



## The Use of Market Incentives to Preserve Biodiversity

**Ingo Bräuer** 

Ecologic

25/04/2006 - ENVECO Meeting, Brussels







- Introduction
- Analytical Framework
- Results of the Study
- Conclusions & Policy Recommendations





## Introduction

- Advantages of Market Based Instruments
  - more flexible
  - more cost-effective
  - voluntary and hence more likely to be accepted
  - incorporate nature conservation into the "real world"





## Introduction

- Scope of the report
  - Which MBIs have been implemented and which are most used?
  - In which conservation areas are they used most and where are they most appropriate?
  - What lessons have been learned from the successful implementation of MBIs?





## Market Based Instruments (MBI)

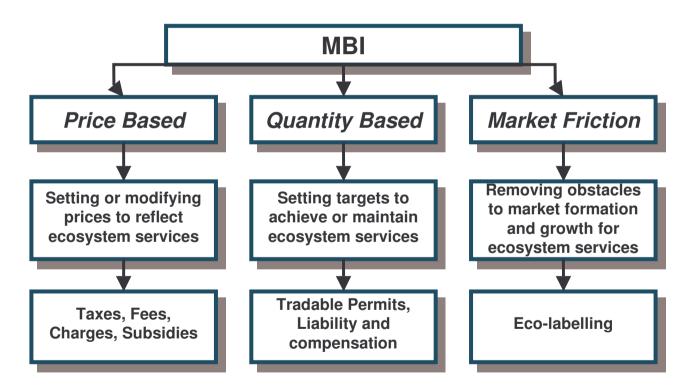
- Taxes, Fees, Charges
- Subsidies, Grants
- Tradable Permits
- Labelling & Certification
- as well as:
- Financial Mechanisms (Green Funds, Tax Reductions, etc.)
- Liability & Compensation Schemes





### **Market Based Instruments**

Functional mechanisms of MBIs







### **Contents of the Report**

- Literature review
  - Qualitative analysis (OECD/EEA-DB and literature)
    - which instruments are in use
    - frequency distribution,
    - comparison between EU and non EU-countries
    - correlation e.g. asset protected <-> instrument
  - Expert interviews
- Assessment framework
  - Synthesis of the apparent pros an cons





#### **Results**

#### **Classification Matrix:**

- 3 fields of application
- 6 types of MBI

	Instru- ment	Taxes / Charges	Subsi- dies	Trad- able permits	Eco- labelling	Financial mech- anisms	Liability	Total
Field of appli	cation	Α	В	С	D	Е	F	
Flora	1	7	1	2	0	0	0	10
Fauna	2	35	4	19	1	0	0	59
Habitat / Ecosystems	3	57	55	12	5	4	2	135
Total		99	60	33	6	4	2	204





## **Results: Flora**

- Taxes/ charges most commonly applied mainly charges for tree protection / cutting
- 1 example of a subsidy / fund flower bulbs in Turkey
- 2 tradable permit examples maple grove permits in Canada and Mangrove use rights in St. Lucia





### **Results: Fauna**

- Most commonly protected through taxes / charges mainly hunting and fishing fees though also observation and import fees
- Tradable permits are often applied but mainly restricted to hunting and fishing
- A few examples of subsidies to compensate for damage caused by animals or protect particular species (geese/monarch butterfly)





## **Results: Habitats**

- Taxes and charges most commonly used e.g. entrance charges, forest felling charges, extraction of natural resources, hunting also environmental tax may be reduced when certain actions carried out.
- Subsidies also very common e.g. agrienvironmental schemes, afforestation, wetland maintenance
- Tradable permits used for habitat trading (e.g. wetland banking in the US)





# Habitats continued

- Eco-labelling applied to agricultural and forestry products
- Financial mechanisms are used in the Netherlands e.g. tax reductions to promote investment in environmentally friendly companies or reductions in income tax for grains from donated land (Ecogift initiative, CA)
- Liability and compensation e.g. to ensure compensation for FFH habitats damaged by development, conservation insurance





#### Recommendations

	Advantages	Disadvantages	Conclusion
Taxes / Charges	<ul> <li>Well known and utilised,</li> <li>easy to implement,</li> <li>high acceptance,</li> <li>generate revenues important for countries with limited fin. resources like the New Member States.</li> </ul>	<ul> <li>Not cost effective,</li> <li>uncertainty about actual effects,</li> <li>difficult to set the right level</li> </ul>	<ul> <li>Need for prompt moni- toring to adjust tax/fee- level</li> </ul>
Subsidies	<ul> <li>Well known and utilised,</li> <li>enjoy more support than taxes,</li> <li>often the only appropriate instrument (e.g. provision of env. assets) (e.g. geese management, UK).</li> </ul>	<ul> <li>dependent on funding, no long term security for biodiversity gains.</li> </ul>	<ul> <li>Auctions (Northeim- Project, De, Value Trading, Fin),</li> <li>"ecological-value-index" helps to set right level of payments (METSO- Program, Fin),</li> <li>output-based design,</li> <li>funds to secure long term financing.</li> </ul>





#### **Recommendations**

	Advantages	Disadvantages	Conclusion
Tradable permits	<ul> <li>High potential of cost savings, flexible,</li> <li>integrates biodiversity concerns into business.</li> </ul>	<ul> <li>Difficulty in designating tradable goods with biodiversity protection,</li> <li>need to have active market.</li> </ul>	<ul> <li>They can work, e.g. wetland banking, US</li> <li>possibilities for EU Habitats Directive.</li> </ul>
Eco- labelling	<ul> <li>High influence on mar- kets with little govern- mental investment, e.g. FSC, organic farming.</li> </ul>	<ul> <li>Uncertainty about success, since acceptance by consumers is unknown,</li> <li>proliferation of labels erodes consumer trust.</li> </ul>	<ul> <li>Useful as additional mechanism,</li> <li>concentration on few promising aspects (use of "umbrella labels").</li> </ul>





#### **Recommendations**

	Advantages	Disadvantages	Conclusion	
Financial Mecha- nisms	<ul> <li>Good way to incorporate biodiversity concerns in normal business,</li> <li>triggers innovation.</li> </ul>	<ul> <li>Limited scope and very low predictability of effects.</li> </ul>	<ul> <li>Useful as additional mechanism to inte- grate mainstream business,</li> <li>Ecogift initiative (CA).</li> </ul>	
Liability	<ul> <li>High impact due to legislative nature,</li> <li>triggers innovation in less harmful technical solutions,</li> <li>is an efficient way to incorporate negative externalities (liability).</li> </ul>	<ul> <li>Compensation may replace mitigation,</li> <li>defining equivalent habitats can be diffi- cult.</li> </ul>	<ul> <li>Can be combined with trading through habi-tats banking,</li> <li>Possibility to establish compensation insurance for farmers as alternative to subsidies (Conservation Insurance, AUS).</li> </ul>	





## Conclusions

- A wide variety of MBIs are applied for very different purposes, many with success.
- MBI have several advantages compared to regulatory approaches
  - Offer policy makers new options to reach conservation objectives with less financial resources
  - When properly designed and used in the right circumstances, they can achieve results beyond CAC
- MBI can play an important role in complementing regulatory approaches but will not substitute them





#### Acknowledgement

#### The following persons contributed to the report:

Rainer Müssner, Katrina Marsden (Ecologic)

Frans Oosterhuis (IVM)

Matt Rayment (GHK)

**Clare Miller, Patrick ten Brink (IEEP)** 

Alena Dodoková (CEI)





## Thank you for listening.

#### **Ingo Bräuer**

braeuer@ecologic.de, www.ecologic.de