annual licensing system in the construction and engineering sector
- Nationality and/or residency requirements for foreign establishment/investment e.g. for companies operating public utilities; or to gain the right to practice in professional services such as architecture and/or engineering
- Requirement that foreign businesses hire specific ratios of domestic staff to foreign staff
- Reservation of some service sectors or activities for nationals or residents.

*Source: OECD 2000:40*

Kirkpatrick (2006) — “Trade in Environmental Services : Assessing the Implications for Developing Countries in the GATS” ICTSD Project on Environmental Goods and Services.

# Freer Trade in Envi. Services: Potentially Losers

- Consumers may be faced with new or higher fees.
- Local entrepreneurs who currently make a living from garbage collection and sorting, or from siphoning off water from old pipe-works.
- Loss of employment within existing service providers.
- Loss of subsidies to existing monopoly utilities which means that they are unable to compete with new providers.

Kirkpatrick (2006) — “Trade in Environmental Services : Assessing the Implications for Developing Countries in the GATS” ICTSD Project on Environmental Goods and Services.

## What's next?

The market for environmental services looks set to grow substantially over the coming years. The successful conclusion of the on-going WTO Doha Round could offer a number of potential opportunities to support growth in the environmental services market, including through enhanced market access. In addition, a number of other factors at the national, regional and international levels can also help create the right conditions for developing countries to expand their presence in this market, such as:

- Build up expertise in niche segments of the market. This can be particularly beneficial for SMEs involved in non-infrastructure related services;

- Tap into growing regional markets;
- Seek joint venture opportunities with foreign firms;
- Liberalise environmental services through regional and bilateral trade agreements;
- Build appropriate regulatory frameworks to support the development of infrastructure related environmental services; and
- Promote transparency and recognition of qualifications and certifications to reduce obstacles to trade in services linked to the movement of natural persons.

[source: UNEP, ITC & ICTSD “Trade and Environment Briefings: Environmental Services” Policy Brief 7, June 2012]



# Opportunity & Challenges for Developing Countries (1)

- Environmental Services are mostly provided by government agencies, nevertheless the trend for out-sourcing practices increases.
  - This implies the “lack of information” for the government to make a decision on the impact of “market access” on local firms.
- Environmental Services are new for “local firms” due to a lack of technology.
  - This implies less opportunity for local firms to be an investor in other countries.
- Promoting “local firms” will imply an increasing in importing technology-embedded equipment and services.

# Opportunity & Challenges for Developing Countries (2)

- Factories relating to waste management (refuse, sewage, etc.) have to comply an environmental assessment protocols.
  - This implies a higher administration for government agencies to monitor these firms if there are more local and foreign firms.
- Related to Sustainable Development in Host Countries
  - Economic, Social, Environment Linkages

