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# **Report on Implementation of the 2004 Council Recommendation on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity**

**Working Group on Economic Aspects of Biodiversity  
OECD Environment Policy Committee**



Environment Directorate

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**Working Party on Global and Structural Policies  
Working Group on Economic Aspects of Biodiversity**

**REPORT BY THE ENVIRONMENT POLICY COMMITTEE ON IMPLEMENTATION OF THE 2004  
COUNCIL RECOMMENDATION ON THE USE OF ECONOMIC INSTRUMENTS IN PROMOTING  
THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY**

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## FOREWORD

The Working Group on the Economic Aspects of Biodiversity (WGEAB) has worked since 1993 to help OECD governments in the design and implementation of economic instruments to conserve and sustainably use biodiversity. The culmination of a series of work under the WGEAB on economic incentives, valuation techniques, and market creation resulted in the adoption in 2004 of an OECD Council Recommendation on “*The Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity*”[C(2004)81].

This report is designed to take stock of the economic instruments for biodiversity management that have been newly introduced or further strengthened since the Recommendation was adopted in 2004. In order to do that, it lists the economic instruments which have been implemented in 19 member countries (and the European Commission) that fall under six different categories of instruments and for eight policy areas. It provides a snapshot on what economic instruments are more commonly used for certain policy purposes and in certain policy areas, as well as what economic instruments are less frequently applied.

This report does not provide an exhaustive review of current biodiversity policies. Rather, it aims to support policy makers in understanding the recent trends and developments in the use of economic instruments for biodiversity management and, as appropriate, to identify priority issues for the years to come. This report does not attempt to assess the effectiveness of any of the economic instruments applied, or the overall performance of any country’s biodiversity policy.

The report was developed under the guidance of Delegates to the WGEAB, and the data was gathered through responses by member countries and the EC to a questionnaire. The report was drafted by Kyung Yong LEE in the OECD Secretariat, under the supervision of Helen Mountford and with support from Patricia Nilsson and Jane Kynaston for the production of the report and pre-filling the questionnaires. This report is published under the responsibility of the Secretary-General of the OECD.

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## 1. Introduction and Executive Summary

Biological diversity matters. It supports our life. We depend upon it for food, clean air and water, shelter, warmth and a variety of medications, clothing and building materials, not to mention those intangible aspects of our lives such as pleasure in the beauty of nature. Earth's ecosystems, however, have been dramatically transformed through human actions such as the conversion of ecosystems for agricultural and other uses. It has brought about biodiversity loss, and ultimately we are suffering a reduction in the "goods and services" that biological diversity would otherwise provide. Recently, the Millennium Ecosystem Assessment reported that the current loss of biodiversity and the related changes in the environment are now faster than ever before in human history (MA, 2005). The *OECD Environmental Outlook to 2030* projects that biodiversity loss will continue over the next few decades in the absence of new policy measures, with the main pressures arising from: land use changes (especially conversion of natural lands for agricultural use or infrastructure), unsustainable use and exploitation of natural resources (especially forestry and fisheries), invasive alien species, global climate change, and pollution (OECD, 2008a).

Such concerns for biodiversity have drawn international attention and political commitments to its conservation and sustainable use. These concerns resulted in the creation of the Convention on Biological Diversity (CBD) in 1992. Then in 2002, the Conference of the Parties to the Convention on Biological Diversity adopted a Strategic Plan, with the mission "to achieve, by 2010, a significant reduction of the current rate of biodiversity loss at the global, regional and national level". Subsequently, this 2010 target was endorsed at the World Summit on Sustainable Development in Johannesburg in 2002. The EU has since committed to halting the loss of biodiversity in the European Union by 2010. Responding to this challenge the EU adopted in 2006 a Communication on "Halting the Loss of Biodiversity to 2010 and Beyond", which is accompanied by an Action Plan setting out a detailed agenda for action to halt the loss of biodiversity by 2010. In March 2007, the Environment Ministers of the G8 countries as well as the five major newly industrialising countries - Brazil, China, India, Mexico, and South Africa - met in Potsdam Germany and confirmed the urgent need to halt human-induced extinction of biodiversity as soon as possible. When they met again in April 2008 in Kobe, Japan, they set out a further "Call for Action on Biodiversity".

As for the OECD, in 1993, the Environment Policy Committee (EPOC) approved the formation of a Working Group on the Economic Aspects of Biodiversity (WGEAB). The work of the WGEAB has focused on the issues where the OECD's comparative advantage in economic analysis could be used, in particular relating to the promotion of the use of economic instruments in conserving and sustainably using biodiversity, specifically incentive measures, valuation and market creation. A series of publications on market-based instruments features this analysis, including: *Saving Biological Diversity: Economic Incentives* (OECD 1996), *Handbook of Incentive Measures for Biodiversity: Design and Implementation* (OECD, 1999a), *Handbook of Biodiversity Valuation: A Guide for Policy Makers* (OECD, 2002); *Harnessing Markets for Biodiversity: Towards Conservation and Sustainable Use* (OECD, 2003); *Handbook of Market Creation for Biodiversity: Issues in Implementation* (OECD 2004), and many others. A new report titled *People and Biodiversity Policies: Impacts, Issues and Strategies for Policy Action* has recently been released (OECD, 2008b).

Drawing on this work, OECD Member countries adopted in April 2004 a Council Recommendation on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity [C(2004)81] (see Appendix 1). The Recommendation was to encourage OECD Member countries to establish and apply a policy framework aimed at ensuring the efficient long-term conservation and sustainable use of biodiversity and its related resources. In addition to the recommendations on the use of economic instruments by Member countries to achieve biodiversity policy objectives, the

Recommendation also requested “the Environment Policy Committee to review the actions taken by Member countries pursuant to this Recommendation within the three-years following the adoption of this Recommendation”.

According to this instruction, this report has been prepared to monitor Member countries’ performance in implementing the Recommendation since 2004, particularly focusing on the extent of the use of economic instruments. It was not meant to conduct an exhaustive review of current biodiversity policies in Member countries. Rather, it aims to support policy makers in understanding recent trends in the implementation of economic instruments and, as appropriate, to identify priority issues for the years to come.

This review is based primarily on information provided by Member countries through a questionnaire on implementation of the Council Recommendation. The questionnaire was structured to elicit information on the extent to which new economic instruments have been developed and applied for biodiversity conservation and its sustainable use since 2004 or existing instruments have been strengthened. 20 countries<sup>1</sup> (including the European Commission) provided responses to the questionnaire. Complementary information was sourced through: (1) the third national reports to the CBD, (2) the OECD/EEA economic instruments database [www.oecd.org/env], and (3) other relevant material from OECD and other sources, such as the “Nature” chapters of the *OECD Environmental Performance Reviews*.

This review finds that most of the responding countries have made further progress in the application of economic instruments within their biodiversity strategy or framework since the adoption in 2004 of the OECD Council Recommendation.

The most commonly noted economic instrument in use for biodiversity conservation or sustainable use is positive subsidies for biodiversity-friendly behaviour, with a number of countries also noting the use of biodiversity-related fees, charges and taxes. Less progress is noted, however, in the reform of perverse incentives and the use of instruments to create markets for the sustainable use of biodiversity.

This review finds that the types of areas where economic instruments are most comprehensively used are inland waters, agriculture and forest biodiversity, while the use of such instruments is more partial or limited in mountain areas and for species management. Another finding is that the use of a specific type of economic instrument often dominates a certain type of area, for example positive subsidies are the predominant instruments used for agriculture and forests management, while taxes, fees and charges are commonly used for management of inland water ecosystems.

The survey is not comprehensive, and significant information gaps remain regarding biodiversity management. Caution is needed in interpreting and using the results of this review, in particular as the number of instruments applied does not necessarily reflect their scope or effectiveness, and also because of some variations in reporting amongst countries.

The report is divided into four sections: Section I provides contextual and background information on the Council Recommendation; Section II describes the basic scope and extent of the review by discussing the boundaries of economic instruments and thematic areas applied in the report; Section III summarises what instruments have been most used in each thematic area; and Section IV provides concluding remarks.

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<sup>1</sup> Australia, Austria, Belgium, Canada, the Czech Republic, Finland, France, Hungary, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, the Slovak Republic, Sweden, Switzerland, Turkey, the United Kingdom and the European Commission.



## 2. Methodology

### 2.1 *Basic scope and extent*

The Council Recommendation consists of the main body and the Annex which is an integral part of the Recommendation. The key messages of the Recommendation provide a general guideline for the use of economic instruments in promoting biodiversity conservation and sustainable use, rather than dictate the use of specific measures (Box 1). Therefore, this review focuses on assessing how the recommendation is incorporated into Member countries' national biodiversity strategies as a whole, with some analysis of the use of individual economic instruments for biodiversity purposes in thematic areas such as agriculture, forestry, etc.

#### **Box 1. The key elements of the Council Recommendation**

The main body of the OECD Council Recommendation on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity includes:

- To establish and apply a policy framework aimed at ensuring the efficient long-term conservation and sustainable use of biodiversity and its related resources.
- To make greater and more consistent use of domestic economic instruments in the application of their biodiversity policy frameworks.
- To integrate market and non-market instruments into an effective and efficient mix of policies.
- To integrate biodiversity policy objectives in a cost-effective manner into government sectoral policies.

Bearing in mind these main recommendations, the Annex sets out more detailed guidance for consideration when Member countries are designing and implementing their biodiversity policies:

- As regards the framework for the use of economic instruments in biodiversity conservation and sustainable use:
  - The overall goal of a policy framework for biodiversity management should be to achieve efficient long-term conservation and sustainable use of biodiversity and related resources and an equitable sharing of the benefits.
  - Policy options should be systematically analysed with a view towards minimising the costs of public administration, monitoring and enforcement, as well as the private costs of implementation.
  - Economic instruments will be important parts of an incentive-based approach to sustainable biodiversity management.
  - Economic instruments should also be seen within the broader context of a market-based approach to the promotion of biodiversity goals.
  - Sector policies should be developed in ways that are consistent with biodiversity objectives.
  - Appropriate targets and timetables need to be established for efficient and effective biodiversity policies, and progress toward these goals needs to be periodically monitored.
- As regards incentive-based instruments in biodiversity management:
  - The range of market measures available to governments for encouraging biodiversity conservation and sustainable use includes economic incentives (fees, charges, subsidies, and payments), funds, and framework incentives (market creation, economic valuation).
  - Economic instrument will often need to be used in conjunction with non-market instruments.
  - Reform or removal of perverse incentives should be an ongoing objective.

## 2.2 *Scope of thematic areas*

Biodiversity impacts arise from a broad range of human activities; for example, the fragmentation, degradation and destruction of habitats, the over-exploitation of natural resources, the spread of invasive alien species, pollution and climate change. Accordingly, a variety of sectoral policies are directly or indirectly interwoven with biodiversity issues. This complexity of biodiversity makes it difficult to delineate the scope of biodiversity-related policy areas.

The CBD applied six thematic areas as a guideline for the national reports of Member countries, and this review follows the same classification of six thematic areas, with the additional area of species management. Member countries were asked to use their own discretion in answering the OECD questionnaire, when this classification did not readily fit their own circumstances. The thematic areas this paper analyses are thus as follows:

- Inland water ecosystems.
- Marine and coastal biological diversity.
- Agricultural biological diversity.
- Forest biological diversity.
- Mountain biological diversity.
- Species management
- Biological diversity of dry and sub-humid lands.

## 2.3 *Scope of economic instruments*

The main objective of the Recommendation is to promote the use of economic instruments for the conservation and sustainable use of biodiversity. The definition of economic instruments in the Recommendation is used in a broad sense, including all instruments that change the incentives individuals face for undertaking particular actions. Similar terms are often interchangeably used between market-based instruments (market measures), incentive-based instruments (incentive measures) and economic instruments (economic incentives). As such, for the purpose of the review of implementation, it is useful to further clarify the different types of economic instruments.

In order to do so, this report basically drew on the concept of economic instruments which were defined in the previous OECD work: *Handbook of Incentive Measures for Biodiversity: Design and Implementation* (OECD, 1999a) and *Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries* (OECD, 1999) with a few modifications to reflect some important concepts that were introduced in the Recommendation, such as market creation or perverse subsidies (Box 2).

The economic instruments applied in this review are thus as follows:

- Price-based instruments (e.g. taxes, charges or fees).
- Liability instruments (e.g. non-compliance fees or performance bonds).

- Subsidies.
- Reform or removal of perverse subsidies.
- Market creation and assignment of well-defined property rights.

#### Box 2. Definition of economic instruments

- **Price-based instruments:** based on the idea that the social costs of biodiversity loss can be imputed into the price of the activities that cause this loss or conversely activities that are socially beneficial should enjoy lower overall taxes. Typically, they include taxes, charges/fees and levies<sup>2</sup>. However, there frequently exists great confusion pertaining to the distinction between them.
  - **Taxes:** compulsory, unrequited payments to general government in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments (e.g. tourism tax (Mexico), fertiliser tax (Netherlands)).
  - **Charges/Fees:** compulsory, requited payments to either general government or to bodies outside general government. Thus in return for a charge or a fee, a service is provided in proportion to its magnitude (e.g. fees for tourism in natural parks, use of public lands for grazing in agriculture, use of sensitive lands, hunting or fishing of threatened species).
- **Liability instruments:** to change the economic incentive associated with environmentally risky behavior by increasing the likelihood that perpetrators of environmental damage pay for its consequences.
  - **Non-compliance fees:** imposed under civil law on polluters or natural resource users which do not comply with environmental or natural resources management requirements and regulations. They can be proportional to selected variables such as damage due to non compliance, profits linked with reduced (none) compliance costs (e.g. non-compliance fees related to poaching or illegal logging).
  - **Performance bonds:** a deposit in the form of a “bond” that polluters or users must pay to guarantee compliance with environmental or natural resources requirements. The bond is refunded when compliance is achieved (e.g. bonds levied on mining operations (Australia), bonds required of hazardous waste sites (Canada)).
- **Subsidies:** all forms of explicit financial support for activities that improve biodiversity quality and quantity (e.g. grants, soft loans, tax breaks, green funds, accelerated depreciation).
- **Removal or reform of perverse subsidies:** perverse subsidies that encourage, either directly or indirectly, resource uses leading to the degradation and loss of biological diversity. Perverse incentives are the result of a government intervention failure, in the sense that the original justification for the policy failed to account for subsequent repercussions (e.g. price support payments to fishers, grants for new vessels, subsidies for the use of fertilisers or pesticides).
- **Market creation and assignment of well-defined property rights:** measures that can create a market through the clear definition of property rights over resources or their use, and the allowance of trading in these rights. It is applicable where clearly defined property rights can be established and upheld for easily identifiable goods and services, and transaction costs are low enough and interested parties numerous enough to allow regular trade (e.g. individual transferable quotas (ITQs) for fisheries management, Tradable/transferable development rights)

<sup>2</sup> The general term “levy” covers all types of compulsory payments. According to the OECD classification, there are “borderline-cases” where a levy could be considered as “unrequited”, i.e. as a “tax” (if the payment is made to “general government” as opposed to a charge or fee).

### 3. Review of the actions taken in the implementation of the Council Recommendation

#### 3.1. Overall review of progress on biodiversity policies

The loss of biodiversity has been of great concern since it not only performs essential life support functions but also provides the basis for important economic, cultural and recreational activities. Accordingly, this Review noted considerable policy attention in OECD countries directed to addressing the challenge of halting biodiversity loss. Most respondents (17 out of 19) had their own national biodiversity strategy or framework in place before the Council Recommendation was adopted in April 2004 (Question 3)<sup>3</sup>. Some Member countries (e.g. Australia, Austria, Canada, Finland, Japan, the Netherlands, Norway, Sweden, Turkey, the United Kingdom and the European Commission) reported that they had already implemented a comprehensive and systematic national strategy or framework.

Furthermore, in response to a question on whether the national biodiversity strategy or framework has been strengthened or improved since April 2004, all respondents answered “Yes” (Question 4). Some countries – such as Belgium, France, Japan, Luxembourg, Korea, the Netherlands, Sweden, Turkey, the United Kingdom and the European Commission – indicated that they have made significant strides in their national biodiversity strategy or framework. For instance, the European Commission adopted a Biodiversity Communication and its supporting Action Plan in 2006 which provides a strategic framework for EU action to meet the target of halting biodiversity loss by 2010. The EU biodiversity policy has directly and indirectly greatly affected the formulation of EU Member States’ biodiversity policies. The United Kingdom indicated that it had published a new strategic framework for conserving biodiversity in October 2007, and had recently substantially revised the UK Biodiversity Action Plan with respect to the targets for the original species and habitats and the list of priority species and habitats.

#### **Box 3. Progress with the European Commission’s biodiversity policies since April 2004**

A new policy framework to halt biodiversity loss in the EU has been implemented since April 2004. At first, The new Communication on “Halting the Loss of Biodiversity by 2010 – and Beyond; Sustaining Ecosystem Services for Human Well-Being” was introduced in 2006. The Communication reviewed progress in implementation of the EU Biodiversity Strategy and Action Plans, and it proposed an Action Plan to 2010 and beyond which sets out a detailed agenda for action to halt the loss of biodiversity by 2010.

The EU has continued since April 2004 its efforts to integrate biodiversity concerns into its major policies. From 2005, following the 2003 reform of the Common Agricultural Policy (CAP) which promoted more environmental friendly measures, the granting of single farm payments and other direct payments became conditional on respect for environmental and food safety standards as well as the requirement to keep all farmland in good agricultural and environmental condition. Similarly to the CAP reforms, the reformed Common Fisheries Policies (CFP) shifted policies towards more environmentally-friendly fishing practices and therefore provides increased positive incentives for marine biodiversity.

Some financing instruments and legal instruments also offer considerable promise for the conservation and sustainable use of biodiversity. The new EU Financial Perspectives for the period 2007-13 opened opportunities for co-financing of biodiversity and the Natura 2000 network of protected sites under the Fund for Rural Development, the Cohesion and Structural Funds, Life+ and the research Framework Programme (FP7). The EU Environmental Liability Directive came into force in 2007; it is based on the “polluter pays” principle and covers damage to natural habitats protected under the 1992 Habitats and 1979 Bird Directives.

In order to more precisely gauge the extent of the progress of the implementation of the recommendation, Member countries were also asked to answer more specific questions linked to the key messages of the Recommendation. In answer to a question on the progress since April 2004 in establishing

<sup>3</sup> Mexico did not provide an answer to this part of the questionnaire.

and applying a policy framework to ensure the efficient long-term conservation and sustainable use of biodiversity and its related resources, nine respondents<sup>4</sup> – Australia, Canada, Finland, France, Japan, Luxembourg, Sweden, the United Kingdom and the European Commission – replied that they have made very significant progress, with nine other countries reporting moderate progress (Question 4-1). For instance, Canada indicated that their government had developed a Biodiversity Outcomes Framework for Canada in 2005, which would be used to identify and link current and future priorities, to engage Canadians in planning and implementation and to report on progress. In October 2006, Ministers responsible for environment, fisheries and aquaculture, forests, parks and wildlife endorsed this framework.

Regarding the use of economic instruments in their national biodiversity strategy or framework, nearly all respondents (13 out of 19) responded that they have made moderate progress since April 2004 (Question 4-2). Australia and the European Commission registered very significant progress in this sector. In particular, Australia reported the comprehensive use of market-based approaches in their biodiversity hotspots programme, environmental stewardship programme and Tasmanian Forest Conservation Fund. France indicated that they has adopted a National Strategy for Biodiversity in 2004, particularly emphasising the use of tax incentives or funding measures, and the development of economic valuation and costing with regard to biodiversity.

Member countries were asked to answer a question on whether any progress has been made in integrating market and non-market instruments into an effective and efficient mix of biodiversity-related policies, and integrating biodiversity objectives in a cost-effective manner into government sectoral policies. Approximately three-quarters of respondents to both questions replied that they achieved more than moderate improvement in these recommendations (Questions 4-3 and 4-4). It is worth noting that the Netherlands has recently conducted two cost-benefit analyses of nature and landscape, which have provided an incentive for policy initiatives in the field of landscape restoration and sustainable use of ecosystem services.

Of course, the Council Recommendation is likely only one of a number of factors motivating the broader use of economic instruments for biodiversity related policies. In order to provide some indication of the extent of its influence, Member countries were asked to answer whether relevant policy makers have taken note of the Recommendation and whether the Recommendation has encouraged the use of economic instruments in their national biodiversity strategy or framework. Almost all respondents (17 out of 19) indicated that they were aware of it at the moderate level or above (Question 1). Most of respondents (16 out of 19) reported that the Recommendation encouraged the use of economic instruments in their national biodiversity strategy or framework (Question 2).

Overall, most of the responding countries were confident on the progress of the national biodiversity strategy or framework in their country after the adoption of the Recommendation, including the use of economic instruments as a tool to achieve the objectives of biodiversity policies. Although the extent and intensity of impact of the Recommendation is unclear, Member countries consider that it has helped to initiate the development and implementation of their biodiversity policies. Box 4 provides more detailed information on the measures that each responding country had recently undertaken with respect to the conservation and sustainable use of biodiversity.

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<sup>4</sup> Switzerland did not provide an answer to this question.

#### Box 4. Examples of progress on national biodiversity policies since April 2004

- Austria

In 2005, Austria further developed and updated the Austrian Implementation Strategy for the Convention on Biological Diversity, which was first established in 1998, by incorporating the global targets from the Strategic Plan (UNEP/CBD(COP/VII/30)).

A project on “Concept for Monitoring Biodiversity in Austria” (Project “MOBE-e”) was carried out in 2004-2006, and established a set of 47 indicators for forest, landscape, settlements, waters, soil, etc.

- Belgium

An Inter-Ministerial Conference on Environment in October 2006 approved the National Biodiversity Strategy 2006-2016. The integration of biodiversity objectives in different sectors is now under discussion, such as in development cooperation, economy, scientific policy and transport.

Flanders has carried out an evaluation of the effectiveness of some financial instruments regarding biodiversity; for example, the costs of managing reserves.

- Canada

Federal, provincial and territorial governments have been working together to sustain Canada’s biodiversity since 1995 when Ministers of Environment from all jurisdictions signed a statement of commitment to the conservation of biodiversity and the sustainable use of biological resources. They agreed to use Canada’s national biodiversity strategy as a guide to their actions.

Beginning in 2001, Ministers from all Canadian jurisdictions began to meet jointly to identify common priorities for implementation of the Canadian Biodiversity Strategy and other biodiversity-related actions. They approved the invasive species strategy for Canada in Autumn 2004, and the national wildlife disease strategy in Autumn 2005.

- Finland

An evaluation of the National Action Plan for Biodiversity in Finland for 1997-2005 was conducted in 2004-05. It provided a wealth of additional information on the current state and trends in biodiversity in Finland, as well as the impacts of the practices and measures so far adopted. Furthermore, it included measures to revise the subsidy systems to prevent perverse incentives to biodiversity, and to investigate the economically motivating financing systems to compensate for losses caused by large predators and seals.

- France

France adopted a National Strategy for Biodiversity in 2004. It is aimed at the maintenance, development and smooth functioning of natural areas, as well as the conservation of wild species and genetic resources. Under this strategy, 10 sectoral Actions Plans were implemented by 8 ministerial departments and their voluntary, private, scientific and local partners, co-ordinated by the Ministry of Ecology and Sustainable Development.

- Hungary

The National Biodiversity Strategy and Action Plans (NBSAP) were approved by the Ministry of Environment and Water in September 2004; however, they have not yet been approved by the government, and a review is currently under way. An inter-ministerial consultation is planned in the near future.

Protected water bodies (“Wetland-Natura 2000 site”) were designated in 2004 according to the EU Water Framework Directive, and terrestrial ecosystems depending directly on water were recently designated in 2007.

- Korea

In 2005, the Ministry of Environment established the “Comprehensive Measures for the Conservation of Biological Resources (2005-2014)”, representing an action plan for National Biodiversity Strategy which was established in 1997. It aims at the conservation of biological resources and the restoration of endangered wild species. In addition, the MOE established the “Framework Plan for Wildlife Protection (2006-2010)” and the “Comprehensive Plan for the Restoration of Endangered Wildlife” in 2006. These plans included some economic instruments such as penalties for eating illegally captured wildlife,

- Netherlands

The Netherlands has had a long tradition of developing and implementing economic instruments for biodiversity and environmental management. Recent examples of instruments include taxes on airline tickets and cars with low fuel efficiency, and subsidies for investments in energy saving technologies.

- United Kingdom

The UK published a new strategic framework for conserving biodiversity in October 2007, which incorporated the need to take action to mitigate the impacts of climate change, the EU Gothenburg agreement in 2001 to halt the loss of biodiversity by 2010 and the findings of the 2005 Millennium Ecosystem Assessment.

The UK also published the revised targets for the existing UK BAP (Biodiversity Action Plan) priority species and habitats in November 2006, and a new list of priority species and habitats in 2007 containing 1 149 species and 65 habitats compared to 577 species and 49 habitats under the original UK BAP lists.

### 3.2. *Summary of economic instruments in biodiversity policies*

In general, the application of economic instruments for biodiversity policies in OECD countries are both numerous and diverse. In total, the 20 respondents listed 405 economic instruments in their responses to the questionnaire, encompassing various domains of environmental policies, ranging from terrestrial, marine, aquatic ecosystems to species management (see Table 1). However, no particular economic instrument was listed for managing biodiversity in dry and sub-humid areas. When the economic instruments in other OECD Member countries (i.e. those that did not respond to the questionnaire) that were indicated in the pre-filled questionnaire (see Annex III) are added<sup>5</sup>, the total number comes to 494.

The most commonly used economic instruments fall into the categories of price based instruments (taxes, fees and charges) and subsidies, while the use of other instruments such as market creation and the assignment of property rights are much less common. The thematic areas covered by economic instruments are also dominated by specific sectors and ecosystems, such as inland waters, agriculture and forests.

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<sup>5</sup> The total number of economic instruments in the prefilled questionnaire amounts to 89 from 11 countries.

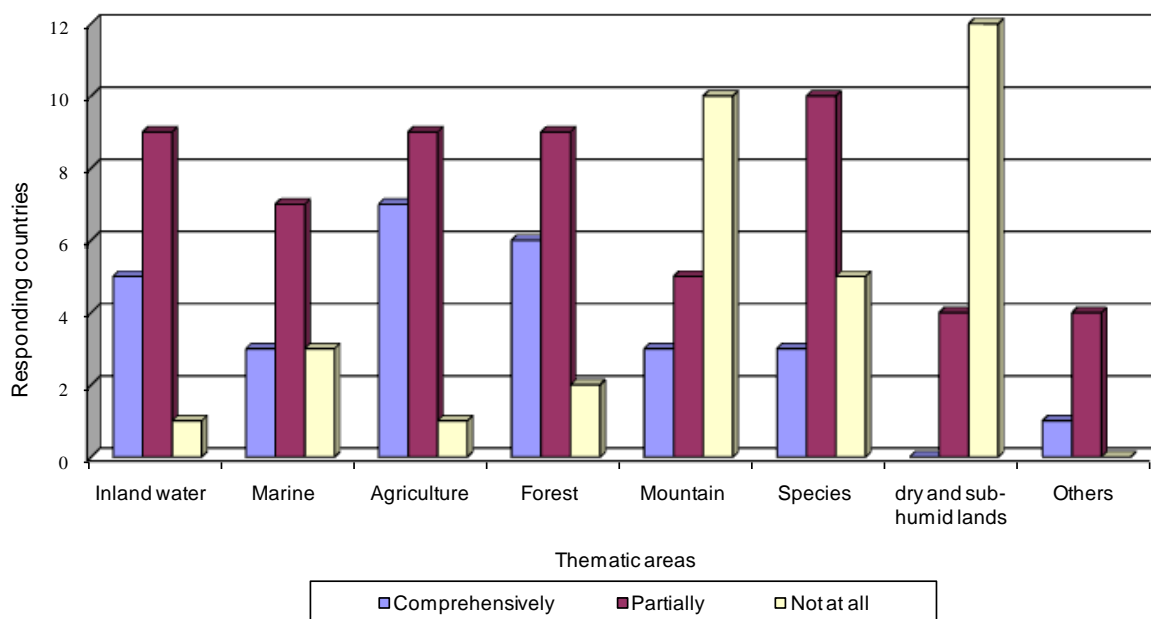
**Table 1. Status of the use of economic instruments**

Countries	Price based instruments (PB)	Subsidies (SU)	Reform or removal of perverse subsidies (PS)	Market creation or assignment of property rights (MC)	Liability instruments (LI)	Others (e.g. voluntary agreements)	<b>Total Instruments listed</b>
Inland water	41	23	-	3	2	1	<b>70</b>
Marine and coast	12	11	-	7	4	-	<b>34</b>
Agriculture	5	57	3	-	-	1	<b>66</b>
Forest	14	56	1	1	-	4	<b>76</b>
Mountain	7	16	-	-	2	-	<b>25</b>
Dry and sub-humid land	-	-	-	-	-	-	-
Species management	12	27	-	5	3	2	<b>49</b>
Other; ecotourism, mining, etc	26	44	3	4	4	4	<b>85</b>
<b>Total instruments listed</b>	<b>117</b>	<b>234</b>	<b>7</b>	<b>20</b>	<b>15</b>	<b>12</b>	<b>405</b>

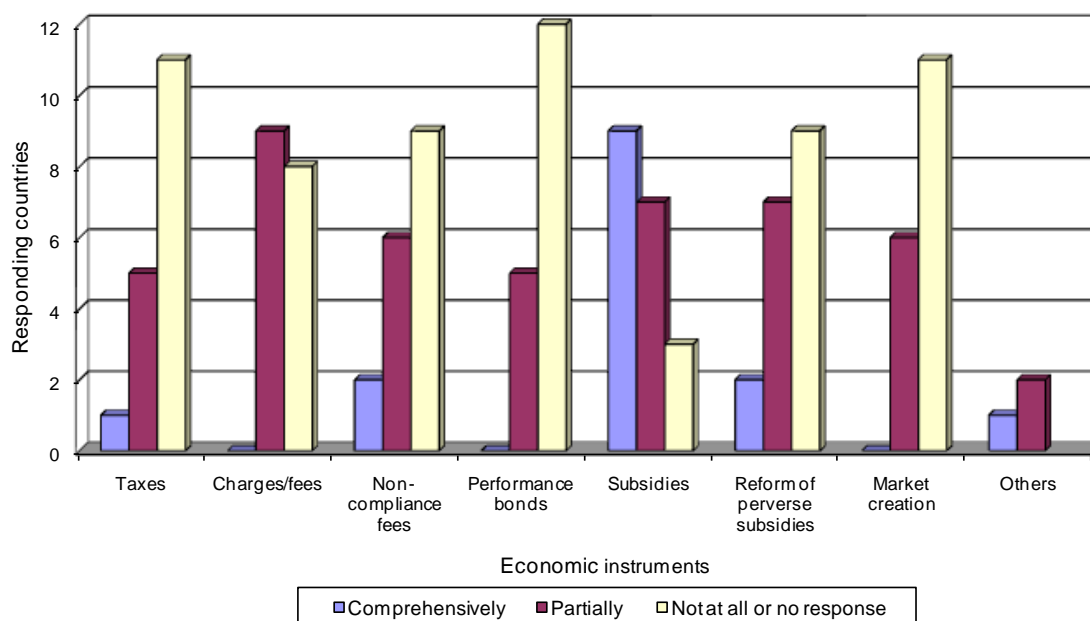
This dominance is also indicated in the responses to the question regarding the extent to which Member countries have applied economic instruments to each of the thematic areas since the adoption of the Recommendation. Many responding countries (e.g. Belgium, Canada, the Czech Republic, Finland, France, the Netherlands and Switzerland) indicated agriculture, forest and inland water as the categories where economic instruments have been most comprehensively used (Question 5), followed by mountain and species management areas. Figure 1 shows the frequency of responses by each category.



**Figure 1. The extent of the application of economic instruments by thematic areas**



In a similar way, Member countries were also asked to indicate which economic instruments have predominantly been applied in their biodiversity related policies since April 2004. A majority of respondents reported that they primarily used subsidies among the various kinds of economic instruments. In particular, some responding countries – such as Canada, the Czech Republic, France, Japan, the Netherlands, Sweden and Switzerland, – indicated that they had comprehensively used them, while others had partially applied them. As for other economic instruments – such as taxes, charge/fees, reform of perverse subsidies and market creation – they were reported to be relatively less frequently used (Question 6). Figure 2 shows the self assessed results on the extent of the application of type of each economic instrument.

**Figure 2. The extent of the application of each economic instrument**

In addition to this relatively limited application to certain thematic areas and economic instruments, wide variations were noted between countries as well. For example, in spite of relatively less progress on price based instruments and market creation, Canada and France showed a relatively wider use of, and recent improvements in, the charge and tax systems, while various cases of auction or tender systems were noted in Australia with respect to water trading, fishing quotas, and biodiversity protection actions by private landholders. France has also recently adopted various tax incentives or funding measures in conserving wetlands and protected areas. The wide variation in application amongst countries might be explained by the complexity and diversity of biodiversity, variations in political and administrative structures and needs, and varying levels of knowledge about biodiversity and economic instruments themselves.

### 3.3. Review of the actions by economic instruments

#### 3.3.1. Price-based instruments

Price-based instruments (e.g. taxes, fees and charges) are one of the commonly used economic instruments to manage biodiversity across OECD countries. Table 2 illustrates a general overview of the use of price-based instruments in OECD countries (see Appendix II for the whole list). Taxes, fees and charges have been widely used in various thematic areas across the responding countries from before the adoption of the Recommendation. Of all the policy sectors, however, the inland water ecosystem is the area where taxes, fees and charges are most applied. A few cases were reported in other thematic areas, for example, marine and coastal ecosystems, forests, species management, soil/land management, and ecotourism.

Taxes, fees and charges are based on the premise that they have a potential to achieve policy objectives at a lower cost than many traditional government regulations by internalising externalities through correct pricing of the use of resources and the pollution of ecosystems. Most importantly, they allow flexibility in the way economic participants choose to respond, leading to least-cost responses, an incentive to innovate, and an efficient allocation of the use of environmental resources across society.

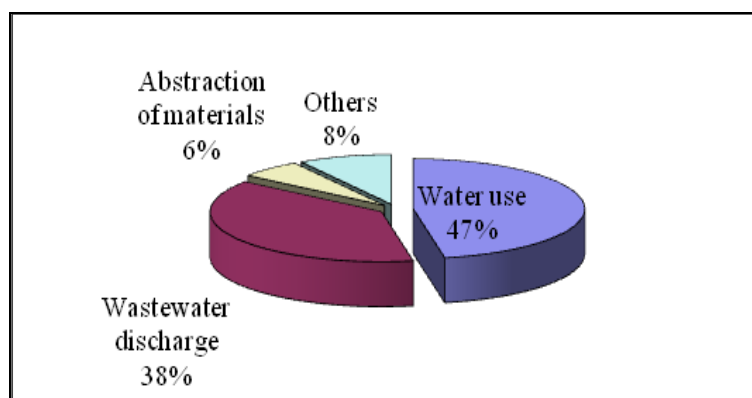
**Table 2. Status of the use of priced based instruments for biodiversity management**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	Total
Australia	♣	♣					♣	4
Austria	♣	N/A		♣		♣		5
Belgium	♣/■	♣				♣		7
Canada	♣/■	♣/■	♣	♣	♣/■	♣	♣	24
Czech Rep.	♣	N/A		♣			♣	4
Finland	♣	♣/■		♣		♣	♣	8
France	♣/■	■					♣/■	19
Hungary	♣	N/A		♣				2
Japan	♣					♣		4
Korea	♣	■		♣	♣		♣	16
Mexico							♣	1
Netherlands	♣	♣	♣			♣		8
Norway	♣		♣	♣			♣	4
Slovak Rep.				♣				1
Sweden	♣					♣	♣	5
Turkey				♣				1
UK	♣/■							4
<b>Total</b>	<b>41</b>	<b>12</b>	<b>5</b>	<b>14</b>	<b>7</b>	<b>12</b>	<b>26</b>	<b>117</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

As for the use of taxes, fees and charges in the inland water sector, their application seems to occur along the entire water management cycle. While the extent of their application varies across responding countries, three different tax (fee and charge) bases are commonly used: water use, wastewater (sewerage and effluent) discharge, and abstraction of material from the watershed (e.g. gravel). These three tax bases account for more than 90% of the price-based instruments applied in the inland water sector as shown in Figure 3.

**Figure 3. Bases of taxes, fees and charges in the inland water ecosystem**



A water tax (fee or charge) indicates the price charged for the direct abstraction of water from ground or surface water or for water supply services. A wastewater charge includes the payment for domestic

sewage or effluents discharged into the sewage system and the payment for pollutant discharged to a natural body of water. Both types can be found sporadically across almost all responding countries (e.g. Austria, Belgium, the Czech Republic, Finland, France, Hungary, Korea, the Netherlands and the United Kingdom). As for abstraction of material from the watershed, Finland and Sweden levy taxes on gravel abstraction. Apart from these three common instruments, Finland imposes charges for permitting activities which affect the level of water in a basin, and the United Kingdom is now considering the establishment of a charging system for physical modifications of waterways to prevent the deterioration of good ecological status.

It appears that the use of taxes, fees and charges in inland water systems is continually expanding, but not significantly. Only six responding countries – Belgium, Canada, Finland, France, Korea and the United Kingdom – indicated changes in this field after the adoption of the Recommendation in 2004. France is the only country that noted significant progress recently.

Concerning marine and coastal ecosystems, some notable examples of price-based instruments can be found such as the environmental management charge (EMC) levied on visits to the Great Barrier Reef (Australia), payments for the loss of value of areas under the decreed protection of dunes (Belgium), and charges for the development of coastal areas (Korea). Some countries also noted charge systems in forest management for the removal of trees or deforestation, and for species management through hunting and fishing fees.

In spite of the increasing application of taxes, fees and charges, their influence in actually conserving biodiversity needs to be carefully assessed. These instruments work properly when the rate of tax (fee or charge) is set at the level of marginal damage or external costs to society as a whole. However, in reality this is seldom the case, because such costs are very difficult to accurately assess, particularly with respect to the impacts on biodiversity and ecosystems. In practice, policy targets tend to be determined as a result of a political process instead, with the tax rate set at a level to achieve these targets (EEA, 2006).

**Table 3. List of price-based instruments introduced or modified after 2004 to support biodiversity management**

<b>Inland water ecosystems (7)</b>		
1	Manure tax (post-2004)	Belgium (Flanders)
2	Waste water charge (post-2004)	Belgium (Flanders)
3	Water permit in National parks (revised in 2007)	Canada
4	Exemption from TFNB (land tax for wetlands (implemented in 2005)	France
5	Rural Development and funding of wetland initiatives (from the non-budgetary appropriations of Water Agencies) (implemented in 2005)	France
6	Abstraction charging (go into effect in 2009)	UK
7	Charging system for regulating physical modifications to prevent deterioration of good ecological status (under consideration)	UK
<b>Marine and coast (5)</b>		
1	Commercial Marine Fishing Licence Fees (revised in 2007)	Canada
2	Species at Risk Act (SARA) (fully implemented in 2004)	Canada
3	Fee on waste from ships (post-2004)	Finland
4	80% of the French registration tax on boats is allocated to the Coastal and Lakeshore Conservatory (the second stage will be an increase from 80% to 100% under the 2007 Finance Bill) (implemented in 2005)	France
5	Charges for the development of coastal area(post-2004)	Korea
<b>Mountain (3)</b>		
1	Charge for entrance to parks (revised in 2007)	Canada
2	Development fees (post-2004)	Canada
3	The Cooperative Fund for Ecosystem Conservation: Cost charging for approved development project (revised in 2004)	Korea
<b>Others; e.g. land/soil management, ecotourism, mining, etc (11)</b>		
1	Exemption from TFNB land tax for Natura 2000 sites (implemented in 2005)	France
2	Exemption from TFNB land tax (see above) for land in the centre of national parks overseas (implemented in 2005)	France
3	Partial exemption from transfer duty for Natura 2000 sites (implemented in 2005)	France
4	Extension to sites other than Natura 2000 sites of the exemption relating to ¾ of transfer duty (implemented in 2006)	France
5	Extension to sites other than Natura 2000 sites of the deduction from net income of the cost of rehabilitation and major maintenance (implemented in 2006)	France
6	Deduction from net income of the cost of rehabilitation and major maintenance work on Natura 2000 sites (implemented in 2006)	France
7	Additional payment under the DGF for <i>communes</i> fully or partially located in the centre of a national park (implemented in 2006)	France
8	Exemption from certain taxes on real-estate donations, legacies, acquisitions and exchanges for public agencies in charge of national parks (implemented in 2006)	France
9	Local Rights and Responsibilities Act, extending the areas eligible for funding by the Departmental Tax for Sensitive Natural Areas to Natura 2000 sites and nature reserves (post-2004)	France
10	The activities eligible for funding by the Departmental Tax for Sensitive Natural Areas are extended to cover natural asset inventories (implemented in 2006)	France
11	Deficits from expenditure on the conservation and enhancement of natural assets are chargeable to general revenue (implemented in 2006)	France

### 3.3.2. Subsidies

Subsidies are one of the most frequently used economic instruments in biodiversity management. Table 4 shows an overview of the use of subsidies in OECD countries (see Appendix II for the whole list). They are used extensively across all policy areas and almost all responding countries. Despite their omnipresence, variations are notable across the thematic areas and in terms of the frequency of their use within a country. Of 235 subsidy schemes noted in OECD countries to support biodiversity management, almost 50% (114 schemes) are applied to agriculture and forest. Relatively few cases are observed in other

policy areas. The number of subsidy schemes listed per country also ranges from 3 noted in France, Luxembourg and the Slovak Republic to up to 37 subsidy schemes noted for Canada.

The broad application of subsidy schemes is in part a result of their relative political acceptability compared with other instruments, and the simplicity of their application (Ingo Bräuer et al. 2006). Policy makers prefer to utilise “positive incentives” to achieve policy objectives, rather than to use “negative incentives” which punish or discourage certain economic activities by imposing more regulation, charges, taxes and penalties. Moreover, there are various practical difficulties in designing economic instruments to internalise the costs of biodiversity loss, and there are often high enforcement and monitoring costs of regulations and access restrictions (OECD, 1999). However, subsidies tend to be expensive for tax payers, and often lock-in practices or technologies rather than encouraging innovation and new management techniques.

**Table 4. Status of the use of subsidies for biodiversity management**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	<i>Total</i>
Australia	♣		♣	♣			♣	5
Austria			♣/■	♣/■				4
Belgium	♣		♣/■	♣/■			♣	16
Canada	♣/■	♣	♣/■	♣/■		♣/■	♣/■	37
Czech Rep.	♣/■		♣/■	♣/■	♣/■	♣/■	♣/■	35
Finland			■	♣			♣	4
France			♣/■	♣/■				3
Hungary			♣/■	♣/■		■	■	12
Japan	♣		■		♣/■		♣	5
Korea		♣/■	♣/■	♣/■	■	♣	♣/■	19
Mexico		■		♣				2
Luxembourg			♣ 2	♣ 1				3
Netherlands			♣/■	♣			♣	7
Norway			■	♣		♣		4
Slovak Rep.				♣ 1		♣ 1	♣ 1	3
Sweden		♣	♣	♣			♣	6
Switzerland			♣	♣	♣	♣	♣	15
UK	♣	♣	♣/■	♣/■		♣	♣/■	18
EU	♣/■ 3	♣/■ 4	♣/■ 7	♣/■ 7	♣/■ 7	♣/■ 5	♣/■ 3	36
<b>Total</b>	<b>23</b>	<b>11</b>	<b>57</b>	<b>56</b>	<b>16</b>	<b>27</b>	<b>44</b>	<b>234</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

Subsidies come in different forms and do not necessarily involve a concrete monetary transfer. They take all forms of direct and indirect financial support, ranging from monetary payments, tax exemptions or reductions, other financial incentives (e.g. loan guarantees and soft loans) to the provision of infrastructure necessary for the sustainable use of resources.

Above all, the most frequently observed subsidy schemes in OECD countries linked to biodiversity management are payment programmes to encourage environmentally friendly practices by granting monetary transfers to land owners, farmers or fishermen. A wide range of agri-environmental payment

programmes based on farming practices are found in many responding countries (e.g. Austria, Belgium, Canada, the Czech Republic, Finland, Hungary, Korea, the Netherlands, Sweden and the United Kingdom). The other common policy instrument is a payment programme based on resource retirement. A subsidy scheme under this category may provide incentive payments to remove land or other factors of production from agriculture or forestry production for environmental purposes. For example, the Austrian Natural Forest Reserves Programme establishes natural reserves on a voluntary basis, and forest owners are compensated for establishing these reserves and for their associated loss of profit. The Czech Republic compensates farmers for banning the use of fertilizers in certain areas of national parks and protected areas. Finally, there are subsidy schemes granting financial support for offsetting the investment costs of installing or implementing infrastructure or other changes to support more environmentally friendly practices. For example, a number of OECD countries provide financial support for reductions in the fishing fleet capacity and fishing effort, such subsidies for fleet retirement were explicitly mentioned by Korea in the questionnaire response. In 2007, Mexico introduced a financial support scheme for the buy-back of coastal fishing fleets or for the technological conversion of fishing gear with a view to reduce the by-catch mortality of endemic marine mammals known as “vaquita” in the Upper Gulf of California.

As to progress since 2004, almost all responding countries reported more than one subsidy scheme that was modified or introduced after 2004. This is in contrast with the relatively small changes seen since 2004 in other economic instruments (see section 3.3.1 for price-based instruments and other following sections). These active changes again illustrate the relatively prominent role of subsidies in the toolkit of policy instruments to manage biodiversity in OECD countries. In particular, subsidies to encourage changes in agricultural production in favour of biodiversity conservation and its sustainable use are reported in almost all responding countries. This also illustrates that reforming agricultural policy towards more environmentally friendly practices is a common trend in OECD countries, and gives an example of the potential for integrating biodiversity concerns into a broader policy context.

**Table 5. List of subsidies introduced or modified after 2004 to support biodiversity management**

<b>Inland water ecosystems (9)</b>		
1	Municipal Rural Infrastructure Fund (adopted in 2006)	Canada
2	Nova Scotia Environmental Home Assessment Program (post-2004)	Canada
3	Capital regional district of Victoria water efficient rebate program (adopted in 2006)	Canada (B.C.)
4	Operational program infrastructure (post-2004)	Czech Rep.
5	Operational program environment (post-2004)	Czech Rep.
6	LIFE+ : Projects for nature protection aimed at Natura 2000 areas (post-2004)	Czech Rep.
7	Agri-environmental measures under the Rural Development regulation (revised in 2006)	EU
8	LIFE+ projects targeting nature conservation and protection (revised in 2007)	EU
9	Structural and Cohesion Funds (subsidies for inland water courses restoration and rehabilitation, etc) (revised in 2006)	EU
<b>Marine and coast (3)</b>		
1	Subsidies for fleet retirement (revised in 2004)	Korea
2	Subsidies for the buy-back of coastal fishing fleets and the technological conversion of fishing gear (introduced in 2007)	Mexico
3	European Fisheries Fund (EFF) (subsidies for following more eco-friendly fishing practices, changing of fishing gear and technology to avoid disturbance of species, training) (revised in 2006)	EU
<b>Agriculture (18)</b>		
1	Adjustment of the Austrian Programme on an environmentally sound and sustainable agriculture (ÖPUL) to the new rural development scheme of the EU (revised in 2007)	Austria
2	Integration of the compensation payments for agriculture within the NATURA 2000 network into the rural development scheme of the EU (revised in 2007)	Austria
3	Rural development plan 2007-2013 (post-2004)	Belgium (Flanders)
4	Alberta Environmentally-Sustainable Agriculture Processing-Based program (revised in 2004)	Canada
5	Payments within Natura 2000 agricultural areas (post-2004)	Czech Rep.

6	Operational Program Environment (post-2004)	Czech Rep.
7	LIFE+: Projects for nature protection aimed at Natura 2000 areas (post-2004)	Czech Rep.
8	Agri-environmental measures (revised in 2007)	France
9	Support for non-commercial investment (revised in 2007)	France
10	The National Rural-Development Plan(NRDP, 2004-2006) (post-2004)	Hungary
11	New Hungary Rural Development Plan(NHRDP, 2007-2013) (post-2004)	Hungary
12	Subsidy Activities for Conservation of Rural Scenery and Nature (post-2004)	Japan
13	Direct payments for environmentally friendly livestock practices (post-2004)	Korea
14	Investment Framework Rural Areas (revised in 2006)	Netherlands
15	SPADE (To stimulate the innovation for agro-biodiversity and sustainable soil management) (revised in 2007)	Netherlands
16	Environmental subsidies in the agricultural sector (revised in 2006)	Norway
17	Entry level Scheme: to provides a fixed payment per hectare in return for a package of management measures (post-2004)	UK
18	Rural development measure – AXIS 2 land management (agri-environmental measures under the Rural Development regulation, payments for Agriculture Natura 2000 areas, etc) (revised in 2006)	EU
<b>Forest (16)</b>		
1	Integration of the compensation payments for forestry within the NATURA 2000 network into the rural development scheme of the EU (post-2004)	Austria
2	Subsidy for private forest owners organisation in the context of forest certification (revised in 2005)	Belgium (Wallonia)
3	Subsidy for forest regeneration in private forests (revised in 2006)	Belgium (Wallonia)
4	Assistance to Combat Pine Beetle Infestation (adopted in 2006)	Canada
5	Payments within Natura 2000 forest areas (post-2004)	Czech Rep.
6	Forest-environment payments (post-2004)	Czech Rep.
7	Operational Program Environment (post-2004)	Czech Rep.
8	LIFE+ (post-2004)	Czech Rep.
9	Support for non-commercial investment in woodland under Natura 2000 contracts (revised in 2007)	France
10	The National Rural-Development Plan(NRDP, 2004-2006) (post-2004)	Hungary
11	New Hungary Rural Development Plan(NHRDP, 2007-2013) (post-2004)	Hungary
12	Restoration of degraded forest ecosystem (post-2004)	Korea
13	Afforestation on marginal farm land and reforestation on abandoned grassland (post-2004)	Korea
14	England Woodland Grant Scheme, Rural Development Contracts in Scotland and Better Woodlands for Wales (post-2004)	UK
15	Rural development measure – AXIS 2 land management (forest-environmental measures under the Rural Development regulation, Natura 2000 payments in forest areas, etc) (revised in 2006)	EU
16	LIFE+ projects in forest areas promoting nature protection and management (revised in 2007)	EU
<b>Mountain (7)</b>		
1	Agri-environmental measures(revised in 2007)	Czech Rep.
2	Operational Program Environment (post-2004)	Czech Rep.
3	LIFE+ (post-2004)	Czech Rep.
4	Government subsidies for development of Quasi-National Parks and Long-Distance Nature Trails (post-2004)	Japan
5	Management and conservation of reserved areas in Baekdu Daegan Mountains: Support for income generating projects to local villagers (post-2004)	Korea
6	Rural development measure- AXIS 2 land management (agri-environmental measures under the Rural Development regulation, Natura 2000 payments, non-productive investments in forest, etc) (revised in 2006)	EU
7	LIFE+ projects in mountainous areas (revised in 2007)	EU



<b>Species management (7)</b>		
1	Endangered species recovery fund (ESRF) (revised in 2006)	Canada
2	Ecological gifts program (revised in 2006)	Canada
3	Operational Program Environment (revised in 2007)	Czech Rep.
4	LIFE+ (revised in 2007)	Czech Rep.
5	Supporting the protection and conservation of habitat and natural stocks of game species (post-2004)	Hungary
6	Agri-environmental and forest-environmental measures (revised in 2006)	EU
7	LIFE+ projects (wild species breeding programmes, etc) (revised in 2007)	EU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (20)</b>		
1	British Columbia Sustainable Environment Fund (post-2004)	Canada (British Columbia)
2	Strengthening accelerated CCA for clean energy generation (strengthened in 2007)	Canada
3	Vehicle Efficiency Incentive + Green Levy on Fuel-Inefficient Vehicles (strengthened in 2007)	Canada
4	Incentives for removal of older, high-emitting vehicles (strengthened in 2007)	Canada
5	Strengthening the Public Transit Tax Credit (strengthened in 2007)	Canada
6	Renewable Fuels Production Incentive (strengthened in 2007)	Canada
7	Accelerate capital cost allowance for forestry bioenergy (strengthened in 2006)	Canada
8	Extending the mineral exploration tax credit for flow-through share investors (revised in 2006)	Canada
9	Operational Program Environment: Subsidies for prevention of landslides and rock avalanches etc (post-2004)	Czech Rep.
10	Compensation for nature conservation restrictions in protected areas and outside of protected areas (post-2004)	Hungary
11	Subsidies for investments in nature conservation (National Development Plan, 2004-2006) (post-2004)	Hungary
12	Subsidies for investments in nature conservation (New Hungary Development Plan, 2007-2013) (post-2004)	Hungary
13	Subsidies for investments in ecotourism (National Development Plan, 2004-2006) (post-2004)	Hungary
14	Subsidies for investments in ecotourism (New Hungary Development Plan, 2007-2013) (post-2004)	Hungary
15	A tax relief and financial support for voluntary participants in conserving cultural and natural heritage resources (post-2004)	Korea
16	Rural Development Plan for England (revised in 2007)	UK
17	Uplands ELS: Plan to convert existing Hill Farm Allowance (income support) into a scheme based on environmental outcomes in the uplands (go into effect in 2010)	UK
18	Projects for specialised of tourism (nature and eco tourism) through the Structural Funds Programmes (revised in 2006)	EU
19	Support for promotion of alternative forms of tourism in rural areas through the Rural Development Fund and Programmes (revised in 2006)	EU
20	LIFE + (revised in 2007)	EU

### 3.3.3. Reform of perverse subsidies

Available data indicates that subsidies for various purposes are pervasive and the total financial transfer to different economic sectors amounts to at least USD 400 million (OECD, 2005). A number of them may aim to correct specific market failures or to generate environmental benefits, such as the payments to farmers to plant trees to reduce agricultural run-off or maintain ecosystems, as indicated in the previous section. On the other hand, many subsidies are harmful to the environment instead. For example, subsidies for road transport increase fragmentation of habitats for wildlife; agricultural subsidies can lead to overuse of pesticides and fertilisers and over-production; and subsidies in fisheries can lead to excess fishing capacity and overexploitation of fish stocks. Even apparently “environmentally benign” subsidies can have negative effects that are sometimes difficult to discern.

Therefore, the reform or removal of support for activities that exert pressure on biodiversity is one of the most promising incentive measures for the conservation and the sustainable use of biodiversity (OECD, 1999). The removal of such “perverse subsidies” not only alleviates pressures on biodiversity, but can also increase economic efficiency and reduce government budget deficits.

However, only a few cases of subsidy reforms designed to reduce pressures on biodiversity were reported in the responses to this survey (see Table 6). Only six examples from Canada, Korea, the United Kingdom and the European Commission were listed as subsidy reform cases implemented since the adoption of the Recommendation in 2004 (see Table 7). This lack of reporting on subsidy reforms or removals seems in part to come from the fact that it is not easy to identify clearly those subsidies which constitute a perverse effect on biodiversity, since most of those subsidies have originally been established for other purposes than the conservation and sustainable use of biodiversity and hence the affect on biodiversity is an ancillary impact that is often not considered.

**Table 6. Status of reform or removal of perverse subsidies since 2004**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	<i>Total</i>
Canada							♣/■	<b>3</b>
Korea			■					<b>1</b>
Sweden				♣				<b>1</b>
UK			■					<b>1</b>
EU			♣/■					<b>1</b>
<b>Total</b>			<b>3</b>	<b>1</b>			<b>3</b>	<b>7</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

According to the EC report to the Convention on Biological Diversity in 2004, its recent reforms to the Common Agriculture Policy (CAP) and the common Fisheries Policy (CFP) have significantly shifted the respective policies towards more environmentally-friendly measures, and therefore provide increased positive incentives for the protection and conservation of agricultural and marine biodiversity (EC, 2004).

**Table 7. List of the reform or removal of perverse subsidies introduced or modified after 2004**

<b>Agriculture(3)</b>		
1	Abolition of subsidy for fertiliser (post-2004)	Korea
2	Removal of production subsidies under the CAP and introduction of Single Farm Payment (post-2004)	UK
3	Progressive move from Common Market Organisation Schemes under the CAP to the Single Farm Payment Scheme which is support non-related to production levels and it is subject to the respect of environmental obligations under cross-compliance rules (implemented in 2005)	EU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (3)</b>		
1	Phasing out of the accelerated capital cost allowance to oil sands investments (strengthened in 2007)	Canada
2	Removal of excise tax exemption for bio-fuels (strengthened in 2007)	Canada
3	Prohibition of the deduction of fines and penalties (introduced in 2005)	Canada

### 3.3.4. Market creation/assignment of property rights

The creation of markets through the removal of barriers to trading and the assignment of well-defined and stable property rights is based on the premise that rational holders of these property rights will maximise the value of their resources over time. The underlying reasoning is that if biodiversity resources

were thus privatised, their conservation would be better assured than under open access regimes where users often resort to short-term exploitation on a first-come, first-serve basis (OECD, 1999).

This reasoning holds well for biodiversity resources that contain market value such as commercially valuable fish-stocks or timber/non-timber forest products. The majority of market creation instruments reported from responding countries are thus associated with the management of commercial fish stocks in the form of individual transferable quotas, or for private ownership of forested land (e.g. Australia, Canada, the Netherlands and the United Kingdom; see Table 8). A recent OECD publication noted that economic instruments are widely used in managing fisheries in OECD countries, based on defining access rights to fisheries resources and encompassing both those administrative regulations that influence fishers' incentives to "race for fish" and incentives to overcapitalise in fishing fleet, as well as a range of economic instruments based on market interplay (OECD, 2006).

**Table 8. Status of the use of market creation measures**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	<i>Total</i>
Australia	♣/■	♣		■		■	♣/■	<b>8</b>
Belgium		■						<b>1</b>
Canada	♣	♣				♣		<b>5</b>
France							♣	<b>1</b>
Netherlands		♣						<b>1</b>
Norway						♣		<b>2</b>
UK		♣/■						<b>2</b>
<b>Total</b>	<b>3</b>	<b>7</b>		<b>1</b>		<b>5</b>	<b>4</b>	<b>20</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

Australia reported in the questionnaire response their experience with several market creation schemes across various policy sectors. A water-based tradable permit scheme is in use to promote and coordinate effective planning and management of water resources for equitable, efficient and sustainable use of water in the Murray-Darling Basin; an off-site action programme is used to counterbalance pollution or environmentally degrading activities on high quality koala habitats in south-east Queensland, with developers having the option of either undertaking the action themselves or paying others to do so on their behalf; and a tender-based approach is used to reward land managers by paying them for maintaining or improving their properties as an incentive to keep them in good condition.

**Table 9. List of market creation measures or the assignment of property rights introduced or modified after 2004**

<b>Inland water ecosystems(1)</b>		
1	Pilot interstate water trading project(revised in July 2004)	Australia
<b>Marine and coast(2)</b>		
1	Nutrient emission right for farmers(post-2004)	Belgium (Flanders)
2	Days at sea regulations: The flat rate "days at sea" allocation is transferable between boats on a temporary annual basis, which is aimed at reducing fishing mortality on cod stocks in the North Sea(post-2004)	UK
<b>Forest(1)</b>		
1	Tasmanian Forest Conservation Fund (adopted in 2007)	Australia
<b>Species management(1)</b>		
1	Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (QLD) (adopted in 2006)	Australia
<b>Others; e.g. land/soil management, ecotourism, mining, etc (2)</b>		
1	Desert Upland Landscape Linkages (adopted in 2006)	Australia
2	Maintaining Australia's biodiversity Hotspots (MABH) (adopted in 2004)	Australia

### 3.3.5. Liability instruments

Liability measures are used to impose fines and non-compliance penalties for breach of environmental regulatory standards, as well as to place responsibility for restoration of the environment or compensation for environmental damage on the polluters. These types of liabilities play a potential role not only in strengthening the polluter pays principle and precautionary approach, but also in directing all economic actors into adopting more comprehensive environmental management practices.

Countries have a civil code relating to general liability for damage caused to a third party as a result of fault or negligence. This civil code is usually interpreted to encompass environmental damage. However, the development of independent liability schemes for environmental damage is a common trend partly due to the complexity of environmental damage. For example, Korea reported the introduction of a new non-compliance fee for those who eat illegally captured wildlife since the adoption of the Recommendation in 2004. The European Parliament and Council approved the Directive on liability for damage to the environment in 2004, going into effect in 2007. The Directive evokes liability for damage to water, to biodiversity (including *de facto* all species and habitats covered under the Natura 2000 network but allowing EU Member States to go beyond these provisions), and covers concrete and quantifiable damage, including multi-source pollution, where a causal link can be established between the damage and the identified polluter(s).

**Table 10. Status of the use of liability instruments**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	<i>Total</i>
Australia		♣						<i>1</i>
Canada					■	♣		<i>2</i>
Hungary							♣	<i>1</i>
Japan		♣						<i>2</i>
Korea	♣					■	♣	<i>4</i>
EU	■	■			■	■	■	<i>5</i>
<b>Total</b>	<b>2</b>	<b>3</b>			<b>2</b>	<b>3</b>	<b>4</b>	<b>15</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

### 3.3.6. Voluntary agreements, labelling and certification, and rewards

Strictly speaking, voluntary agreements, labelling and certification, and rewards are not economic instruments. However, they can play a role in achieving biodiversity conservation and its sustainable use by complementing and supporting the existing markets.

A number of countries – including Australia, Austria, Belgium, Korea, the Netherlands and the United Kingdom – reported the use of the voluntary agreements, labelling and certification and rewards to contribute to biodiversity conservation and sustainable use.

**Table 11. Status of voluntary agreements, labelling and etc**

Countries	Inland water	Marine and coast	Agriculture	Forest	Mountain	Species	Others	<i>Total</i>
Australia							♣	<i>1</i>
Austria							♣	<i>1</i>
Belgium				■				<i>1</i>
Canada				♣				<i>3</i>
Korea			♣			■		<i>3</i>
Netherlands							♣	<i>2</i>
UK	♣							<i>1</i>
<b>Total</b>	<b>1</b>		<b>1</b>	<b>4</b>		<b>2</b>	<b>4</b>	<b>12</b>

Note: ♣ indicates the introduction of price-based instruments before 2004, and ■ indicates the modification of existing or introduction of new price-based instruments (including the proposed) after 2004.

## 4. Conclusions

Most of the countries responding to the questionnaire have in place a national biodiversity strategy or framework, a number of which provide a comprehensive and over-arching framework across policy areas. All responding countries noted improvements to or strengthening of their biodiversity strategy or framework in recent years. Nearly all noted further progress in the last few years in the application of economic instruments within their biodiversity strategy or framework, although the use of market-based instruments is often still predominant with specific instruments and policy areas.

The most commonly noted economic instruments used in the responding countries are positive subsidies for biodiversity friendly behaviour, with the application of fees, charges and taxes fairly widely used as well. Less progress has been made however in reforming perverse incentives, with the exception of recent reforms of agricultural subsidies and some progress in reforming perverse subsidies in the fishing sector. Instruments that create markets for sustainable use of biodiversity resources are also relatively less developed in biodiversity management, for example tradable permits schemes, although there are some examples such as with fishing quotas and hunting permits.

In terms of application of biodiversity related incentive measures to specific sectors and ecosystems, the survey indicates that the areas covered most comprehensively by such measures in responding countries are inland waters, agriculture and forest biodiversity, while the use of such instruments is more partial or limited in mountain areas and species management. The other finding is that the use of a specific type of economic instrument often dominates a certain area. In agriculture and forests management, the most commonly used type of instrument is positive subsidies, or payments for activities which encourage sustainable use or conservation of biodiversity. Taxes, fees and charges are most commonly used to preserve inland water ecosystems, with the majority of their imposition targeted to three areas: water use, wastewater charges, and the abstraction of materials.

The uneven use of economic instruments to support sustainable use and conservation of biodiversity resources may be attributed to a range of factors, including: differences in the legal, policy and administrative structure; stakeholder preferences; the variety and nature of the policy challenges each country faces; and of course various other policy-relevant circumstances (available technologies, stock of natural resources, and changes in consumer behaviours). These variations inevitably lead to difficulties in evaluating the environmental effectiveness or economic efficiency of each economic instrument or the policy mix as a whole. Careful attention may therefore be needed in interpreting progress in the use of economic instruments as leading to better policy outcomes.

This survey is not comprehensive, and significant information gaps remain. Some caution is needed in interpreting and using the results of this survey. In particular, the number of economic instruments listed in the questionnaire responses does not necessarily reflect the scope and extent of biodiversity policies in place, in part because of variations in the way countries reported these instruments and in part because of the very differing ambition level and coverage amongst the policy instruments noted. Economic instruments are often employed in combination with other policy instruments, in a policy mix, and as such it is often hard to distinguish them from other policy measures. They may be interconnected in several ways. While clear conclusions cannot be drawn about the exact coverage and number of instruments in operation, some preliminary and general observations about the extent and recent developments in the use of such instruments can be made as outlined in this paper.

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**APPENDIX I**  
**THE RECOMMENDATION OF THE COUNCIL ON THE USE OF ECONOMIC INSTRUMENTS**  
**IN PROMOTING THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY**

THE COUNCIL,

Having regard to Article 5 b) of the Convention on the Organisation for Economic Co-operation and Development of 14 December 1960;

Having regard to the Recommendation of the Council on Guiding Principles Concerning International Economic Aspects of Environmental Policies of 26 May 1972 [C(72)128];

Having regard to the Recommendation of the Council on the Use of Economic Instruments in Environmental Policy of 31 January 1991 [C(90)177/FINAL], which recommended *inter alia* that Member countries: i) work towards improving the allocation and efficient use of natural and environmental resources by means of economic instruments, so as to better reflect the social cost of using these resources; and ii) make effort to reach further agreement at international level on the use of environmental policy instruments with respect to solving regional or global environmental problems, as well as ensuring sustainable development;

Having regard to existing Council Acts which recommend the use of economic instruments in various fields of environmental policy, namely: the Recommendation of the Council of 28 September 1976 on a Comprehensive Waste Management Policy [C(76)155(Final)]; the Recommendation of the Council of 5 April 1978 on Water Management Policies and Instruments [C(78)4(Final)]; the Recommendation of the Council of 3 February 1978 on the Re-Use and Recycling of Beverage Containers [C(78)8(Final)]; the Recommendation of the Council of 3 July 1978 on Noise Abatement Policies [C(78)73(Final)]; the Recommendation of the Council of 20 June 1985 on Strengthening Noise Abatement Policies [C(85)103]; the Recommendation of the Council of 31 March 1989 on Water Resource Management Policies: Integration, Demand management, and Groundwater Protection [C(89)12(Final)]; the Recommendation of the Council on Coastal Zone Management of 23 July 1992 [C(92)114(Final)]; the Recommendation of the Council on Improving the Environmental Performance of Government of 20 February 1996 [C(96)39(Final)];

Having regard to the objectives concerning biodiversity management expressed in the OECD *Environmental Strategy for the First Decade of the 21<sup>st</sup> Century*, adopted by OECD Environment Ministers and endorsed by the OECD Council at Ministerial level in May 2001, which *inter alia* call for significant reductions in threats to ecosystems and their species from habitat loss and fragmentation, changes in land use patterns, pollution, introduction of invasive species, and over-exploitation or extinction of wild species; and considering that OECD Environment Ministers agreed in the same *Strategy* that "... countries should apply precaution as appropriate in situations where there is a lack of scientific certainty";

Having regard to Articles 10 and 11 of the Convention on Biological Diversity, which call respectively on Parties to "integrate consideration of the conservation and sustainable use of biological resources into national decision-making ..."; and to "as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity";

Having regard to Decisions IV/10A, V/15, VI/15 (including Annex 1), and VII/18 of the Conference of Parties to the Convention on Biological Diversity, each of which discuss the links between the assessment of biodiversity and the implementation of appropriate incentive measures, and *inter alia* "... requests the Executive Secretary to collaborate with OECD ... in order to engage in a coordinated effort ... to elaborate proposals for the design and implementation of incentive measures for the conservation and sustainable use of biodiversity...";

Recalling the objective of significantly reducing the rate of the biodiversity loss by 2010 included in the World Summit on Sustainable Development's Plan of Implementation (4 September 2002) (WSSD/POI), and having regard to Paragraph 44(a) of that WSSD/POI which calls on countries *inter alia* to: "integrate the objectives of the Convention [on Biological Diversity] into global, regional, and national sectoral and cross-sectoral programmes and policies, in particular in the programmes and policies of the economic sectors of countries ...";

On the proposal of the Environment Policy Committee:

**I. Recommends** that Member countries:

- (i) establish and apply a policy framework aimed at ensuring the efficient long-term conservation and sustainable use of biodiversity and its related resources.<sup>6</sup> The overarching goal of such a framework should be to ensure maximum net benefits<sup>7</sup>, both now and in the future, from the use and conservation of resources stemming from biodiversity – as well as an equitable sharing of these benefits that is consistent with national, and applicable international, legislation;
- (ii) make greater and more consistent use of domestic economic instruments<sup>8</sup> in the application of their biodiversity policy frameworks, while attempting to reach further agreement at the international level on the use of economic-based policy instruments with respect to biodiversity conservation and management;
- (iii) integrate market and non-market (i.e. non-price) instruments – taking account of the respective advantages of each in lowering information and transactions costs, and in addressing the "public" values of biodiversity – into an effective and efficient mix of policies; and
- (iv) integrate biodiversity policy objectives in a cost-effective manner into government sectoral policies, in order to avoid undue adverse effects on biodiversity and its related resources.

**II. Recommends** that, when designing and implementing their biodiversity policies, Member countries take into account the Considerations set out in the Annex hereto, which are an integral part of this Recommendation.

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<sup>6</sup> The restoration of degraded biodiversity-related resources, when warranted, is also fully consistent with achieving the goals of this Recommendation.

<sup>7</sup> The term net benefits is used here to describe a welfare perspective (including environmental, economic and social welfare).

<sup>8</sup> Economic instruments is used here in a broad sense, to include all instruments that change the incentives individuals face for undertaking particular actions.

**III. Instructs** the Environment Policy Committee and other relevant bodies of the Organisation:

- (i) to support Member countries' efforts in applying incentives-based approaches to achieving biodiversity policy objectives: by examining the feasibility of such instruments; by providing appropriate guidance on their use; and by exchanging information concerning the design or choice of particular instruments, including the reform of existing and proposed measures that (could) have harmful effects on biodiversity;
- (ii) to continue to support efforts by the Convention on Biological Diversity to improve the efficient and effective application of incentives-based approaches to biodiversity conservation and sustainable use;
- (iii) to review the actions taken by Member countries pursuant to this Recommendation within the three years following the adoption of this Recommendation; and
- (iv) to assist non-Member countries in developing and implementing policy frameworks that contribute to the achievement of the objectives of this Recommendation in those countries.

**ANNEX TO APPENDIX I  
ECONOMIC CONSIDERATIONS TO BE TAKEN INTO ACCOUNT BY OECD MEMBER  
COUNTRIES IN PROMOTING THE CONSERVATION AND SUSTAINABLE USE OF  
BIODIVERSITY<sup>9,10</sup>**

**I. FRAMEWORK FOR THE USE OF ECONOMIC INSTRUMENTS IN BIODIVERSITY  
CONSERVATION AND SUSTAINABLE USE: KEY ELEMENTS**

- The overall *goal* of a policy framework for biodiversity management should be to achieve efficient long-term conservation and sustainable use of biodiversity and related resources – as well as an equitable sharing of the benefits that is consistent with national, and applicable international, legislation. When a biodiversity-policy framework accounts for all public values of biodiversity, and for the consequences that its use may subsequently have on all affected individuals (including future generations), use of the biodiversity resources will be consistent with achieving the greatest net benefit to society over the long term.
- The choice of particular instruments is complex and dependent upon specific institutional, economic and social needs. Policy options should be systematically analysed with a view towards minimising the costs of public administration, monitoring and enforcement, as well as the private costs of implementation. Since market-based instruments are often cost-effective – and generally under-utilised – they should be promoted. Nonetheless, in many cases it will also be necessary to use non-market-based instruments in an effective policy mix – in order to achieve an efficient long-term level of conservation and sustainable use of biodiversity.
- Properly designed and implemented, economic instruments will be important parts of an *incentive-based approach* to sustainable biodiversity management. Using these economic instruments will often require some form of *valuation* of the underlying biodiversity resources in order to integrate non-market aspects of biodiversity into economic decisions. This will help in setting policy goals at an appropriate level.
- Economic instruments should also be seen within the broader context of a market-based approach to the promotion of biodiversity goals. A *market creation* agenda will therefore be an important element of an efficient and effective management framework for biodiversity. Part of that agenda will involve establishing the rules and procedures that make markets work efficiently and

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<sup>9</sup> The Considerations set out in this Annex are based on reviews of Member countries' experiences with economic approaches to biodiversity management, as well as various biodiversity management frameworks developed by the Working Group on the Economic Aspects of Biodiversity (WGEAB). Further detail can be found in the publications of that Group, notably in: OECD (1999), *Handbook of Incentive Measures for Biodiversity: Design and Implementation*; OECD (2002), *Handbook of Biodiversity Valuation: A Guide for Policy-Makers*; OECD (2003), *Harnessing Markets for Biodiversity: Towards Conservation and Sustainable Use*; and OECD (forthcoming 2004), *Handbook on Market Creation for Biodiversity* (working title).

<sup>10</sup> The WGEAB work that underpins this Recommendation was also referenced extensively in Decision V1/15 (Annex 1) of the CBD Conference of the Parties.

effectively. Frameworks for access agreements that facilitate market-based exchanges of biodiversity-related resources are examples of initiatives in this direction.

- Sector policies should be developed in ways that are consistent with biodiversity objectives. Biodiversity impact assessment will usually be an important component of this search for *policy coherence*.
- There is a need to work with other OECD and non-Member countries to implement efficient and sustainable biodiversity management policies at the *international level* (e.g. through the development co-operation agenda; for protecting migratory species and aquatic resources, etc), within the context of available international biodiversity-related agreements while reflecting the particular costs and benefits facing individual countries.
- *Appropriate targets and timetables* need to be established for efficient and effective biodiversity policies, and progress toward these goals needs to be *periodically monitored*.

## II. INCENTIVE-BASED INSTRUMENTS IN BIODIVERSITY MANAGEMENT

Incentive measures are important elements of strategies for biodiversity conservation and sustainable use. Incentive measures often make use of the price system and market forces for achieving their objectives. They also:

- Rely on the premise that rational individuals will respond to changes in relative costs and benefits of the choices they make;
- Help reconcile differences between the value of biodiversity to individuals, and to society as a whole;
- Increase returns to activities that conserve or restore ecosystems that are particularly important for biodiversity;
- Increase the cost of (i.e. lower the returns to) activities that damage ecosystems that are particularly important for biodiversity; and
- Level the playing field between the (generally observable use-) returns to biodiversity degradation and the (generally non-observable non-use-) returns to biodiversity conservation and enhancement/restoration.

The use of economic instruments for biodiversity protection is predicated on the assumption that the social costs (benefits) of biodiversity use, degradation, and restoration can be internalised in the price of activities that cause these losses (gains) in biodiversity.

Biodiversity management problems arise in different ways in different ecosystems and communities. Incentive measures therefore need to be designed with the specific needs of individual ecosystems and communities in mind. Whether incentive or other measures are used should be based on a consideration of which ones are likely to be most efficient and effective.

*Elements* that are especially important for the successful implementation of incentive measures related to biodiversity policies include (within both OECD Member and non-Member countries):

- *Adequate information* about biodiversity-related resources, including their states; the pressures to which they are exposed; and the likelihood that individual incentive measures will be successful, should they be applied to a given situation;
- *Building the capacity* to design, implement, monitor, and enforce particular incentive measures, and in particular biodiversity management contexts; and
- Involving indigenous and local communities and stakeholders in the design and implementation of incentive measures.

**Implementation** of incentive measures for biodiversity conservation and sustainable management involves *inter alia* the following key steps:

- *Identification of the underlying problem and preliminary assessment of the potential role of incentive measures*: Data collection; preliminary assessment of the need for, and the potential utility of, the incentive measure; and stakeholder involvement will each contribute at this stage;
- *Design of the incentive measure*: Assess potential options on the basis of efficiency, effectiveness, equity in benefits and burdens, political acceptability, and predictability of the likely impact of the measure;
- *Building political support and institutional capacity*: This will include explicitly recognising the (existing) policy mix into which the incentive measure will now be introduced; personnel training; communication; examining complementary measures which may also be necessary; and developing appropriate links to private sector actors; and
- *Managing, monitoring, and enforcing the measure*: Setting aside sufficient funding for each of these steps will be important, as will revising the design of the measure over time, in order to reflect changing conditions.

### ***Incentive measures***

The range of market (and market-support) measures available to governments for encouraging biodiversity conservation and sustainable use includes:

#### *Economic incentives*

- Fees, charges and environmental taxes;
- Payments for ecosystem services;
- Assignment of well-defined property rights;
- Reform or removal of harmful subsidies.

#### *Funds*

- Environmental funds and public financing.

*Framework incentives*

- Information provision, scientific and technical capacity building;
- Economic valuation;
- Market creation;
- Institution-building and stakeholder involvement.

Examples of market measures include, *inter alia*:

- Charges or non-compliance fees related to certain types of forestry activities;
- Liability fees for the maintenance or rehabilitation of ecologically-sensitive lands;
- Fishing license fees or taxes (whose objective is resource management);
- Levies for the abstraction of surface water or groundwater;
- Support for biodiversity-related labelling schemes;
- Liability payments for biodiversity damages (including interim losses);
- Charges for:
  - Use of public lands for grazing in agriculture;
  - Use of sensitive lands;
  - Hunting or fishing of threatened species; and
  - Tourism in natural parks.
- Payments to farmers within a watershed for using farming techniques that maintain the quality of water resources.

***Combinations of instruments***

To achieve biodiversity-related policy objectives, economic instruments will often need to be used in conjunction with non-market instruments (standards, regulations, access restrictions, management plans, etc.). Both market and non-market components of these “mixes” of policy measures should be designed and implemented to complement each other.

***Reform or removal of perverse incentives***

Government-based economic support can take several forms, including *inter alia*: direct payments; tax exemptions or reductions; financial incentives for preferred inputs or equipment; market price support; credit guarantees; technical assistance; or free use of infrastructure. When aimed at general economic/social objectives, these instruments can sometimes lead to harmful effects on biodiversity and its related resources, even if their original intent had nothing to do with biodiversity.

Reform of these policies – in order to eliminate their harmful effects – should be an ongoing objective. When reform leads to the reduction of this support, it will not only bring benefits through reduced biodiversity loss, but will also improve the fiscal position of governments (assuming the support was originally provided from government budgets). In addition, all new economic support policies should be subjected *ex ante* to a review of their likely contribution to society's welfare (including their potential harmful effects on biodiversity). They should also be subjected to *ex post* review, to ensure these benefits continue to accrue over time.

Reform of perverse incentives related to biodiversity may be difficult to implement in practice, because some existing beneficiaries could lose wealth as a consequence of the reforms (although some could also gain). In many cases, however, it will be possible to design alternative policies which achieve the original social and economic goals of the support programme, but without the same negative consequences for biodiversity.

It should also be recognised that not all support programmes exert negative pressures on biodiversity resources – some also have the effect of improving opportunities for biodiversity conservation and sustainable use. Nevertheless, these programmes may still require periodic reform, if the economic costs associated with them exceed the public values associated with the (now protected) biodiversity resources.

Two elements of the *framework incentives* listed above are especially important for incentive measures – *valuation* of biodiversity and *market creation*. These issues are addressed in more detail in the following Sections.

### III. VALUING BIODIVERSITY

Incentives to achieve particular biodiversity outcomes aim directly or indirectly to move the market price toward a level that reflects full internalisation in management decisions of the values of the goods and services that biodiversity makes possible.

In many circumstances, policies to *directly* internalise impacts on biodiversity are not feasible (i.e. impacts on biodiversity cannot be reflected in resource-use decisions through the specific creation of markets for those impacts). In those cases, more *indirect* measures of government policy (market or non-market) may be necessary (e.g. taxes, levies, regulations, etc). Taxes, for example, are “indirect” because they can only approximately reflect the collective loss associated with biodiversity degradation. That is, they require policy-makers to estimate the level of collective loss – this loss cannot be observed in the market – and then impose that estimated cost on users of biodiversity-related resources.

To obtain such information, some metric of the incremental costs of using biodiversity-related resources will be necessary, in order to properly calibrate the policy instrument under consideration (e.g. to set a tax at the socially optimum level). *Economic* valuation can help in this process by providing a monetary measure of the impacts involved.

In addition to this *economic* calculation, however, policy-makers will also need information regarding *non-economic* criteria (e.g. moral choices, aesthetic, cultural, and spiritual values). Several techniques exist for describing these criteria in terms that are useful for decision-making (e.g. multi-criteria analysis, focus groups, etc.). Both economic and non-economic elements will therefore enter into most biodiversity policy decisions.

In principle, economic valuation techniques should be used only to the point where anticipated incremental (including long-term) improvements in the decision are commensurate with the costs of undertaking the valuation in the first place (i.e. a cost/benefit criterion should be applied to the valuation study itself). The remainder of this section is primarily concerned with *economic* valuation.



Assessing the economic value of biodiversity in a particular policy context should include an examination of all *use* and *non-use* values. Examples of use values include the services provided by ecosystems. Non-use values include, *inter alia*: option values, existence values, and bequest values.

Valuing the *market-based* (private) goods and services provided by biodiversity-related resources (i.e. moving toward full internalisation) is inherently easier than valuing *non-market-based* (public) ones. Nevertheless, acceptable methodologies exist for many of both types, and should be applied as appropriate. The use of more *ad hoc* approaches (such as narrative statements) may also sometimes be appropriate.

Many biodiversity values will engage public interests; however, some will also engage private interests to a sufficient extent that private markets can themselves approximate the best social use of the biodiversity-related resources. Both elements need to be recognised as a basis for considering the respective roles of governments and private actors in subsequent management of biodiversity-related resources.

Although debate continues about the applicability of economic techniques to the valuation of (non-marketed) environmental resources, use of these techniques in biodiversity management is growing. This growth is mainly due to advances in the theoretical methodologies that underlie these processes – which have allowed them to account for broader aspects of environmental resources that are of interest to policy-makers.

Nevertheless, there is still a gap between the highly refined assessments of value that are desirable for decision-making, and the ability of valuation techniques to meet this demand. Thus, while valuation techniques remain important *contributors* to the decision-making framework, other approaches will also often need to be taken into account in arriving at the final policy decision.

A wide *range* of quantitative valuation methods exists for use in developing and implementing biodiversity policy. Some of the more commonly used approaches include:

*Market price approaches:*

- Value on the basis of: observed market values for biodiversity-related goods and services; changes in the productivity of biodiversity-related resources; and cost considerations (replacement costs; restoration costs; or the value of preventative expenditures).

*Revealed preference approaches:*

- Value on the basis of the changes in market prices that result from changes in non-market (biodiversity-related) assets (travel cost method; recreational use method; hedonic method).

*Stated preference approaches:*

- Value on the basis of stated “willingness to pay” for biodiversity conservation and restoration (contingent valuation method).

*Benefits transfer approaches:*

- Rigorously value in one context, with these values then being adjusted for transfer to other (similar) contexts.

**IV. MARKET CREATION IN BIODIVERSITY MANAGEMENT**

In the same way that market-based incentives operate to reduce inappropriate pressures on biodiversity-related resources, use of markets more broadly can contribute to improved biodiversity management. Market creation works through the removal of barriers to trading, including the establishment and assignment of well-defined and stable property and/or user rights.<sup>11</sup> Market creation is based on the premise that holders of these property rights will maximise the value of their resources over time, thereby optimising both the level and the cost of biodiversity use, conservation, and restoration. In short, market creation involves more than just the use of market incentives.

Governments have two important roles to play in supporting markets for biodiversity-related resources. First, they need to establish the right framework conditions under which private and public operators can efficiently supply biodiversity-related resources to users. This role was discussed earlier (Section II). Second, governments need to ensure that public biodiversity-related goods are provided in the most efficient and effective manner possible. Creating markets implies putting in place the right legal/incentive frameworks to overcome characteristics such as *non-excludability* and/or *non-rivalry* in use, both of which can make public goods unsuitable for trading in markets – even when individuals would be willing to pay for them.

Markets will, by themselves, result in the right amount of use or conservation of biodiversity-related resources when the market can be made to reflect the full (including public) value to society of these resources (and also when all non-marketed consequences associated with their use are fully reflected in management decisions). Market *creation* for biodiversity is therefore the culmination of efforts to develop instruments and frameworks that capture public values. The emergence of private parks in many regions of the world demonstrates that there is scope for capturing public values in private markets. For those parks, the *private* value of their uniqueness is high enough to support public biodiversity objectives. However, the *public* value of the parks will typically be greater than those private values. Economic instruments that can capture some of these public values can improve biodiversity outcomes by extending the application of markets.

There are several specific markets in which biodiversity-compatible activity is already occurring, including *inter alia*: organic agriculture; sustainable forestry; non-timber forest products; genetic resources; and eco-tourism. Two highly successful examples of market creation – related to biodiversity resource management – where the instruments themselves created the market, and where the link to economic policy is clear, are:

- *Trading in access to fishing rights* – Property rights can sometimes be assigned over the harvesting of commercial fish species through individual transferable quotas (ITQs). Markets are created around the ITQs, which are transferable from one fisher to another – their value therefore becomes associated with their potential to generate income for individual fishers. In order to maintain this value over time, rights holders will tend to protect the natural resource that underlies it (i.e. the fish, and the biodiversity associated with those fish).

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<sup>11</sup> Property rights are assumed here to include even limited rights, such as easements on real estate that restrict the use of property.

- *Transferable development rights (TDRs)* – TDRs involve *partial* transfers of rights to use land: transfers that, in a biodiversity management context, restrict activities on ecologically-sensitive private lands. These can include restrictions on development, perhaps by implementing legally-binding property covenants or land management plans, both of which may be based on biodiversity management goals. The gains to biodiversity result from the restrictions that are imposed, whereas the efficiency gains result from having the limited development rights exercised by the most economic use.

Markets will also need to be monitored and even guided to ensure they result in net benefits for society as a whole. For example, trading in (illegal) products from endangered species highlights the potential adverse consequences of markets that do not take account of public values and externalities.

The absence of appropriate *information* can inhibit the development and implementation of market approaches to biodiversity conservation, use, and restoration. Information can be provided through such mechanisms as labelling, certification, direct information provision, technical capacity building, etc. Information provision is an important part of the foundation that enables incentive measures to work effectively and efficiently, thereby also underpinning the creation of markets. Scientific knowledge is an important part of this information function, so governments need to develop policies that establish the right conditions for new knowledge to emerge related to biodiversity conservation. Information assets currently being maintained in databases also need to be fully exploited in support of biodiversity conservation and management objectives. This exploitation can also extend to the development of indicators for monitoring biodiversity change (trends and patterns), which can be used to evaluate policy performance and to update the existing policies.

The active *engagement of stakeholders* in the development and implementation of biodiversity management policies is also an important key to the success of market creation policies. Institutional arrangements should therefore be installed to ensure the appropriate level of engagement with stakeholders in key decisions affecting biodiversity-related resources. Local community networks that identify and support local biodiversity objectives can make important contributions in this regard. As is the case with information provision, the early engagement of stakeholders is an important part of the market creation process.

*Dedicated funds* for biodiversity management purposes can tap into a growing pool of global savings that is seeking out “environmentally-friendly” investment opportunities. They are part of a growing development of innovative “green” financing approaches and financial mechanisms. Examples include venture capital funds that target environment-related start-up firms; mutual funds that invest in firms with a “green” charter; social equity funds; and the involvement of local banks in funding sustainable resource-use projects. Policies to enhance the role of financial markets in the sustainable use of biodiversity support (and create) markets by allowing these funds to more effectively seek out profitable opportunities.

Using capital markets to allocate these funds for biodiversity purposes increases the overall efficiency and effectiveness of the management process. The specialised knowledge, embodied in local branches of local markets, combined with the national and international coverage of some financial institutions, allows savings in one region to find their way to other locations, where they can be used most profitably – thereby contributing to the creation of markets for biodiversity. Moreover, using capital markets will allow local constraints in financial resources (which may be particularly acute in non-Member countries) to be overcome.

**APPENDIX II**  
**THE LIST OF THE TOTAL ECONOMIC INSTRUMENTS FOR BIODIVERSITY REPORTED**

**1. By economic instruments****<Price-based instruments: 117 >**

<i>Inland water ecosystems (41)</i>		
1	Water effluent charge	Australia
2	Fee on water use	Austria
3	Wastewater charges	Austria
4	Manure tax ( <i>post-2004</i> )	Belgium (Flanders)
5	Waste water charge ( <i>post-2004</i> )	Belgium (Flanders)
6	Waste water charge	Belgium (Wallonia)
7	Tax on water withdrawals	Belgium (Wallonia)
8	Groundwater tax	Belgium (Flanders)
9	Water abstraction permit fees	Canada (British Columbia, Nova Scotia)
10	Charge on discharge	Canada (British Columbia, Quebec)
11	Water permit in National parks ( <i>revised in 2007</i> )	Canada
12	Charge for withdrawal of groundwater	Czech Rep.
13	Fee for permitted discharge of wastewater into groundwater	Czech Rep.
14	Fee on gravel abstraction	Finland
15	Water level regulation charge: Payments for environmental permits relating to water levels	Finland
16	Water user charges	Finland
17	Exemption from TFNB (land tax for wetlands ( <i>implemented in 2005</i> ))	France
18	Rural Development and funding of wetland initiatives (from the non-budgetary appropriations of Water Agencies) ( <i>implemented in 2005</i> )	France
19	Charge on water abstraction	France
20	Charge on water consumption	France
21	Charge on water supply	France
22	Sewerage charge	France
23	Charge on water abstraction	Hungary
24	Charge on abstraction of water from rivers	Japan
25	Fee for use of water in reservoirs (dams)	Japan

26	Wastewater user charges	Japan
27	Water quality improvement charge	Korea
28	Water use charge for the Han River	Korea
29	Source charge	Korea
30	Emission charge	Korea
31	Total pollution load charge	Korea
32	Water use charge for the Nokdong River, the Gum River and the Youngsan River	Korea
33	Municipal sewerage charge	Netherlands
34	Groundwater extraction tax	Netherlands
35	Eco-taxes	Netherlands
36	Charges on tap water and waste water treatment	Norway
37	Natural gravel tax	Sweden
38	Charges for discharges	UK
39	Abstraction charging ( <i>go into effect in 2009</i> )	UK
40	Charging system for regulating physical modifications to prevent deterioration of good ecological status ( <i>post-2004, under consideration</i> )	UK
41	Charge on water resources	UK
<b>Marine and coast (12)</b>		
1	Environmental management charge (EMC) on visits to the Great Barrier Reef	Australia
2	Payment of loss of value of areas under the Decree protection of dunes	Belgium (Flanders)
3	Charge on fishing licences	Canada (Quebec)
4	Recreational Fishing Licence Fees	Canada
5	Salmon Conservation Stamp	Canada
6	Commercial Marine Fishing Licence Fees ( <i>revised in 2007</i> )	Canada
7	Species at Risk Act (SARA) ( <i>fully implemented in 2004</i> )	Canada
8	Fee on waste from ships ( <i>post-2004</i> )	Finland
9	Charge on fishing licence	Finland
10	80% of the French registration tax on boats is allocated to the Coastal and Lakeshore Conservatory (the second stage will be an increase from 80% to 100% under the 2007 Finance Bill) ( <i>implemented in 2005</i> )	France
11	Charges for the development of coastal area ( <i>post-2004</i> )	Korea
12	Charge for fishing licence	Netherlands
<b>Agriculture (5)</b>		
1	Charge on agricultural inputs	Canada (British Columbia)
2	High VAT (on fertilisers and pesticides)	Netherlands
3	Tax on farm mineral surpluses	Netherlands
4	Pesticide tax	Netherlands
5	Tax on the use of pesticides	Norway
<b>Forest (14)</b>		
1	Charge for tree protection: charge for trees with more than 40 cm circumference that is cut down if no new plantings are carried out instead	Austria (Vienna)
2	Stumpages fees	Canada
3	Forest protection fees	Canada
4	Charge for over-cutting	Canada (Alberta)
5	Charge for forest management & research	Canada (Quebec)

6	Logging tax	Canada (British Columbia)
7	Fee for the withdrawal of forest land	Czech Rep.
8	Forest management fee	Finland
9	Fee for forest management	Hungary
10	Tax revision on reserved area	Korea
11	Charging cancellation fee for erosion control projects designed for flood disaster prevention	Korea
12	Forest Trust Fund	Norway
13	Charges for the conversion or destruction of forested lands	Slovak Rep.
14	Charge for grazing	Turkey
<b>Mountain (7)</b>		
1	Charge for entrance to parks for fishers and hunters	Canada (Quebec)
2	Charge for entrance to parks ( <i>revised in 2007</i> )	Canada
3	Development fees ( <i>post-2004</i> )	Canada
4	Fee for national park entrance	Korea
5	Charging establishment costs on deforestation projects	Korea
6	Charging restoration costs on deforestation projects	Korea
7	The Cooperative Fund for Ecosystem Conservation: Cost charging for approved development project ( <i>revised in 2004</i> )	Korea
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (12)</b>		
1	Fee on hunting and fishing	Austria
2	Fee for the import and export of animals and plants	Austria
3	Hunting permits	Belgium
4	Fee on animal trapping	Canada (Alberta)
5	Fee on hunting licence	Canada (Alberta, Quebec, etc)
6	Charge for entrance to exploitation zone	Canada (Quebec)
7	Charge for entrance to wildlife reserves	Canada (Quebec)
8	Charge on permit for hunting with snares	Canada (Quebec)
9	Charge on hunting licence	Finland
10	Hunting tax	Japan
11	Charge on hunting licence	Netherlands
12	Hunting fee	Sweden
<b>Others; e.g. land/soil management, ecotourism, mining, etc (26)</b>		
1	Environmental surcharges on local taxes	Australia
2	Conservation Covenants	Australia
3	Products charge	Canada
4	Mineral tax	Canada (British Columbia)
5	Payments for use of mining space area	Czech Rep.
6	Fee on claims to work a mine	Finland
7	Exemption from TFNB land tax for Natura 2000 sites ( <i>implemented in 2005</i> )	France
8	Exemption from TFNB land tax (see above) for land in the centre of national parks overseas ( <i>implemented in 2005</i> )	France

9	Partial exemption from transfer duty for Natura 2000 sites ( <i>implemented in 2005</i> )	France
10	Extension to sites other than Natura 2000 sites of the exemption relating to ¾ of transfer duty ( <i>implemented in 2006</i> )	France
11	Extension to sites other than Natura 2000 sites of the deduction from net income of the cost of rehabilitation and major maintenance ( <i>implemented in 2006</i> )	France
12	Deduction from net income of the cost of rehabilitation and major maintenance work on Natura 2000 sites ( <i>implemented in 2006</i> )	France
13	Additional payment under the DGF for <i>communes</i> fully or partially located in the centre of a national park ( <i>implemented in 2006</i> )	France
14	Exemption from certain taxes on real-estate donations, legacies, acquisitions and exchanges for public agencies in charge of national parks ( <i>implemented in 2006</i> )	France
15	Local Rights and Responsibilities Act, extending the areas eligible for funding by the Departmental Tax for Sensitive Natural Areas to Natura 2000 sites and nature reserves ( <i>post-2004</i> )	France
16	The activities eligible for funding by the Departmental Tax for Sensitive Natural Areas are extended to cover natural asset inventories ( <i>implemented in 2006</i> )	France
17	Deficits from expenditure on the conservation and enhancement of natural assets are chargeable to general revenue ( <i>implemented in 2006</i> )	France
18	General tax on pollution activities	France
19	Environmental improvement charge: charges for the quantity of the consumed water in commercial building	Korea
20	Ecosystem conservation fee: fees for development project causing considerable impacts upon the natural environment or ecosystem	Korea
21	Emission standards charge	Korea
22	Fees for national park entrance	Mexico
23	Fee on an environmental fee for tourism entering Spitsbergen	Norway
24	Excavation charge for peat or material	Sweden
25	Licence fee for exploitation of peat	Sweden
26	Mineral extraction charge	Sweden

## &lt;Subsidies: 234&gt;

<b><i>Inland water ecosystems (23)</i></b>		
1	Living Murray program	Australia
2	Subsidy to local authorities for water management	Belgium (Wallonia)
3	Subsidy to farmers for creation of ponds	Belgium (Wallonia)
4	Subsidy for individual water purification	Belgium (Wallonia)
5	City of Toronto high-efficiency clothes washer rebate	Canada (Ontario)
6	Riparian tax credit	Canada (Manitoba)
7	Subsidy for conservation of water courses and soils	Canada
8	Municipal Rural Infrastructure Fund ( <i>adopted in 2006</i> )	Canada
9	Nova Scotia Environmental Home Assessment Program ( <i>post-2004</i> )	Canada
10	Capital regional district of Victoria water efficient rebate program ( <i>adopted in 2006</i> )	Canada (British Columbia)
11	Operational program infrastructure ( <i>post-2004</i> )	Czech Rep.
12	Operational program environment ( <i>post-2004</i> )	Czech Rep.

13	LIFE+ : Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	Czech Rep.
14	Programme for revitalisation of river system	Czech Rep.
15	Removal of flood damage	Czech Rep.
16	Support for de-sludging of ponds	Czech Rep.
17	Landscape management program	Czech Rep.
18	Fund for river development	Japan
19	Ago-environmental support for resource protection schemes as well as specific habitat creation schemes for wetland	UK
20	Catchments Sensitive Farming Project: which has a capital grant scheme aiming at diffuse pollution control	UK
21	Agri-environmental measures under the Rural Development regulation (a variety of targeted measures can be found within the various Rural Development programmes of the Member States) ( <i>revised in 2006</i> )	EU
22	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	EU
23	Structural and Cohesion Funds (subsidies for inland water courses restoration and rehabilitation, avoiding pollution, etc) ( <i>revised in 2006</i> )	EU
<b>Marine and coast (11)</b>		
1	Financial support for fisheries management and research, and harbour services	Canada
2	Subsidies for fleet retirement ( <i>revised in 2004</i> )	Korea
3	Subsidies for the buy-back of coastal fishing fleets and the technological conversion of fishing gear ( <i>introduced in 2007</i> )	Mexico
4	Subsidies for wetlands	Sweden
5	Grant for salt marshes	UK
6	Subsidy for wetlands	UK
7	Financial instruments for fisheries	UK
8	The Common Fisheries Policy (CFP)	EU
9	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	EU
10	European Fisheries Fund (EFF) (subsidies for following more eco-friendly fishing practices, changing of fishing gear and technology to avoid disturbance of species, training) ( <i>revised in 2006</i> )	EU
11	Structural and Cohesion Funds (subsidies for restoration of coastal line and rehabilitation of wetlands, avoiding pollution/sendimentation, etc) ( <i>revised in 2006</i> )	EU
<b>Agriculture (57)</b>		
1	50 percent fencing subsidy	Australia
2	National Landcare program	Australia
3	Adjustment of the Austrian Programme on an environmentally sound and sustainable agriculture (ÖPUL) to the new rural development scheme of the EU: grants for organic farming, alpine pasturing and herding, tending of high alpine meadows, etc ( <i>revised in 2007</i> )	Austria
4	Integration of the compensation payments for agriculture within the NATURA 2000 network into the rural development scheme of the EU: Compensation payment for management and restrictions as defined by legal instruments ( <i>revised in 2007</i> )	Austria
5	Rural development plan 2007-2013 ( <i>post-2004</i> )	Belgium (Flanders)
6	Agri-environmental support	Belgium (Wallonia)
7	Incentive for the plantation of hedges	Belgium (Wallonia)
8	Environmentally related subsidies to farmers	Belgium (Flanders)
9	Subsidies for nature conservation	Belgium (Wallonia)
10	Nature 2000 legislation	Belgium (Wallonia)



11	CARE (Conservation of Agriculture, Resources and the Environment) program	Canada (Ontario, Prairie)
12	Environmental Farm Plan program	Canada
13	Land Stewardship program	Canada (Ontario)
14	Greencover Canada program	Canada
15	Alberta Environmentally-Sustainable Agriculture Processing-Based program ( <i>revised in 2004</i> )	Canada
16	National Farm Stewardship program	Canada
17	Payments within Natura 2000 agricultural areas: compensation of forbiddance to use fertilizers in the 1 <sup>st</sup> zones of national parks and landscape protected areas covered by Natural 2000 ( <i>post-2004</i> )	Czech Rep.
18	Operational Program Environment: Biodiversity projects aimed at agricultural land such as creating new landscape structures, water regime, etc ( <i>post-2004</i> )	Czech Rep.
19	LIFE+: Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	Czech Rep.
20	Agri-environmental subsidies	Czech Rep.
21	Agriculture and Forestry Fund	Czech Rep.
22	Charge for removal of land from the agricultural land fund	Czech Rep.
23	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
24	Agri-environmental subsidies program (2000-2006)	Finland
25	Agri-environmental measures ( <i>revised in 2007</i> )	France
26	Support for non-commercial investment ( <i>revised in 2007</i> )	France
27	The National Rural-Development Plan (NRDP, 2004-2006) ( <i>post-2004</i> )	Hungary
28	New Hungary Rural Development Plan (NHRDP, 2007-2013) ( <i>post-2004</i> )	Hungary
29	National Agri-environment Programme (NAEP, 2002-2004): The NAEP became part of the agri-environmental measures of the NRDP, after its accession to the EU in May 2004	Hungary
30	Subsidy Activities for Conservation of Rural Scenery and Nature ( <i>post-2004</i> )	Japan
31	Direct payments for environmentally friendly livestock practices ( <i>post-2004</i> )	Korea
32	Direct payments for environmentally friendly agriculture	Korea
33	Agri-environmental measures	Luxembourg
34	Biodiversity subsidies	Luxembourg
35	Investment Framework Rural Areas ( <i>revised in 2006</i> )	Netherlands
36	SPADE(To stimulate the innovation for agro-biodiversity and sustainable soil management) ( <i>revised in 2007</i> )	Netherlands
37	Support for agriculture sector	Netherlands
38	Environmental subsidies in the agricultural sector ( <i>revised in 2006</i> )	Norway
39	Sweden's rural development programme (LBU)	Sweden
40	Subsidy for ecological livestock production	Switzerland
41	Subsidy for extending agricultural areas	Switzerland
42	Subsidy for farmyard manure	Switzerland
43	Support for sustainable resource use	Switzerland
44	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	Switzerland
45	Direct payment for ecological services	Switzerland
46	Compensation for the preservation of meadows, extensive production of cereals and rape, and preservation of biodiversity on farmland	Switzerland
47	Entry level Scheme: The scheme provides a fixed payment per hectare in return for a package of management measures chosen by the farmer from a standard menu of options ( <i>post-2004</i> )	UK
48	Subsidy for farm waste treatment facilities	UK
49	Organic Farming Scheme	UK

50	The Nitrate Sensitive Area Scheme (NSA): Payment range from €79 per hectare for restrictions on nitrogen fertilizers, to €843 for the conversion of arable land to native species grassland	UK
51	The Common Agriculture Policy (CAP)	EU
52	Agri-environmental measures under the Rural Development regulation (measures targeting reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, reduction of water use, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. <i>(revised in 2006)</i>	EU
53	Payments for Agriculture Natura 2000 areas <i>(revised in 2006)</i>	EU
54	Programme for conservation of genetic resources in agriculture. <i>(revised in 2006)</i>	EU
55	Subsidies for the development of nature management programmes for agricultural lands in Natura 2000 sites and in areas of High Nature Value. <i>(revised in 2006)</i>	EU
56	Subsidies for non-productive investments in private agriculture land (investment needed for public recreation, facilitating access to public, etc) <i>(revised in 2006)</i>	EU
57	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc). <i>(revised in 2006)</i>	EU
<b>Forest(56)</b>		
1	Tasmanian regional forest agreement	Australia
2	Integration of the compensation payments for forestry within the NATURA 2000 network into the rural development scheme of the EU: grants for very specific management measures like conservation and tending of rare tree species <i>(post-2004)</i>	Austria
3	Forest subsidies	Austria
4	Natural Forest Reserves Programme: Reserves are established on a voluntary basis, and forest owners are compensated for their services rendered and for their loss of profit	Austria
5	Subsidy for forest regeneration in private forests <i>(revised in 2006)</i>	Belgium (Wallonia)
6	Subsidy for forest management	Belgium (Wallonia)
7	Subsidies for nature and forests	Belgium (Flanders)
8	Tax exemption	Belgium (Flanders, Wallonia)
9	Permanent cover program	Canada (Prairie, British Columbia)
10	Subsidy for forest development agencies	Canada
11	Subsidy for forest-based resources	Canada
12	Subsidy for reforestation	Canada
13	Tax-free intergenerational transfers of commercial farm woodlots	Canada
14	Assistance to Combat Pine Beetle Infestation <i>(adopted in 2006)</i>	Canada
15	Payments within Natura 2000 forest areas <i>(post-2004)</i>	Czech Rep.
16	Forest-environment payments <i>(post-2004)</i>	Czech Rep.
17	Operational Program Environment <i>(post-2004)</i>	Czech Rep.
18	LIFE+ <i>(post-2004)</i>	Czech Rep.
19	Subsidies to forestry	Czech Rep.
20	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
21	Subsidy for forests	Finland
22	The METSO Forest Biodiversity Programme for Southern Finland: To provide funding mechanisms for the management, restoration and protection of traditional wooded biotopes	Finland

23	Support for non-commercial investment in woodland under Natura 2000 contracts ( <i>revised in 2007</i> )	France
24	The National Rural-Development Plan (NRDP, 2004-2006) ( <i>post-2004</i> )	Hungary
25	New Hungary Rural Development Plan (NHRDP, 2007-2013) ( <i>post-2004</i> )	Hungary
26	National Afforestation Plan	Hungary
27	Restoration of degraded forest ecosystem ( <i>post-2004</i> )	Korea
28	Afforestation on marginal farm land and reforestation on abandoned grassland ( <i>post-2004</i> )	Korea
29	Plantation projects: Providing low-interest loans to reduce financial burden on participating firms	Korea
30	Expansion of national forest land	Korea
31	Forest tending projects	Korea
32	Fire prevention	Korea
33	Forest disease and pests prevention	Korea
34	Establishment of forest arboretum and museum	Korea
35	Establishment of eco-forest and urban forest	Korea
36	Preparation of forest management plan	Korea
37	Introduction and operation of managing agency system for private forests	Korea
38	Biodiversity subsidies	Luxembourg
39	Payment for Hydrological Environmental Services Program	Mexico
40	Subsidy for afforestation and forestry maintenance	Netherlands
41	Tax exemptions for forest conservation and for green investment funds	Netherlands
42	Grants for the forestry	Norway
43	Incentive instruments for sustainable forestry	Slovak Rep.
44	Subsidy for forestry	Sweden
45	Subsidy for forest maintenance and management	Switzerland
46	Subsidy for structural improvement and forest roads	Switzerland
47	England Woodland Grant Scheme, Rural Development Contracts in Scotland and Better Woodlands for Wales ( <i>post-2004</i> )	UK
48	Subsidy for woodlands	UK
49	Subsidy for woodland Grant Scheme(England and Wales), Scottish Forestry Grants Scheme	UK
50	Forest-environmental measures under the Rural Development regulation (measures targeting environmental friendly harvesting and management of forest, forest risks prevention, avoidance of disturbance of species and habitats, protection of native forest species, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. ( <i>revised in 2006</i> )	EU
51	Payments for Forest Natura 2000 areas ( <i>revised in 2006</i> )	EU
52	Programmes for new techniques and innovation for forest management. Support for programmes to promote forest certification. ( <i>revised in 2006</i> )	EU
53	Subsidies for the development of nature oriented management programmes for Natura 2000 forest sites. ( <i>revised in 2006</i> )	EU
54	Subsidies for non-productive investments in private forests (investment needed for public recreation, facilitating access to public, etc) ( <i>revised in 2006</i> )	EU
55	LIFE+ projects in forest areas promoting nature protection and management (normally focusing on forest species protection like bats, forest birds, etc) ( <i>revised in 2007</i> )	EU
56	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for forests and rural land like integrated flooding and fire protection, etc). ( <i>revised in 2006</i> )	EU
<b>Mountain(16)</b>		
1	Agri-environmental measures ( <i>revised in 2007</i> )	Czech Rep.
2	Operational Program Environment ( <i>post-2004</i> )	Czech Rep.
3	LIFE+ ( <i>post-2004</i> )	Czech Rep.
4	Less-favoured Areas: Mountain Areas (designated by H)	Czech Rep.
5	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.

6	Government subsidies for development of Quasi-National Parks and Long-Distance Nature Trails ( <i>post-2004</i> )	Japan
7	Government subsidy for improvement in natural parks and promotion of co-existing with nature	Japan
8	Management and conservation of reserved areas in Baekdu Daegan Mountains : Support for income generating projects to local villagers ( <i>post-2004</i> )	Korea
9	Compensation for protecting and preserving the cultural landscape	Switzerland
10	Agri-environmental and forest-environmental measures under the Rural Development regulation (measures targeting soil depletion, reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. ( <i>revised in 2006</i> )	EU
11	Payments for Agriculture and forest Natura 2000 areas in mountainous regions ( <i>revised in 2006</i> )	EU
12	Less-favoured areas support (mountainous areas are a distinct part of the implementation of this measure) with view to avoid land abandonment and marginalisation ( <i>revised in 2006</i> )	EU
13	Subsidies for the development of nature management programmes for agricultural and forest lands in Natura 2000 sites and in areas of High Nature Value, in mountainous areas. ( <i>revised in 2006</i> )	EU
14	Subsidies for non-productive investments in private agriculture and forest mountainous land (investment needed for public recreation, facilitating access to public, etc) ( <i>revised in 2006</i> )	EU
15	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc). ( <i>revised in 2006</i> )	EU
16	LIFE+ projects in mountainous areas ( <i>revised in 2007</i> )	EU
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (27)</b>		
1	Interdepartmental Recovery Fund (IRF)	Canada
2	Alberta Buck for wildlife program	Canada (Alberta)
3	Critical wildlife habitat program	Canada (Manitoba)
4	Fish and wildlife development fund	Canada (Saskatchewan)
5	Nova Scotia Habitat Conservation Fund	Canada (Nova Scotia)
6	Habitat stewardship program for species at risk	Canada
7	Endangered species recovery fund (ESRF) ( <i>revised in 2006</i> )	Canada
8	Ecological gifts program ( <i>revised in 2006</i> )	Canada
9	Operational Program Environment: Support for investment projects for protection of endangered species ( <i>revised in 2007</i> )	Czech Rep.
10	LIFE+ ( <i>revised in 2007</i> )	Czech Rep.
11	Contribution to zoological gardens	Czech Rep.
12	Agri-environmental measure: Subsidy for bird habitats on grassland	Czech Rep.
13	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
14	Supporting the protection and conservation of habitat and natural stocks of game species ( <i>post-2004</i> )	Hungary
15	Subsidy for poaching monitoring organizations	Korea
16	Subsidy for ex-suit conservation institutes	Korea
17	Subsidy for biodiversity management contract	Korea
18	Compensation for damage by protected species	Norway

19	Preventive measures	Norway
20	Financial contributions	Slovak Rep.
21	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	Switzerland
22	Subsidy for wildlife	UK
23	Agri-environmental and forest-environmental measures targeting species conservation (mainly birds and carnivorous, plus bats and beetles in forest areas) ( <i>revised in 2006</i> )	EU
24	Agri-environmental and forest-environmental measures targeting landscape management and land fragmentation, creation of corridors for species migration, etc ( <i>revised in 2006</i> )	EU
25	Protection of rare plant and animal breeds in agriculture ( <i>revised in 2006</i> )	EU
26	LIFE+ projects (wild species breeding programmes, management of species, management plans, etc) ( <i>revised in 2007</i> )	EU
27	Structural funds (provision of compensatory measures associated with projects that have a negative impact to nature and species (rehabilitation of adjusted to project land, green belts and "pass-ways", etc) ( <i>revised in 2006</i> )	EU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (44)</b>		
1	Bush Tender	Australia
2	PRESTI program-Prevention stimulation for industry	Belgium (Flanders)
3	Subsidy to local authorities with voluntary agreement	Belgium (Flanders)
4	Capital Gains Tax Exemptions	Canada
5	British Columbia Sustainable Environment Fund ( <i>post-2004</i> )	Canada (British Columbia)
6	Strengthening accelerated CCA for clean energy generation ( <i>strengthened in 2007</i> )	Canada
7	Vehicle Efficiency Incentive + Green Levy on Fuel-Inefficient Vehicles ( <i>strengthened in 2007</i> )	Canada
8	Incentives for removal of older, high-emitting vehicles ( <i>strengthened in 2007</i> )	Canada
9	Strengthening the Public Transit Tax Credit ( <i>strengthened in 2007</i> )	Canada
10	Renewable Fuels Production Incentive ( <i>strengthened in 2007</i> )	Canada
11	Accelerate capital cost allowance for forestry bioenergy ( <i>strengthened in 2006</i> )	Canada
12	Extending the mineral exploration tax credit for flow-through share investors ( <i>revised in 2006</i> )	Canada
13	Land care (custody) program	Czech Rep.
14	Landscape improvement program	Czech Rep.
15	Mining reduction	Czech Rep.
16	Restoration of damages caused by mining	Czech Rep.
17	Operational Program Environment: Subsidies for prevention of landslides and rock avalanches, monitoring of geofactors, measures to protect against water and wind erosion and to reduce negative effects of surface runoffs ( <i>post-2004</i> )	Czech Rep.
18	Subsidy/compensation for nature conservation	Finland
19	Compensation for nature conservation restrictions in protected areas and outside of protected areas ( <i>post-2004</i> )	Hungary
20	Subsidies for investments in nature conservation (National Development Plan, 2004-2006) ( <i>post-2004</i> )	Hungary
21	Subsidies for investments in nature conservation (New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	Hungary
22	Subsidies for investments in ecotourism (National Development Plan, 2004-2006) ( <i>post-2004</i> )	Hungary
23	Subsidies for investments in ecotourism (New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	Hungary
24	Japan Fund for Global Environment	Japan

25	A tax relief and financial support for voluntary participants in conserving cultural and natural heritage resources ( <i>post-2004</i> )	Korea
26	Subsidy for natural environment conservation organizations	Korea
27	Subsidy for natural resources management	Netherlands
28	Subsidy for protected areas and purchase of ecological areas	Netherlands
29	Subsidies for environmental purposes	Slovak Rep.
30	Support for environmental goals and supervision	Sweden
31	Local Investment Program(LIP): To support local investments for sustainable development	Sweden
32	Local conservation projects: To stimulate nature conservation efforts, especially among the municipalities	Sweden
33	Subsidy for biodiversity programmes	Switzerland
34	Subsidy for ecological compensation	Switzerland
35	Subsidy for nature and landscape protection	Switzerland
36	Subsidy for protection against natural hazards	Switzerland
37	Rural Development Plan for England ( <i>revised in 2007</i> )	UK
38	Uplands ELS: Plan to convert existing Hill Farm Allowance(income support) into a scheme based on environmental outcomes in the uplands ( <i>to go into effect in 2010</i> )	UK
39	Subsidy for silt conservation	UK
40	Aggregate levy	UK
31	The country side stewardship scheme	UK
32	Projects for specialised forms of tourism (nature and eco tourism) through the Structural Funds Programmes ( <i>revised in 2006</i> )	EU
33	Support for promotion of alternative forms of tourism in rural areas through the Rural Development Fund and Programmes ( <i>revised in 2006</i> )	EU
34	LIFE + ( <i>revised in 2007</i> )	EU

<Reform or removal of perverse subsidies: 7>

<b>Agriculture (3)</b>		
1	Abolition of subsidy for fertiliser ( <i>post-2004</i> )	Korea
2	Removal of production subsidies under the CAP and introduction of Single Farm Payment ( <i>post-2004</i> )	UK
3	Progressive move from Common Market Organisation Schemes under the CAP to the Single Farm Payment Scheme which is support non-related to production levels and it is subject to the respect of environmental obligations under cross-compliance rules ( <i>implemented in 2005</i> )	EU
<b>Forest (1)</b>		
1	Removal of perverse subsidies: For examples, subsidies for cutting down sparsely wooded forests, subsidies for the afforestation of grazing pastures, subsidies for drainage of wet forests, and subsidies for the construction of minor hydro-electric power plants	Sweden
<b>Others; e.g. land/soil management, ecotourism, mining, etc (3)</b>		
1	Phasing out of the accelerated capital cost allowance to oil sands investments ( <i>strengthened in 2007</i> )	Canada
2	Removal of excise tax exemption for bio-fuels ( <i>strengthened in 2007</i> )	Canada
3	Prohibition of the deduction of fines and penalties ( <i>introduced in 2005</i> )	Canada

<Market creation or the assignment of property rights: 20>

<b>Inland water ecosystems (3)</b>		
1	Water trading	Australia
2	Pilot interstate water trading project ( <i>revised in July 2004</i> )	Australia

3	Transferable consumption allowances for degreasing solvents	Canada
<b>Marine and coast (7)</b>		
1	Individual transferable fishing quotas	Australia
2	Nutrient emission right for farmers ( <i>post-2004</i> )	Belgium (Flanders)
3	Transferable fishing quotas	Canada
4	Individual Transferable Quotas	Canada
5	Tradable fishery quota	Netherlands
6	Days at sea regulations: The flat rate “days at sea” allocation is transferable between boats on a temporary annual basis, which is aimed at reducing fishing mortality on cod stocks in the North Sea ( <i>post-2004</i> )	UK
7	Fixed quota allocation units	UK
<b>Forest (1)</b>		
1	Tasmanian Forest Conservation Fund ( <i>adopted in 2007</i> )	Australia
<b>Species management (5)</b>		
1	Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (QLD) ( <i>adopted in 2006</i> )	Australia
2	Tradable hunting rights	Canada (Alberta)
3	Water allocation transfers	Canada (Alberta)
4	Licence to hunt and fee	Norway
5	Fee for fishing	Norway
<b>Others; e.g. land/soil management, ecotourism, mining, etc (4)</b>		
1	Environmental services scheme	Australia (New South Wales)
2	Desert Upland Landscape Linkages ( <i>adopted in 2006</i> )	Australia
3	Maintaining Australia’s biodiversity Hotspots (MABH) ( <i>adopted in 2004</i> )	Australia
4	Tradable development rights for land preservation	France

<Liability instruments: 15>

<b>Inland water ecosystems (2)</b>		
1	Restoration performance bond	Korea
2	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Marine and coast (4)</b>		
1	Performance bonds for land and tourist development and for rehabilitation of mine sites	Australia
2	Penalty on use of explosive/poison	Japan
3	Penalty on reclamation etc. of protected water area	Japan
4	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Mountain (2)</b>		
1	Fines for environmental damages ( <i>post-2004</i> )	Canada
2	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Species management (3)</b>		
1	Hunting fines	Canada
2	Non-compliance fee: Fees for eating illegally captured wildlife ( <i>post-2004</i> )	Korea

3	Entry into force of the EU Environmental Liability Directive (ELD) – species covered under the Birds and Habitats Directives, plus other species as defined by each of the Member States ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (4)</b>		
1	Nature conservation penalty	Hungary
2	Waste treatment performance bond: Deposits for the appropriate treatment of wastes when giving an approval of industrial waste treatment facilities	Korea
3	Performance bond for post management of landfill sites: Deposits for the post-management of waste landfill sites after the completion of land filling	Korea
4	Entry into force of the EU Environmental Liability Directive (ELD) – soil, mining and waste treatment are key areas of implementation ( <i>adopted in 2004 and went into effect in 2007</i> )	EU

<Others (voluntary agreements, etc): 12>

<b>Inland water ecosystems (1)</b>		
1	Voluntary initiative for pesticides: This was offered by industry in lieu of a pesticides tax, and has made some inroads into water pollution by pesticides.	UK
<b>Agriculture (1)</b>		
1	Certification for environmentally friendly agricultural products	Korea
<b>Forest (4)</b>		
1	Subsidy for private forest owners organisation in the context of forest certification ( <i>revised in 2005</i> )	Belgium (Wallonia)
2	Tenure holder obligations	Canada
3	Forest Management Certification Systems	Canada
4	Brochure on Forest Best Management Practices for Biodiversity	Canada
<b>Species management (2)</b>		
1	Reward for noticing illegal capture and picking of wildlife ( <i>post-2004</i> )	Korea
2	Voluntary agreement on conservation of wildlife with owner of land or management institute ( <i>post-2004</i> )	Korea
<b>Others; e.g. land/soil management, ecotourism, mining, etc (4)</b>		
1	National Market-Based Instruments Pilot Program	Australia
2	Contractual Nature Protection by the Federal provinces: Some measures are supported financially such as active measures for conservation and improvement of valuable biotopes, the decrease of land use intensity or abandonment of use and other measures that can only be successful if they are carried out in cooperation with the population	Austria
3	Social Cost Benefit Analysis(SCBA) on Green/Blue zoning	Netherlands
4	SCBA on investments in the Dutch landscape	Netherlands



## 2. By thematic areas

### <Inland water ecosystems: 70>

<i>Price based instruments (41)</i>		
1	Water effluent charge	Australia
2	Fee on water use	Austria
3	Wastewater charges	Austria
4	Manure tax ( <i>post-2004</i> )	Belgium (Flanders)
5	Waste water charge ( <i>post-2004</i> )	Belgium (Flanders)
6	Waste water charge	Belgium (Wallonia)
7	Tax on water withdrawals	Belgium (Wallonia)
8	Groundwater tax	Belgium (Flanders)
9	Water abstraction permit fees	Canada (British Columbia, Nova Scotia)
10	Charge on discharge	Canada (British Columbia, Quebec)
11	Water permit in National parks ( <i>revised in 2007</i> )	Canada
12	Charge for withdrawal of groundwater	Czech Rep.
13	Fee for permitted discharge of wastewater into groundwater	Czech Rep.
14	Fee on gravel abstraction	Finland
15	Water level regulation charge: Payments for environmental permits relating to water levels	Finland
16	Water user charges	Finland
17	Exemption from TFNB (land tax for wetlands ( <i>implemented in 2005</i> ))	France
18	Rural Development and funding of wetland initiatives (from the non-budgetary appropriations of Water Agencies) ( <i>implemented in 2005</i> )	France
19	Charge on water abstraction	France
20	Charge on water consumption	France
21	Charge on water supply	France
22	Sewerage charge	France
23	Charge on water abstraction	Hungary
24	Charge on abstraction of water from rivers	Japan
25	Fee for use of water in reservoirs (dams)	Japan
26	Wastewater user charges	Japan
27	Water quality improvement charge	Korea
28	Water use charge for the Han River	Korea
29	Source charge	Korea
30	Emission charge	Korea
31	Total pollution load charge	Korea
32	Water use charge for the Nokdong River, the Gum River and the Youngsan River	Korea
33	Municipal sewerage charge	Netherlands

34	Groundwater extraction tax	Netherlands
35	Eco-taxes	Netherlands
36	Charges on tap water and waste water treatment	Norway
37	Natural gravel tax	Sweden
38	Charges for discharges	UK
39	Abstraction charging ( <i>revised in 2004 revision, go into effect in 2009</i> )	UK
40	Charging system for regulating physical modifications to prevent deterioration of good ecological status ( <i>under consideration</i> )	UK
41	Charge on water resources	UK
<b>Subsidies (23)</b>		
2	Living Murray program	Australia
2	Subsidy to local authorities for water management	Belgium (Wallonia)
3	Subsidy to farmers for creation of ponds	Belgium (Wallonia)
4	Subsidy for individual water purification	Belgium (Wallonia)
5	City of Toronto high-efficiency clothes washer rebate	Canada (Ontario)
6	Riparian tax credit	Canada (Manitoba)
7	Subsidy for conservation of water courses and soils	Canada
8	Municipal Rural Infrastructure Fund ( <i>adopted in 2006</i> )	Canada
9	Nova Scotia Environmental Home Assessment Program ( <i>post-2004</i> )	Canada
10	Capital regional district of Victoria water efficient rebate program ( <i>adopted in 2006</i> )	Canada (British Columbia)
11	Operational program infrastructure ( <i>post-2004</i> )	Czech Rep.
12	Operational program environment ( <i>post-2004</i> )	Czech Rep.
13	LIFE+ : Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	Czech Rep.
14	Programme for revitalisation of river system	Czech Rep.
15	Removal of flood damage	Czech Rep.
16	Support for de-sludging of ponds	Czech Rep.
17	Landscape management program	Czech Rep.
18	Fund for river development	Japan
19	Ago-environmental support for resource protection schemes as well as specific habitat creation schemes for wetland	UK
20	Catchments Sensitive Farming Project: which has a capital grant scheme aiming at diffuse pollution control	UK
21	Agri-environmental measures under the Rural Development regulation (a variety of targeted measures can be found within the various Rural Development programmes of the Member States) ( <i>revised in 2006</i> )	EU
22	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	EU
23	Structural and Cohesion Funds (subsidies for inland water courses restoration and rehabilitation, avoiding pollution, etc) ( <i>revised in 2006</i> )	EU
<b>Market creation or the assignment of property rights (3)</b>		
1	Water trading	Australia
2	Pilot interstate water trading project ( <i>revised in July 2004</i> )	Australia
3	Transferable consumption allowances for degreasing solvents	Canada

<b>Liability instruments (2)</b>		
1	Restoration performance bond	Korea
2	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Others : voluntary agreements, etc (1)</b>		
1	Voluntary initiative for pesticides: This was offered by industry in lieu of a pesticides tax, and has made some inroads into water pollution by pesticides.	UK

## &lt;Marine and coast: 34&gt;

<b>Prise based instruments (12)</b>		
1	Environmental management charge (EMC) on visits to the Great Barrier Reef	Australia
2	Payment of loss of value of areas under the Decree protection of dunes	Belgium (Flanders)
3	Charge on fishing licences	Canada (Quebec)
4	Recreational Fishing Licence Fees	Canada
5	Salmon Conservation Stamp	Canada
6	Commercial Marine Fishing Licence Fees ( <i>revised in 2007</i> )	Canada
7	Species at Risk Act (SARA) ( <i>fully implemented in 2004</i> )	Canada
8	Fee on waste from ships ( <i>post-2004</i> )	Finland
9	Charge on fishing licence	Finland
10	80% of the French registration tax on boats is allocated to the Coastal and Lakeshore Conservatory (the second stage will be an increase from 80% to 100% under the 2007 Finance Bill) ( <i>implemented in 2005</i> )	France
11	Charges for the development of coastal area ( <i>post-2004</i> )	Korea
12	Charge for fishing licence	Netherlands
<b>Subsidies (11)</b>		
1	Financial support for fisheries management and research, and harbour services	Canada
2	Subsidies for fleet retirement ( <i>revised in 2004</i> )	Korea
3	Subsidies for the buy-back of coastal fishing fleets and the technological conversion of fishing gear ( <i>introduced in 2007</i> )	Mexico
4	Subsidies for wetlands	Sweden
5	Grant for salt marshes	UK
6	Subsidy for wetlands	UK
7	Financial instruments for fisheries	UK
8	The Common Fisheries Policy (CFP)	EU
9	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	EU
10	European Fisheries Fund (EFF) (subsidies for following more eco-friendly fishing practices, changing of fishing gear and technology to avoid disturbance of species, training) ( <i>revised in 2006</i> )	EU
11	Structural and Cohesion Funds (subsidies for restoration of coastal line and rehabilitation of wetlands, avoiding pollution/sedimentation, etc) ( <i>revised in 2006</i> )	EU
<b>Market creation or the assignment of property rights (7)</b>		
1	Individual transferable fishing quotas	Australia
2	Nutrient emission right for farmers ( <i>post-2004</i> )	Belgium (Flanders)
3	Transferable fishing quotas	Canada
4	Individual Transferable Quotas	Canada
5	Tradable fishery quota	Netherlands
6	Days at sea regulations: The flat rate "days at sea" allocation is transferable between boats on a temporary annual basis, which is aimed at reducing fishing mortality on cod stocks in the North Sea ( <i>post-2004</i> )	UK

7	Fixed quota allocation units	UK
<b>Liability instruments (4)</b>		
1	Performance bonds for land and tourist development and for rehabilitation of mine sites	Australia
2	Penalty on use of explosive/poison	Japan
3	Penalty on reclamation etc. of protected water area	Japan
4	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU

## &lt;Agriculture: 66&gt;

<b>Price based instruments (5)</b>		
1	Charge on agricultural inputs	Canada (British Columbia)
2	High VAT (on fertilisers and pesticides)	Netherlands
3	Tax on farm mineral surpluses	Netherlands
4	Pesticide tax	Netherlands
5	Tax on the use of pesticides	Norway
<b>Subsidies (57)</b>		
1	50 percent fencing subsidy	Australia
2	National Landcare program	Australia
3	Adjustment of the Austrian Programme on an environmentally sound and sustainable agriculture (ÖPUL) to the new rural development scheme of the EU: grants for organic farming, alpine pasturing and herding, tending of high alpine meadows, etc ( <i>revised in 2007</i> )	Austria
4	Integration of the compensation payments for agriculture within the NATURA 2000 network into the rural development scheme of the EU: Compensation payment for management and restrictions as defined by legal instruments ( <i>revised in 2007</i> )	Austria
5	Rural development plan 2007-2013 ( <i>post-2004</i> )	Belgium (Flanders)
6	Agri-environmental support	Belgium (Wallonia)
7	Incentive for the plantation of hedges	Belgium (Wallonia)
8	Environmentally related subsidies to farmers	Belgium (Flanders)
9	Subsidies for nature conservation	Belgium (Wallonia)
10	Nature 2000 legislation	Belgium (Wallonia)
11	CARE (Conservation of Agriculture, Resources and the Environment) program	Canada (Ontario, Prairie)
12	Environmental Farm Plan program	Canada
13	Land Stewardship program	Canada (Ontario)
14	Greencover Canada program	Canada
15	Alberta Environmentally-Sustainable Agriculture Processing-Based program ( <i>revised in 2004</i> )	Canada
16	National Farm Stewardship program	Canada
17	Payments within Natura 2000 agricultural areas: compensation of forbiddance to use fertilizers in the 1 <sup>st</sup> zones of national parks and landscape protected areas covered by Natural 2000 ( <i>post-2004</i> )	Czech Rep.

18	Operational Program Environment: Biodiversity projects aimed at agricultural land such as creating new landscape structures, water regime, etc ( <i>post-2004</i> )	Czech Rep.
19	LIFE+: Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	Czech Rep.
20	Agri-environmental subsidies	Czech Rep.
21	Agriculture and Forestry Fund	Czech Rep.
22	Charge for removal of land from the agricultural land fund	Czech Rep.
23	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
24	Agri-environmental subsidies program (2000-2006)	Finland
25	Agri-environmental measures ( <i>revised in 2007</i> )	France
26	Support for non-commercial investment ( <i>revised in 2007</i> )	France
27	The National Rural-Development Plan (NRDP, 2004-2006) ( <i>post-2004</i> )	Hungary
28	New Hungary Rural Development Plan (NHRDP, 2007-2013) ( <i>post-2004</i> )	Hungary
29	National Agri-environment Programme (NAEP, 2002-2004): The NAEP became part of the agri-environmental measures of the NRDP, after its accession to the EU in May 2004	Hungary
30	Subsidy Activities for Conservation of Rural Scenery and Nature ( <i>post-2004</i> )	Japan
31	Direct payments for environmentally friendly livestock practices ( <i>post-2004</i> )	Korea
32	Direct payments for environmentally friendly agriculture	Korea
33	Agri-environmental measures	Luxembourg
34	Biodiversity subsidies	Luxembourg
35	Investment Framework Rural Areas ( <i>revised in 2006</i> )	Netherlands
36	SPADE(To stimulate the innovation for agro-biodiversity and sustainable soil management) ( <i>revised in 2007</i> )	Netherlands
37	Support for agriculture sector	Netherlands
38	Environmental subsidies in the agricultural sector ( <i>revised in 2006</i> )	Norway
39	Sweden's rural development programme(LBU)	Sweden
40	Subsidy for ecological livestock production	Switzerland
41	Subsidy for extending agricultural areas	Switzerland
42	Subsidy for farmyard manure	Switzerland
43	Support for sustainable resource use	Switzerland
44	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	Switzerland
45	Direct payment for ecological services	Switzerland
46	Compensation for the preservation of meadows, extensive production of cereals and rape, and preservation of biodiversity on farmland	Switzerland
47	Entry level Scheme: The scheme provides a fixed payment per hectare in return for a package of management measures chosen by the farmer from a standard menu of options ( <i>post-2004</i> )	UK
48	Subsidy for farm waste treatment facilities	UK
49	Organic Farming Scheme	UK
50	The Nitrate Sensitive Area Scheme (NSA): Payment range from €79 per hectare for restrictions on nitrogen fertilizers, to €843 for the conversion of arable land to native species grassland	UK
51	The Common Agriculture Policy (CAP)	EU
52	Agri-environmental measures under the Rural Development regulation (measures targeting reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, reduction of water use, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. ( <i>revised in 2006</i> )	EU
53	Payments for Agriculture Natura 2000 areas ( <i>revised in 2006</i> )	EU
54	Programme for conservation of genetic resources in agriculture ( <i>revised in 2006</i> )	EU
55	Subsidies for the development of nature management programmes for agricultural lands in Natura 2000 sites and in areas of High Nature Value ( <i>revised in 2006</i> )	EU

56	Subsidies for non-productive investments in private agriculture land (investment needed for public recreation, facilitating access to public, etc) ( <i>revised in 2006</i> )	EU
57	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc) ( <i>revised in 2006</i> )	EU
<b>Reform or removal of perverse subsidies (3)</b>		
1	Abolition of subsidy for fertiliser ( <i>post-2004</i> )	Korea
2	Removal of production subsidies under the CAP and introduction of Single Farm Payment ( <i>post-2004</i> )	UK
3	Progressive move from Common Market Organisation Schemes under the CAP to the Single Farm Payment Scheme which is support non-related to production levels and it is subject to the respect of environmental obligations under cross-compliance rules ( <i>implemented in 2005</i> )	EU
<b>Others : voluntary agreements, etc(1)</b>		
1	Certification for environmentally friendly agricultural products	Korea

## &lt;Forest: 76&gt;

<b>Price based instruments (14)</b>		
1	Charge for tree protection: charge for trees with more than 40 cm circumference that is cut down if no new plantings are carried out instead	Austria (Vienna)
2	Stumpages fees	Canada
3	Forest protection fees	Canada
4	Charge for over-cutting	Canada (Alberta)
5	Charge for forest management & research	Canada (Quebec)
6	Logging tax	Canada (British Columbia)
7	Fee for the withdrawal of forest land	Czech Rep.
8	Forest management fee	Finland
9	Fee for forest management	Hungary
10	Tax revision on reserved area	Korea
11	Charging cancellation fee for erosion control projects designed for flood disaster prevention	Korea
12	Forest Trust Fund	Norway
13	Charges for the conversion or destruction of forested lands	Slovak Rep.
14	Charge for grazing	Turkey
<b>Subsidies (57)</b>		
1	Tasmanian regional forest agreement	Australia
2	Integration of the compensation payments for forestry within the NATURA 2000 network into the rural development scheme of the EU: grants for very specific management measures like conservation and tending of rare tree species ( <i>post-2004</i> )	Austria
3	Forest subsidies	Austria
4	Natural Forest Reserves Programme: Reserves are established on a voluntary basis, and forest owners are compensated for their services rendered and for their loss of profit	Austria
5	Subsidy for forest regeneration in private forests ( <i>revised in 2006</i> )	Belgium (Wallonia)
6	Subsidy for forest management	Belgium (Wallonia)
7	Subsidies for nature and forests	Belgium (Flanders)

8	Tax exemption	Belgium (Flanders, Wallonia)
9	Permanent cover program	Canada (Prairie, British Columbia)
10	Subsidy for forest development agencies	Canada
11	Subsidy for forest-based resources	Canada
12	Subsidy for reforestation	Canada
13	Tax-free intergenerational transfers of commercial farm woodlots	Canada
14	Assistance to Combat Pine Beetle Infestation ( <i>adopted in 2006</i> )	Canada
15	Payments within Natura 2000 forest areas ( <i>post-2004</i> )	Czech Rep.
16	Forest-environment payments ( <i>post-2004</i> )	Czech Rep.
17	Operational Program Environment ( <i>post-2004</i> )	Czech Rep.
18	LIFE+ ( <i>post-2004</i> )	Czech Rep.
19	Subsidies to forestry	Czech Rep.
20	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
21	Subsidy for forests	Finland
22	The METSO Forest Biodiversity Programme for Southern Finland: To provide funding mechanisms for the management, restoration and protection of traditional wooded biotopes	Finland
23	Support for non-commercial investment in woodland under Natura 2000 contracts. ( <i>post-2004, revised in 2007</i> )	France
24	The National Rural-Development Plan(NRDP, 2004-2006) ( <i>post-2004</i> )	Hungary
25	New Hungary Rural Development Plan(NHRDP, 2007-2013) ( <i>post-2004</i> )	Hungary
26	National Afforestation Plan	Hungary
27	Restoration of degraded forest ecosystem ( <i>post-2004</i> )	Korea
28	Afforestation on marginal farm land and reforestation on abandoned grassland ( <i>post-2004</i> )	Korea
29	Plantation projects: Providing low-interest loans to reduce financial burden on participating firms	Korea
30	Expansion of national forest land	Korea
31	Forest tending projects	Korea
32	Fire prevention	Korea
33	Forest disease and pests prevention	Korea
34	Establishment of forest arboretum and museum	Korea
35	Establishment of eco-forest and urban forest	Korea
36	Preparation of forest management plan	Korea
37	Introduction and operation of managing agency system for private forests	Korea
38	Biodiversity subsidies	Luxembourg
39	Payment for Hydrological Environmental Services Program	Mexico
40	Subsidy for afforestation and forestry maintenance	Netherlands
41	Tax exemptions for forest conservation and for green investment funds	Netherlands
42	Grants for the forestry	Norway
43	Incentive instruments for sustainable forestry	Slovak Rep.
44	Subsidy for forestry	Sweden
45	Subsidy for forest maintenance and management	Switzerland
46	Subsidy for structural improvement and forest roads	Switzerland
47	England Woodland Grant Scheme, Rural Development Contracts in Scotland and Better Woodlands for Wales ( <i>post-2004</i> )	UK
48	Subsidy for woodlands	UK
49	Subsidy for woodland Grant Scheme(England and Wales), Scottish Forestry Grants Scheme	UK

50	Forest-environmental measures under the Rural Development regulation (measures targeting environmental friendly harvesting and management of forest, forest risks prevention, avoidance of disturbance of species and habitats, protection of native forest species, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. <i>(revised in 2006)</i>	EU
51	Payments for Forest Natura 2000 areas <i>(revised in 2006)</i>	EU
52	Programmes for new techniques and innovation for forest management. Support for programmes to promote forest certification. <i>(revised in 2006)</i>	EU
53	Subsidies for the development of nature oriented management programmes for Natura 2000 forest sites. <i>(revised in 2006)</i>	EU
54	Subsidies for non-productive investments in private forests (investment needed for public recreation, facilitating access to public, etc) <i>(revised in 2006)</i>	EU
55	LIFE+ projects in forest areas promoting nature protection and management (normally focusing on forest species protection like bats, forest birds, etc) <i>(revised in 2007)</i>	EU
56	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for forests and rural land like integrated flooding and fire protection, etc). <i>(revised in 2006)</i>	EU
<b>Reform or removal of perverse subsidies (1)</b>		
1	Removal of perverse subsidies: For examples, subsidies for cutting down sparsely wooded forests, subsidies for the afforestation of grazing pastures, subsidies for drainage of wet forests, and subsidies for the construction of minor hydro-electric power plants	Sweden
<b>Market creation or the assignment of property rights (1)</b>		
1	Tasmanian Forest Conservation Fund <i>(adopted in 2007)</i>	Australia
<b>Others : voluntary agreements, etc (4)</b>		
1	Subsidy for private forest owners organisation in the context of forest certification <i>(revised in 2005)</i>	Belgium (Wallonia)
2	Tenure holder obligations	Canada
3	Forest Management Certification Systems	Canada
4	Brochure on Forest Best Management Practices for Biodiversity	Canada

## &lt;Mountain: 25&gt;

<b>Price based instruments (7)</b>		
1	Fee for national park entrance	Korea
2	Charging establishment costs on deforestation projects	Korea
3	Charging restoration costs on deforestation projects	Korea
4	The Cooperative Fund for Ecosystem Conservation: Cost charging for approved development project <i>(revised in 2004)</i>	Korea
5	Charge for entrance to parks for fishers and hunters	Canada (Quebec)
6	Charge for entrance to parks <i>(revised in 2007)</i>	Canada
7	Development fees <i>(post-2004)</i>	Canada
<b>Subsidies (16)</b>		
1	Agri-environmental measures <i>(revised in 2007)</i>	Czech Rep.
2	Operational Program Environment <i>(post-2004)</i>	Czech Rep.
3	LIFE+ <i>(post-2004)</i>	Czech Rep.
4	Less-favoured Areas: Mountain Areas (designated by H)	Czech Rep.
5	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
6	Government subsidies for development of Quasi-National Parks and Long-Distance Nature Trails <i>(post-2004)</i>	Japan
7	Government subsidy for improvement in natural parks and promotion of co-existing with nature	Japan



8	Management and conservation of reserved areas in Baekdu Daegan Mountains : Support for income generating projects to local villagers ( <i>post-2004</i> )	Korea
9	Compensation for protecting and preserving the cultural landscape	Switzerland
10	Agri-environmental and forest-environmental measures under the Rural Development regulation (measures targeting soil depletion, reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. ( <i>revised in 2006</i> )	EU
11	Payments for Agriculture and forest Natura 2000 areas in mountainous regions ( <i>revised in 2006</i> )	EU
12	Less-favoured areas support (mountainous areas are a distinct part of the implementation of this measure) with view to avoid land abandonment and marginalisation ( <i>revised in 2006</i> )	EU
13	Subsidies for the development of nature management programmes for agricultural and forest lands in Natura 2000 sites and in areas of High Nature Value, in mountainous areas. ( <i>revised in 2006</i> )	EU
14	Subsidies for non-productive investments in private agriculture and forest mountainous land (investment needed for public recreation, facilitating access to public, etc) ( <i>revised in 2006</i> )	EU
15	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc). ( <i>revised in 2006</i> )	EU
16	LIFE+ projects in mountainous areas ( <i>revised in 2007</i> )	EU
<b>Liability instruments (2)</b>		
1	Fines for environmental damages ( <i>post-2004</i> )	Canada
2	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	EU

<Dry and sub-humid lands: 0>

*No economic instruments reported(0)*

<Species management: 49>

<b>Price based instruments (12)</b>		
1	Fee on hunting and fishing	Austria
2	Fee for the import and export of animals and plants	Austria
3	Hunting permits	Belgium
4	Fee on animal trapping	Canada (Alberta)
5	Fee on hunting licence	Canada (Alberta, Quebec, etc)
6	Charge for entrance to exploitation zone	Canada (Quebec)
7	Charge for entrance to wildlife reserves	Canada (Quebec)
8	Charge on permit for hunting with snares	Canada (Quebec)
9	Charge on hunting licence	Finland
10	Hunting tax	Japan
11	Charge on hunting licence	Netherlands
12	Hunting fee	Sweden

<b>Subsidies (27)</b>		
1	Interdepartmental Recovery Fund(IRF)	Canada
2	Alberta Buck for wildlife program	Canada (Alberta)
3	Critical wildlife habitat program	Canada (Manitoba)
4	Fish and wildlife development fund	Canada (Saskatche wan)
5	Nova Scotia Habitat Conservation Fund	Canada (Nova Scotia)
6	Habitat stewardship program for species at risk	Canada
7	Endangered species recovery fund (ESRF) ( <i>revised in 2006</i> )	Canada
8	Ecological gifts program ( <i>revised in 2006</i> )	Canada
9	Operational Program Environment: Support for investment projects for protection of endangered species ( <i>revised in 2007</i> )	Czech Rep.
10	LIFE+ ( <i>revised in 2007</i> )	Czech Rep.
11	Contribution to zoological gardens	Czech Rep.
12	Agri-environmental measure: Subsidy for bird habitats on grassland	Czech Rep.
13	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	Czech Rep.
14	Supporting the protection and conservation of habitat and natural stocks of game species ( <i>post-2004</i> )	Hungary
15	Subsidy for poaching monitoring organizations	Korea
16	Subsidy for ex-suit conservation institutes	Korea
17	Subsidy for biodiversity management contract	Korea
18	Compensation for damage by protected species	Norway
19	Preventive measures	Norway
20	Financial contributions	Slovak Rep.
21	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	Switzerland
22	Subsidy for wildlife	UK
23	Agri-environmental and forest-environmental measures targeting species conservation (mainly birds and carnivorous, plus bats and beetles in forest areas) ( <i>revised in 2006</i> )	EU
24	Agri-environmental and forest-environmental measures targeting landscape management and land fragmentation, creation of corridors for species migration, etc ( <i>revised in 2006</i> )	EU
25	Protection of rare plant and animal breeds in agriculture ( <i>revised in 2006</i> )	EU
26	LIFE+ projects (wild species breeding programmes, management of species, management plans, etc) ( <i>revised in 2007</i> )	EU
27	Structural funds (provision of compensatory measures associated with projects that have a negative impact to nature and species (rehabilitation of adjusted to project land, green belts and "pass-ways", etc) ( <i>revised in 2006</i> )	EU
<b>Market creation or the assignment of property rights (5)</b>		
1	Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (QLD) ( <i>adopted in 2006</i> )	Australia
2	Tradable hunting rights	Canada (Alberta)
3	Water allocation transfers	Canada (Alberta)
4	Licence to hunt and fee	Norway
5	Fee for fishing	Norway

<b>Liability instruments (3)</b>		
1	Non-compliance fee: Fees for eating illegally captured wildlife ( <i>post-2004</i> )	Korea
2	Hunting fines	Canada
3	Entry into force of the EU Environmental Liability Directive (ELD) – species covered under the Birds and Habitats Directives, plus other species as defined by each of the Member States ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Others : voluntary agreements, etc (2)</b>		
1	Reward for noticing illegal capture and picking of wildlife( <i>post-2004</i> )	Korea
2	Voluntary agreement on conservation of wildlife with owner of land or management institute ( <i>post-2004</i> )	Korea

## &lt; Others (e.g. land/soil management, ecotourism, mining, etc): 85 &gt;

<b>Price based instruments (26)</b>		
1	Environmental surcharges on local taxes	Australia
2	Conservation Covenants	Australia
3	Products charge	Canada
4	Mineral tax	Canada (British Columbia)
5	Payments for use of mining space area	Czech Rep.
6	Fee on claims to work a mine	Finland
7	Exemption from TFNB land tax for Natura 2000 sites ( <i>implemented in 2005</i> )	France
8	Exemption from TFNB land tax (see above) for land in the centre of national parks overseas ( <i>implemented in 2005</i> )	France
9	Partial exemption from transfer duty for Natura 2000 sites ( <i>implemented in 2005</i> )	France
10	Extension to sites other than Natura 2000 sites of the exemption relating to $\frac{3}{4}$ of transfer duty ( <i>implemented in 2006</i> )	France
11	Extension to sites other than Natura 2000 sites of the deduction from net income of the cost of rehabilitation and major maintenance ( <i>implemented in 2006</i> )	France
12	Deduction from net income of the cost of rehabilitation and major maintenance work on Natura 2000 sites ( <i>implemented in 2006</i> )	France
13	Additional payment under the DGF for <i>communes</i> fully or partially located in the centre of a national park ( <i>implemented in 2006</i> )	France
14	Exemption from certain taxes on real-estate donations, legacies, acquisitions and exchanges for public agencies in charge of national parks ( <i>implemented in 2006</i> )	France
15	Local Rights and Responsibilities Act, extending the areas eligible for funding by the Departmental Tax for Sensitive Natural Areas to Natura 2000 sites and nature reserves ( <i>post-2004</i> )	France
16	The activities eligible for funding by the Departmental Tax for Sensitive Natural Areas are extended to cover natural asset inventories ( <i>implemented in 2006</i> )	France
17	Deficits from expenditure on the conservation and enhancement of natural assets are chargeable to general revenue ( <i>implemented in 2006</i> )	France
18	General tax on pollution activities	France
19	Environmental improvement charge: charges for the quantity of the consumed water in commercial building	Korea
20	Ecosystem conservation fee: fees for development project causing considerable impacts upon the natural environment or ecosystem	Korea
21	Emission standards charge	Korea
22	Fees for national park entrance	Mexico
23	Fee on an environmental fee for tourism entering Spitsbergen	Norway
24	Excavation charge for peat or material	Sweden
25	Licence fee for exploitation of peat	Sweden

26	Mineral extraction charge	Sweden
<b>Subsidies (44)</b>		
1	Bush Tender	Australia
2	PRESTI program-Prevention stimulation for industry	Belgium (Flanders)
3	Subsidy to local authorities with voluntary agreement	Belgium (Flanders)
4	Capital Gains Tax Exemptions	Canada
5	British Columbia Sustainable Environment Fund ( <i>post-2004</i> )	Canada (British Columbia)
6	Strengthening accelerated CCA for clean energy generation ( <i>strengthened in 2007</i> )	Canada
7	Vehicle Efficiency Incentive + Green Levy on Fuel-Inefficient Vehicles ( <i>strengthened in 2007</i> )	Canada
8	Incentives for removal of older, high-emitting vehicles ( <i>strengthened in 2007</i> )	Canada
9	Strengthening the Public Transit Tax Credit ( <i>strengthened in 2007</i> )	Canada
10	Renewable Fuels Production Incentive ( <i>strengthened in 2007</i> )	Canada
11	Accelerate capital cost allowance for forestry bioenergy ( <i>strengthened in 2006</i> )	Canada
12	Extending the mineral exploration tax credit for flow-through share investors ( <i>revised in 2006</i> )	Canada
13	Land care(custody) program	Czech Rep.
14	Landscape improvement program	Czech Rep.
15	Mining reduction	Czech Rep.
16	Restoration of damages caused by mining	Czech Rep.
17	Operational Program Environment: Subsidies for prevention of landslides and rock avalanches, monitoring of geofactors, measures to protect against water and wind erosion and to reduce negative effects of surface runoffs ( <i>post-2004</i> )	Czech Rep.
18	Subsidy/compensation for nature conservation	Finland
19	Compensation for nature conservation restrictions in protected areas and outside of protected areas ( <i>post-2004</i> )	Hungary
20	Subsidies for investments in nature conservation(National Development Plan, 2004-2006) ( <i>post-2004</i> )	Hungary
21	Subsidies for investments in nature conservation(New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	Hungary
22	Subsidies for investments in ecotourism(National Development Plan, 2004-2006) ( <i>post-2004</i> )	Hungary
23	Subsidies for investments in ecotourism(New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	Hungary
24	Japan Fund for Global Environment	Japan
25	A tax relief and financial support for voluntary participants in conserving cultural and natural heritage resources ( <i>post-2004</i> )	Korea
26	Subsidy for natural environment conservation organizations	Korea
27	Subsidy for natural resources management	Netherlands
28	Subsidy for protected areas and purchase of ecological areas	Netherlands
29	Subsidies for environmental purposes	Slovak Rep.
30	Support for environmental goals and supervision	Sweden
31	Local Investment Program(LIP): To support local investments for sustainable development	Sweden
32	Local conservation projects: To stimulate nature conservation efforts, especially among the municipalities	Sweden
33	Subsidy for biodiversity programmes	Switzerland
34	Subsidy for ecological compensation	Switzerland
35	Subsidy for nature and landscape protection	Switzerland
36	Subsidy for protection against natural hazards	Switzerland
37	Rural Development Plan for England ( <i>revised in 2007</i> )	UK

38	Uplands ELS: Plan to convert existing Hill Farm Allowance(income support) into a scheme based on environmental outcomes in the uplands ( <i>to go effect in 2010</i> )	UK
39	Subsidy for sits conservation	UK
40	Aggregate levy	UK
41	The country side stewardship scheme	UK
42	Projects for specialised forms of tourism (nature and eco tourism) through the Structural Funds Programmes ( <i>revised in 2006</i> )	EU
43	Support for promotion of alternative forms of tourism in rural areas through the Rural Development Fund and Programmes ( <i>revised in 2006</i> )	EU
44	LIFE + ( <i>revised in 2007</i> )	EU
<b>Reform or removal of perverse subsidies (3)</b>		
1	Phasing out of the accelerated capital cost allowance to oil sands investments ( <i>strengthened in 2007</i> )	Canada
2	Removal of excise tax exemption for bio-fuels ( <i>strengthened in 2007</i> )	Canada
3	Prohibition of the deduction of fines and penalties ( <i>introduced in 2005</i> )	Canada
<b>Market creation or the assignment of property rights (4)</b>		
1	Environmental services scheme	Australia (New South Wales)
2	Desert Upland Landscape Linkages ( <i>adopted in 2006</i> )	Australia
3	Maintaining Australia's biodiversity Hotspots (MABH) ( <i>adopted in 2004</i> )	Australia
4	Tradable development rights for land preservation	France
<b>Liability instruments (4)</b>		
1	Nature conservation penalty	Hungary
2	Waste treatment performance bond: Deposits for the appropriate treatment of wastes when giving an approval of industrial waste treatment facilities	Korea
3	Performance bond for post management of landfill sites: Deposits for the post-management of waste landfill sites after the completion of land filling	Korea
4	Entry into force of the EU Environmental Liability Directive (ELD) – soil, mining and waste treatment are key areas of implementation ( <i>adopted in 2004 and went into effect in 2007</i> )	EU
<b>Others : voluntary agreements, etc(4)</b>		
1	National Market-Based Instruments Pilot Program	Australia
2	Contractual Nature Protection by the Federal provinces: Some measures are supported financially such as active measures for conservation and improvement of valuable biotops, the decrease of land use intensity or abandonment of use and other measures that can only be successful if they are carried out in cooperation with the population	Austria
3	Social Cost Benefit Analysis(SCBA) on Green/Blue zoning	Netherlands
4	SCBA on investments in the Dutch landscape	Netherlands

### 3. Instruments listed by country

In the tables below: PB indicates price based instruments, SU subsidies, PS reform or removal of perverse subsidies, MC market creation or the assignment of property rights, LI liability instruments, and others such as voluntary agreements, etc.

#### <Australia: 19>

<b><i>Inland water ecosystems (4)</i></b>		
1	Water effluent charge	PB
2	Living Murray program	SU
3	Water trading	MC
4	Pilot interstate water trading project ( <i>revised in July 2004</i> )	MC
<b><i>Marine and coast (3)</i></b>		
1	Environmental management charge(EMC) on visits to the Great Barrier Reef	PB
2	Individual transferable fishing quotas	MC
3	Performance bonds for land and tourist development and for rehabilitation of mine sites	LI
<b><i>Agriculture (2)</i></b>		
1	50 percent fencing subsidy	SU
2	National Landcare program	SU
<b><i>Forest (2)</i></b>		
1	Tasmanian regional forest agreement	SU
2	Tasmanian Forest Conservation Fund ( <i>adopted in 2007</i> )	MC
<b><i>Mountain (0)</i></b>		
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management(1)</i></b>		
1	Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016(QLD) ( <i>adopted in 2006</i> )	MC
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (7)</i></b>		
1	Environmental surcharges on local taxes	PB
2	Conservation Covenants	PB
3	Bush Tender	SU
4	Environmental services scheme	MC (New South Wales)
5	Desert Upland Landscape Linkages ( <i>adopted in 2006</i> )	MC
6	Maintaining Australia's biodiversity Hotspots (MABH) ( <i>adopted in 2004</i> )	MC
7	National Market-Based Instruments Pilot Program	Pilot projects

#### <Austria: 11>

<b><i>Inland water ecosystems (2)</i></b>		
1	Fee on water use	PB
2	Wastewater charges	PB
<b><i>Marine and coast (0)</i></b>		

<b>Agriculture (2)</b>		
1	Adjustment of the Austrian Programme on an environmentally sound and sustainable agriculture (ÖPUL) to the new rural development scheme of the EU: grants for organic farming, alpine pasturing and herding, tending of high alpine meadows, etc ( <i>revised in 2007</i> )	SU
2	Integration of the compensation payments for agriculture within the NATURA 2000 network into the rural development scheme of the EU: Compensation payment for management and restrictions as defined by legal instruments ( <i>revised in 2007</i> )	SU
<b>Forest (4)</b>		
1	Charge for tree protection: charge for trees with more than 40cm circumference that is cut down if no new plantings are carried out instead	PB
2	Integration of the compensation payments for forestry within the NATURA 2000 network into the rural development scheme of the EU: grants for very specific management measures like conservation and tending of rare tree species ( <i>post-2004</i> )	SU
3	Forest subsidies	SU
4	Natural Forest Reserves Programme: Reserves are established on a voluntary basis, and forest owners are compensated for their services rendered and for their loss of profit	Voluntary agreement
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (2)</b>		
1	Fee on hunting and fishing	PB
2	Fee for the import and export of animals and plants	PB
<b>Others; e.g. land/soil management, ecotourism, mining, etc (1)</b>		
1	Contractual Nature Protection by the Federal provinces: Some measures are supported financially such as active measures for conservation and improvement of valuable biotops, the decrease of land use intensity or abandonment of use and other measures that can only be successful if they are carried out in cooperation with the population	Voluntary agreement

<Belgium: 24>

<b>Inland water ecosystems (8)</b>		
1	Manure tax ( <i>post-2004</i> )	PB
2	Waste water charge ( <i>post-2004</i> )	PB
3	Waste water charge	PB
4	Tax on water withdrawals	PB
5	Groundwater tax	PB
6	Subsidy to local authorities for water management	SU
7	Subsidy to farmers for creation of ponds	SU
8	Subsidy for individual water purification	SU
<b>Marine and coast (2)</b>		
1	Payment of loss of value of areas under the Decree protection of dunes	PB
2	Nutrient emission right for farmers ( <i>post-2004</i> )	MC
<b>Agriculture (6)</b>		
1	Rural development plan 2007-2013 ( <i>post-2004</i> )	SU
2	Agri-environmental support	SU
3	Incentive for the plantation of hedges	SU
4	Environmentally related subsidies to farmers	SU
5	Subsidies for nature conservation	SU
6	Nature 2000 legislation	SU
<b>Forest (5)</b>		
1	Subsidy for forest regeneration in private forests ( <i>revised in 2006</i> )	SU
2	Subsidy for forest management	SU
3	Subsidies for nature and forests	SU

4	Tax exemption	SU
5	Subsidy for private forest owners organisation in the context of forest certification ( <i>revised in 2005</i> )	Certification
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (1)</b>		
1	Hunting permits	PB
<b>Others; e.g. land/soil management, ecotourism, mining, etc (2)</b>		
1	PRESTI program-Prevention stimulation for industry	SU
2	Subsidy to local authorities with voluntary agreement	SU

## &lt;Canada: 73 &gt;

<b>Inland water ecosystems (10)</b>		
1	Water abstraction permit fees	PB (British Columbia, Nova Scotia)
2	Charge on discharge	PB (British Columbia, Quebec)
3	Water permit in National parks ( <i>revised in 2007</i> )	PB
4	City of Toronto high-efficiency clothes washer rebate	SU (Ontario)
5	Riparian tax credit	SU(GTF) (Manitoba)
6	Subsidy for conservation of water courses and soils	SU(GFT)
7	Municipal Rural Infrastructure Fund ( <i>adopted in 2006</i> )	SU
8	Nova Scotia Environmental Home Assessment Program ( <i>post-2004</i> )	SU(GFT)
9	Capital regional district of Victoria water efficient rebate program ( <i>adopted in 2006</i> )	SU(GFT) (British Columbia)
10	Transferable consumption allowances for degreasing solvents	MC
<b>Marine and coast (8)</b>		
1	Charge on fishing licences	PB (Quebec)
2	Recreational Fishing Licence Fees	PB
3	Salmon Conservation Stamp	PB
4	Commercial Marine Fishing Licence Fees ( <i>revised in 2007</i> )	PB
5	Species at Risk Act (SARA) ( <i>fully implemented in 2004</i> )	PB
6	Financial support for fisheries management and research, and harbour services	SU(GTF)
7	Transferable fishing quotas	MC
8	Individual Transferable Quotas	MC
<b>Agriculture (7)</b>		
1	Charge on agricultural inputs	PB (British Columbia)
2	CARE (Conservation of Agriculture, Resources and the Environment) program	SU(GFT) (Ontario, Prairie)
3	Environmental Farm Plan program	SU(GFT)



4	Land Stewardship program	SU(GFT) (Ontario)
5	Greencover Canada program	SU(GFT)
6	Alberta Environmentally-Sustainable Agriculture Processing-Based program ( <i>revised in 2004</i> )	SU
7	National Farm Stewardship program	SU(GFT)
<b>Forest (14)</b>		
1	Stumpages fees	PB
2	Forest protection fees	PB
3	Charge for over-cutting	PB (Alberta)
4	Charge for forest management & research	PB (Quebec)
5	Logging tax	PB (British Columbia)
6	Permanent cover program	SU (Prairie, British Columbia)
7	Subsidy for forest development agencies	SU
8	Subsidy for forest-based resources	SU
9	Subsidy for reforestation	SU
10	Tax-free intergenerational transfers of commercial farm woodlots	SU
11	Assistance to Combat Pine Beetle Infestation ( <i>adopted in 2006</i> )	SU
12	Tenure holder obligations	Others
13	Forest Management Certification Systems	Others
14	Brochure on Forest Best Management Practices for Biodiversity	Others
<b>Mountain (4)</b>		
1	Charge for entrance to parks for fishers and hunters	PB (Quebec)
2	Charge for entrance to parks ( <i>revised in 2007</i> )	PB
3	Development fees ( <i>post-2004</i> )	PB
4	Fines for environmental damages ( <i>post-2004</i> )	LI
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (16)</b>		
1	Fee on animal trapping	PB (Alberta)
2	Fee on hunting licence	PB (Alberta, Quebec, etc)
3	Charge for entrance to exploitation zone	PB (Quebec)
4	Charge for entrance to wildlife reserves	PB (Quebec)
5	Charge on permit for hunting with snares	PB (Quebec)
6	Interdepartmental Recovery Fund (IRF)	SU(GFT)
7	Alberta Buck for wildlife program	SU(GFT) (Alberta)
8	Critical wildlife habitat program	SU(GFT) (Manitoba)

9	Fish and wildlife development fund	SU (Saskatchewan)
10	Nova Scotia Habitat Conservation Fund	SU(GFT) (Nova Scotia)
11	Habitat stewardship program for species at risk	SU
12	Endangered species recovery fund (ESRF) ( <i>revised in 2006</i> )	SU(GFT)
13	Ecological gifts program ( <i>revised in 2006</i> )	SU
14	Tradable hunting rights	MC (Alberta)
15	Water allocation transfers	MC (Alberta)
16	Hunting fines	LI
<b>Others; e.g. land/soil management, ecotourism, mining, etc (14)</b>		
1	Products charge	PB
2	Mineral tax	PB (British Columbia)
3	Capital Gains Tax Exemptions	SU
4	British Columbia Sustainable Environment Fund ( <i>post-2004</i> )	SU (British Columbia)
5	Strengthening accelerated CCA for clean energy generation ( <i>strengthened in 2007</i> )	SU
6	Vehicle Efficiency Incentive + Green Levy on Fuel-Inefficient Vehicles ( <i>strengthened in 2007</i> )	SU
7	Incentives for removal of older, high-emitting vehicles ( <i>strengthened in 2007</i> )	SU
8	Strengthening the Public Transit Tax Credit ( <i>strengthened in 2007</i> )	SU
9	Renewable Fuels Production Incentive ( <i>strengthened in 2007</i> )	SU
10	Accelerate capital cost allowance for forestry bioenergy ( <i>strengthened in 2006</i> )	SU
11	Extending the mineral exploration tax credit for flow-through share investors ( <i>revised in 2006</i> )	SU
12	Phasing out of the accelerated capital cost allowance to oil sands investments ( <i>strengthened in 2007</i> )	PS
13	Removal of excise tax exemption for bio-fuels ( <i>strengthened in 2007</i> )	PS
14	Prohibition of the deduction of fines and penalties ( <i>introduced in 2005</i> )	PS

**<Czech Republic: 40>**

<b><i>Inland water ecosystems (9)</i></b>		
1	Charge for withdrawal of groundwater	PB
2	Fee for permitted discharge of wastewater into groundwater	PB
3	Operational program infrastructure ( <i>post-2004</i> )	SU
4	Operational program environment ( <i>post-2004</i> )	SU
5	LIFE+ : Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	SU
6	Programme for revitalisation of river system	SU
7	Removal of flood damage	SU
8	Support for de-sludging of ponds	SU
9	Landscape management program	SU
<b><i>Marine and coast (0)</i></b>		

<b>Agriculture (7)</b>		
1	Payments within Natura 2000 agricultural areas: compensation of forbiddance to use fertilizers in the 1 <sup>st</sup> zones of national parks and landscape protected areas covered by Natural 2000 ( <i>post-2004</i> )	SU
2	Operational Program Environment: Biodiversity projects aimed at agricultural land such as creating new landscape structures, water regime, etc ( <i>post-2004</i> )	SU
3	LIFE+: Projects for nature protection, especially aimed at support for Natura 2000 areas ( <i>post-2004</i> )	SU
4	Agri-environmental subsidies	SU
5	Agriculture and Forestry Fund	SU
6	Charge for removal of land from the agricultural land fund	SU
7	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	SU
<b>Forest (7)</b>		
1	Fee for the withdrawal of forest land	PB
2	Payments within Natura 2000 forest areas ( <i>post-2004</i> )	SU
3	Forest-environment payments ( <i>post-2004</i> )	SU
4	Operational Program Environment ( <i>post-2004</i> )	SU
5	LIFE+ ( <i>post-2004</i> )	SU
6	Subsidies to forestry	SU
7	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	SU
<b>Mountain (5)</b>		
1	Agri-environmental measures ( <i>revised in 2007</i> )	SU
2	Operational Program Environment ( <i>post-2004</i> )	SU
3	LIFE+ ( <i>post-2004</i> )	SU
4	Less-favoured Areas: Mountain Areas (designated by H)	SU
5	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	SU
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (5)</b>		
1	Operational Program Environment: Support for investment projects for protection of endangered species ( <i>revised in 2007</i> )	SU
2	LIFE+ ( <i>revised in 2007</i> )	SU
3	Contribution to zoological gardens	SU
4	Agri-environmental measure: Subsidy for bird habitats on grassland	SU
5	Landscape Management Program: Mostly small-scale nature protection actions for specific needs of endangered species and habitats	SU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (7)</b>		
1	Payments for use of mining space area	PB
3	Land care(custody) program	SU
4	Landscape improvement program	SU
5	Mining reduction	SU
6	Restoration of damages caused by mining	SU
7	Operational Program Environment: Subsidies for prevention of landslides and rock avalanches, monitoring of geofactors, measures to protect against water and wind erosion and to reduce negative effects of surface runoffs ( <i>post-2004</i> )	SU

## &lt;Finland: 12&gt;

<b><i>Inland water ecosystems (3)</i></b>		
1	Fee on gravel abstraction	PB
2	Water level regulation charge: Payments for environmental permits relating to water levels	PB
3	Water user charges	PB
<b><i>Marine and coast (2)</i></b>		
1	Fee on waste from ships ( <i>post-2004</i> )	PB
2	Charge on fishing licence	PB
<b><i>Agriculture (1)</i></b>		
1	Agri-environmental subsidies program (2000-2006)	SU
<b><i>Forest (3)</i></b>		
1	Forest management fee	PB
2	Subsidy for forests	SU
3	The METSO Forest Biodiversity Programme for Southern Finland: To provide funding mechanisms for the management, restoration and protection of traditional wooded biotopes	SU
<b><i>Mountain (0)</i></b>		
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (1)</i></b>		
1	Charge on hunting licence	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (2)</i></b>		
1	Fee on claims to work a mine	PB
2	Subsidy/compensation for nature conservation	SU

## &lt;France: 23&gt;

<b><i>Inland water ecosystems (6)</i></b>		
1	Exemption from TFNB (land tax for wetlands ( <i>implemented in 2005</i> ))	PB
2	Rural Development and funding of wetland initiatives (from the non-budgetary appropriations of Water Agencies) ( <i>implemented in 2005</i> )	PB
3	Charge on water abstraction	PB
4	Charge on water consumption	PB
5	Charge on water supply	PB
6	Sewerage charge	PB
<b><i>Marine and coast (1)</i></b>		
1	80% of the French registration tax on boats is allocated to the Coastal and Lakeshore Conservatory (the second stage will be an increase from 80% to 100% under the 2007 Finance Bill) ( <i>implemented in 2005</i> )	PB
<b><i>Agriculture (2)</i></b>		
1	Agri-environmental measures ( <i>revised in 2007</i> )	SU
2	Support for non-commercial investment ( <i>revised in 2007</i> )	SU
<b><i>Forest (1)</i></b>		
1	Support for non-commercial investment in woodland under Natura 2000 contracts. ( <i>revised in 2007</i> )	SU

<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (0)</b>		
<b>Others; e.g. land/soil management, ecotourism, mining, etc (13)</b>		
1	Exemption from TFNB land tax for Natura 2000 sites ( <i>implemented in 2005</i> )	PB
2	Exemption from TFNB land tax (see above) for land in the centre of national parks overseas ( <i>implemented in 2005</i> )	PB
3	Partial exemption from transfer duty for Natura 2000 sites ( <i>implemented in 2005</i> )	PB
4	Extension to sites other than Natura 2000 sites of the exemption relating to $\frac{3}{4}$ of transfer duty ( <i>implemented in 2006</i> )	PB
5	Extension to sites other than Natura 2000 sites of the deduction from net income of the cost of rehabilitation and major maintenance ( <i>implemented in 2006</i> )	PB
6	Deduction from net income of the cost of rehabilitation and major maintenance work on Natura 2000 sites ( <i>implemented in 2006</i> )	PB
7	Additional payment under the DGF for <i>communes</i> fully or partially located in the centre of a national park ( <i>implemented in 2006</i> )	PB
8	Exemption from certain taxes on real-estate donations, legacies, acquisitions and exchanges for public agencies in charge of national parks ( <i>implemented in 2006</i> )	PB
9	Local Rights and Responsibilities Act, extending the areas eligible for funding by the Departmental Tax for Sensitive Natural Areas to Natura 2000 sites and nature reserves ( <i>post-2004</i> )	PB
10	The activities eligible for funding by the Departmental Tax for Sensitive Natural Areas are extended to cover natural asset inventories ( <i>implemented in 2006</i> )	PB
11	Deficits from expenditure on the conservation and enhancement of natural assets are chargeable to general revenue ( <i>implemented in 2006</i> )	PB
12	General tax on pollution activities	PB
13	Tradable development rights for land preservation	MC

<Hungary: 15>

<b>Inland water ecosystems (1)</b>		
1	Charge on water abstraction	PB
<b>Marine and coast (0)</b>		
<b>Agriculture (3)</b>		
1	The National Rural-Development Plan (NRDP, 2004-2006) ( <i>post-2004</i> )	SU
2	New Hungary Rural Development Plan (NHRDP, 2007-2013) ( <i>post-2004</i> )	SU
3	National Agri-environment Programme( NAEP, 2002-2004): The NAEP became part of the agri-environmental measures of the NRDP, after its accession to the EU in May 2004	SU
<b>Forest (4)</b>		
1	Fee for forest management	PB
2	The National Rural-Development Plan (NRDP, 2004-2006) ( <i>post-2004</i> )	SU
3	New Hungary Rural Development Plan (NHRDP, 2007-2013) ( <i>post-2004</i> )	SU
4	National Afforestation Plan	SU
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (1)</b>		
1	Supporting the protection and conservation of habitat and natural stocks of game species ( <i>post-2004</i> )	SU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (6)</b>		
1	Compensation for nature conservation restrictions in protected areas and outside of protected areas( <i>post-2004</i> )	SU

2	Subsidies for investments in nature conservation (National Development Plan, 2004-2006) ( <i>post-2004</i> )	SU
3	Subsidies for investments in nature conservation (New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	SU
4	Subsidies for investments in ecotourism (National Development Plan, 2004-2006) ( <i>post-2004</i> )	SU
5	Subsidies for investments in ecotourism (New Hungary Development Plan, 2007-2013) ( <i>post-2004</i> )	SU
6	Nature conservation penalty	LI

## &lt;Japan: 11&gt;

<b><i>Inland water ecosystems (4)</i></b>		
1	Charge on abstraction of water from rivers	PB
2	Fee for use of water in reservoirs(dams)	PB
3	Wastewater user charges	PB
4	Fund for river development	SU
<b><i>Marine and coast (2)</i></b>		
1	Penalty on use of explosive/poison	LI
2	Penalty on reclamation etc. of protected water area	LI
<b><i>Agriculture (1)</i></b>		
1	Fund for river development	SU
<b><i>Forest (0)</i></b>		
<b><i>Mountain (2)</i></b>		
1	Government subsidies for development of Quasi-National Parks and Long-Distance Nature Trails ( <i>post-2004</i> )	SU
2	Government subsidy for improvement in natural parks and promotion of co-existing with nature	SU
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (1)</i></b>		
1	Hunting tax	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i></b>		
1	Japan Fund for Global Environment	SU

## &lt;Korea: 44&gt;

<b><i>Inland water ecosystems (7)</i></b>		
1	Water quality improvement charge	PB
2	Water use charge for the Han River	PB
3	Source charge	PB
4	Emission charge	PB
5	Total pollution load charge	PB
6	Water use charge for the Nokdong River, the Gum River and the Youngsan River	PB
7	Restoration performance bond	LI
<b><i>Marine and coast (2)</i></b>		
1	Charges for the development of coastal area ( <i>post-2004</i> )	PB
2	Subsidies for fleet retirement ( <i>revised in 2004</i> )	SU
<b><i>Agriculture (4)</i></b>		
1	Direct payments for environmentally friendly livestock practices ( <i>post-2004</i> )	SU

2	Direct payments for environmentally friendly agriculture	SU
3	Abolition of subsidy for fertiliser ( <i>post-2004</i> )	PS
4	Certification for environmentally friendly agricultural products	Certification
<b>Forest (13)</b>		
1	Tax revision on reserved area	PB
2	Charging cancellation fee for erosion control projects: Charge cancellation fee for erosion control projects designed for flood disaster prevention	PB
3	Restoration of degraded forest ecosystem ( <i>post-2004</i> )	SU
4	Afforestation on marginal farm land and reforestation on abandoned grassland ( <i>post-2004</i> )	SU
5	Plantation projects: Providing low-interest loans to reduce financial burden on participating firms	SU
6	Expansion of national forest land	SU
7	Forest tending projects	SU
8	Fire prevention	SU
9	Forest disease and pests prevention	SU
10	Establishment of forest arboretum and museum	SU
11	Establishment of eco-forest and urban forest	SU
12	Preparation of forest management plan	SU
13	Introduction and operation of managing agency system for private forests	SU
<b>Mountain (5)</b>		
1	Fee for national park entrance	PB
2	Charging establishment costs on deforestation projects	PB
3	Charging restoration costs on deforestation projects	PB
4	The Cooperative Fund for Ecosystem Conservation: Cost charging for approved development project ( <i>revised in 2004</i> )	PB
5	Management and conservation of reserved areas in Baekdu Daegan Mountains: Support for income generating projects to local villagers ( <i>post-2004</i> )	SU
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (6)</b>		
1	Subsidy for poaching monitoring organizations	SU
2	Subsidy for ex-suit conservation institutes	SU
3	Subsidy for biodiversity management contract	SU
4	Non-compliance fee: Fees for eating illegally captured wildlife ( <i>post-2004</i> )	LI
5	Reward for noticing illegal capture and picking of wildlife ( <i>post-2004</i> )	Rewarding
6	Voluntary agreement on conservation of wildlife with owner of land or management institute ( <i>post-2004</i> )	Voluntary agreement
<b>Others; e.g. land/soil management, ecotourism, mining, etc (7)</b>		
1	Environmental improvement charge: charges for the quantity of the consumed water in commercial building	PB
2	Ecosystem conservation fee: fees for development project causing considerable impacts upon the natural environment or ecosystem	PB
3	Emission standards charge	PB
4	A tax relief and financial support for voluntary participants in conserving cultural and natural heritage resources ( <i>post-2004</i> )	SU
5	Subsidy for natural environment conservation organizations	SU
6	Waste treatment performance bond: Deposits for the appropriate treatment of wastes when giving an approval of industrial waste treatment facilities	LI
7	Performance bond for post management of landfill sites: Deposits for the post-management of waste landfill sites after the completion of land filling	LI

## &lt;Luxembourg: 3&gt;

<b><i>Inland water ecosystems (0)</i></b>		
<b><i>Marine and coast (0)</i></b>		
<b><i>Agriculture (2)</i></b>		
1	Agri-environmental measures	SU
2	Biodiversity subsidies	SU
<b><i>Forest (1)</i></b>		
1	Biodiversity subsidies	SU
<b><i>Mountain (0)</i></b>		
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (0)</i></b>		
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (0)</i></b>		

## &lt;Mexico: 3 &gt;

<b><i>Inland water ecosystems (0)</i></b>		
<b><i>Marine and coast (1)</i></b>		
1	Subsidies for the buy-back of coastal fishing fleets and the technological conversion of fishing gear ( <i>introduced in 2007</i> )	SU
<b><i>Agriculture (0)</i></b>		
<b><i>Forest (1)</i></b>		
1	Payment for Hydrological Environmental Services Program	SU
<b><i>Mountain (0)</i></b>		
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (0)</i></b>		
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i></b>		
1	Fees for national park entrance	PB

## &lt;Netherlands: 18&gt;

<b><i>Inland water ecosystems (3)</i></b>		
1	Municipal sewerage charge	PB
2	Groundwater extraction tax	PB
3	Eco-taxes	PB
<b><i>Marine and coast (2)</i></b>		
1	Charge for fishing licence	PB
2	Tradable fishery quota	MC
<b><i>Agriculture (6)</i></b>		
1	High VAT (on fertilisers and pesticides)	PB
2	Tax on farm mineral surpluses	PB
3	Pesticide tax	PB
4	Investment Framework Rural Areas ( <i>revised in 2006</i> )	SU
5	SPADE(To stimulate the innovation for agro-biodiversity and sustainable soil management) ( <i>revised in 2007</i> )	SU
6	Support for agriculture sector	SU
<b><i>Forest (2)</i></b>		
1	Subsidy for afforestation and forestry maintenance	SU



2	Tax exemptions for forest conservation and for green investment funds	SU
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands(0)</b>		
<b>Species management (1)</b>		
1	Charge on hunting licence	PB
<b>Others; e.g. land/soil management, ecotourism, mining, etc (4)</b>		
1	Subsidy for natural resources management	SU
2	Subsidy for protected areas and purchase of ecological areas	SU
3	Social Cost Benefit Analysis(SCBA) on Green/Blue zoning	BC analysis
4	SCBA on investments in the Dutch landscape	BC analysis

<Norway: 10 >

<b>Inland water ecosystems (1)</b>		
1	Charges on tap water and waste water treatment	PB
<b>Marine and coast (0)</b>		
<b>Agriculture (2)</b>		
1	Tax on the use of pesticides	PB
2	Environmental subsidies in the agricultural sector ( <i>revised in 2006</i> )	SU
<b>Forest (2)</b>		
1	Forest Trust Fund	PB
2	Grants for the forestry	SU
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (4)</b>		
1	Compensation for damage by protected species	SU
2	Preventive measures	SU
3	Licence to hunt and fee	MC
4	Fee for fishing	MC
<b>Others; e.g. land/soil management, ecotourism, mining, etc (1)</b>		
1	Fee on an environmental fee for tourism entering Spitsbergen	PB

<Slovak Republic: 4 >

<b>Inland water ecosystems (0)</b>		
<b>Marine and coast (0)</b>		
<b>Agriculture (0)</b>		
<b>Forest (2)</b>		
1	Incentive instruments for sustainable forestry	SU
2	Charges for the conversion or destruction of forested lands	PB
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (1)</b>		
1	Financial contributions	SU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (1)</b>		
1	Subsidies for environmental purposes	SU

## &lt;Sweden: 12&gt;

<b><i>Inland water ecosystems (1)</i></b>		
1	Natural gravel tax	PB
<b><i>Marine and coast (1)</i></b>		
1	Subsidies for wetlands	SU
<b><i>Agriculture (1)</i></b>		
1	Sweden's rural development programme (LBU)	SU
<b><i>Forest (2)</i></b>		
1	Subsidy for forestry	SU
2	Removal of perverse subsidies: For examples, subsidies for cutting down sparsely wooded forests, subsidies for the afforestation of grazing pastures, subsidies for drainage of wet forests, and subsidies for the construction of minor hydro-electric power plants	PS
<b><i>Mountain (0)</i></b>		
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (1)</i></b>		
1	Hunting fee	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (6)</i></b>		
1	Excavation charge for peat or material	PB
2	Licence fee for exploitation of peat	PB
3	Mineral extraction charge	PB
4	Support for environmental goals and supervision	SU
5	Local Investment Program(LIP): To support local investments for sustainable development	SU
6	Local conservation projects: To stimulate nature conservation efforts, especially among the municipalities	SU

## &lt;Switzerland: 15 &gt;

<b><i>Inland water ecosystems (0)</i></b>		
<b><i>Marine and coast (0)</i></b>		
<b><i>Agriculture (7)</i></b>		
1	Subsidy for ecological livestock production	SU
2	Subsidy for extending agricultural areas	SU
3	Subsidy for farmyard manure	SU
4	Support for sustainable resource use	SU
5	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	SU
6	Direct payment for ecological services	SU
7	Compensation for the preservation of meadows, extensive production of cereals and rape, and preservation of biodiversity on farmland	SU
<b><i>Forest (2)</i></b>		
1	Subsidy for forest maintenance and management	SU
2	Subsidy for structural improvement and forest roads	SU
<b><i>Mountain (1)</i></b>		
1	Compensation for protecting and preserving the cultural landscape	SU
<b><i>Dry and sub-humid lands (0)</i></b>		
<b><i>Species management (1)</i></b>		
1	National Plan of Action for the Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture	SU

<b>Others; e.g. land/soil management, ecotourism, mining, etc (4)</b>		
1	Subsidy for biodiversity programmes	SU
2	Subsidy for ecological compensation	SU
3	Subsidy for nature and landscape protection	SU
4	Subsidy for protection against natural hazards	SU

<Turkey: 1>

<b>Inland water ecosystems (0)</b>		
<b>Marine and coast (0)</b>		
<b>Agriculture (0)</b>		
<b>Forest (1)</b>		
1	Charge for grazing	PB
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands(0)</b>		
<b>Species management (0)</b>		
<b>Others; e.g. land/soil management, ecotourism, mining, etc (0)</b>		

<UK: 26>

<b>Inland water ecosystems (7)</b>		
1	Charges for discharges	PB
2	Abstraction charging ( <i>post-2004 revision, go into effect in 2009</i> )	PB
3	Charging system for regulating physical modifications to prevent deterioration of good ecological status ( <i>under consideration</i> )	PB
4	Charge on water resources	PB
5	Ago-environmental support for resource protection schemes as well as specific habitat creation schemes for wetland	SU
6	Catchments Sensitive Farming Project: which has a capital grant scheme aiming at diffuse pollution control	SU
7	Voluntary initiative for pesticides: This was offered by industry in lieu of a pesticides tax, and has made some inroads into water pollution by pesticides.	Voluntary initiative
<b>Marine and coast (5)</b>		
1	Grant for salt marshes	SU
2	Subsidy for wetlands	SU
3	Financial instruments for fisheries	SU
4	Days at sea regulations: The flat rate “days at sea” allocation is transferable between boats on a temporary annual basis, which is aimed at reducing fishing mortality on cod stocks in the North Sea ( <i>post-2004</i> )	MC
5	Fixed quota allocation units	MC
<b>Agriculture (5)</b>		
1	Entry level Scheme: The scheme provides a fixed payment per hectare in return for a package of management measures chosen by the farmer from a standard menu of options ( <i>post-2004</i> )	SU
2	Subsidy for farm waste treatment facilities	SU
3	Organic Farming Scheme	SU
4	The Nitrate Sensitive Area Scheme(NSA): Payment range from €79 per hectare for restrictions on nitrogen fertilizers, to €843 for the conversion of arable land to native species grassland	SU

5	Removal of production subsidies under the CAP and introduction of Single Farm Payment ( <i>post-2004</i> )	PS
<b>Forest (3)</b>		
1	England Woodland Grant Scheme, Rural Development Contracts in Scotland and Better Woodlands for Wales ( <i>post-2004</i> )	SU
2	Subsidy for woodlands	SU
3	Subsidy for woodland Grant Scheme(England and Wales), Scottish Forestry Grants Scheme	SU
<b>Mountain (0)</b>		
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (1)</b>		
1	Subsidy for wildlife	SU
<b>Others; e.g. land/soil management, ecotourism, mining, etc (5)</b>		
1	Rural Development Plan for England ( <i>revised in 2007</i> )	SU
2	Uplands ELS: Plan to convert existing Hill Farm Allowance(income support) into a scheme based on environmental outcomes in the uplands ( <i>to go into effect in 2010</i> )	SU
3	Subsidy for sits conservation	SU
4	Aggregate levy	SU
5	The country side stewardship scheme	SU

## &lt;European Commission: 42 &gt;

<b>Inland water ecosystems (4)</b>		
1	Agri-environmental measures under the Rural Development regulation (a variety of targeted measures can be found within the various Rural Development programmes of the Member States) ( <i>revised in 2006</i> )	SU
2	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	SU
3	Structural and Cohesion Funds (subsidies for inland water courses restoration and rehabilitation, avoiding pollution, etc) ( <i>revised in 2006</i> )	SU
4	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	LI
<b>Marine and coast (5)</b>		
1	The Common Fisheries Policy (CFP)	SU
2	LIFE+ projects targeting nature conservation and protection ( <i>revised in 2007</i> )	SU
3	European Fisheries Fund (EFF) (subsidies for following more eco-friendly fishing practices, changing of fishing gear and technology to avoid disturbance of species, training) ( <i>revised in 2006</i> )	SU
4	Structural and Cohesion Funds (subsidies for restoration of coastal line and rehabilitation of wetlands, avoiding pollution/sendimentation, etc) ( <i>revised in 2006</i> )	SU
5	Entry into force of the EU Environmental Liability Directive (ELD) ( <i>adopted in 2004 and went into effect in 2007</i> )	LI
<b>Agriculture (8)</b>		
1	The Common Agriculture Policy (CAP)	SU
2	Agri-environmental measures under the Rural Development regulation (measures targeting reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, reduction of water use, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. ( <i>revised in 2006</i> )	SU
3	Payments for Agriculture Natura 2000 areas ( <i>revised in 2006</i> )	SU
4	Programme for conservation of genetic resources in agriculture. ( <i>revised in 2006</i> )	SU
5	Subsidies for the development of nature management programmes for agricultural lands in Natura 2000 sites and in areas of High Nature Value. ( <i>revised in 2006</i> )	SU

6	Subsidies for non-productive investments in private agriculture land (investment needed for public recreation, facilitating access to public, etc) <i>(revised in 2006)</i>	SU
7	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc). <i>(revised in 2006)</i>	SU
8	Progressive move from Common Market Organisation Schemes under the CAP to the Single farm Payment Scheme which is non-related to production levels and it is subject to the respect of environmental obligations under cross-compliance rules <i>(implemented in 2005)</i>	PS
<b>Forest (7)</b>		
1	Forest-environmental measures under the Rural Development regulation (measures targeting environmental friendly harvesting and management of forest, forest risks prevention, avoidance of disturbance of species and habitats, protection of native forest species, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. <i>(revised in 2006)</i>	SU
2	Payments for Forest Natura 2000 areas <i>(revised in 2006)</i>	SU
3	Programmes for new techniques and innovation for forest management. Support for programmes to promote forest certification. <i>(revised in 2006)</i>	SU
4	Subsidies for the development of nature oriented management programmes for Natura 2000 forest sites. <i>(revised in 2006)</i>	SU
5	Subsidies for non-productive investments in private forests (investment needed for public recreation, facilitating access to public, etc) <i>(revised in 2006)</i>	SU
6	LIFE+ projects in forest areas promoting nature protection and management (normally focusing on forest species protection like bats, forest birds, etc) <i>(revised in 2007)</i>	SU
7	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for forests and rural land like integrated flooding and fire protection, etc). <i>(revised in 2006)</i>	SU
<b>Mountain (8)</b>		
1	Agri-environmental and forest-environmental measures under the Rural Development regulation (measures targeting soil depletion, reduction and avoidance of pollution and disturbance of species and habitats, protection of native plant and animal races in agriculture, promotion of low inputs agriculture, promotion of landscape and land features (hedges, soil terracing, etc). Programmes are designed by the Member States at national or regional level, according to their needs. <i>(revised in 2006)</i>	SU
2	Payments for Agriculture and forest Natura 2000 areas in mountainous regions <i>(revised in 2006)</i>	SU
3	Less-favoured areas support (mountainous areas are a distinct part of the implementation of this measure) with view to avoid land abandonment and marginalisation <i>(revised in 2006)</i>	SU
4	Subsidies for the development of nature management programmes for agricultural and forest lands in Natura 2000 sites and in areas of High Nature Value, in mountainous areas. <i>(revised in 2006)</i>	SU
5	Subsidies for non-productive investments in private agriculture and forest mountainous land (investment needed for public recreation, facilitating access to public, etc) <i>(revised in 2006)</i>	SU
6	Structural and Cohesion Funds (subsidies for reduction of natural catastrophes risks for agricultural and rural land like integrated flooding and fire protection, etc). <i>(revised in 2006)</i>	SU
7	LIFE+ projects in mountainous areas <i>(revised in 2007)</i>	SU
8	Entry into force of the EU Environmental Liability Directive (ELD) <i>(adopted in 2004 and went into effect in 2007)</i>	LI
<b>Dry and sub-humid lands (0)</b>		
<b>Species management (6)</b>		
1	Agri-environmental and forest-environmental measures targeting species conservation (mainly birds and carnivorous, plus bats and beetles in forest areas) <i>(revised in 2006)</i>	SU
2	Agri-environmental and forest-environmental measures targeting landscape management and land fragmentation, creation of corridors for species migration, etc <i>(revised in 2006)</i>	SU
3	Protection of rare plant and animal breeds in agriculture <i>(revised in 2006)</i>	SU
4	LIFE+ projects (wild species breeding programmes, management of species, management plans, etc) <i>(revised in 2007)</i>	SU

5	Structural funds (provision of compensatory measures associated with projects that have a negative impact to nature and species (rehabilitation of adjusted to project land, green belts and "pass-ways", etc) ( <i>revised in 2006</i> )	SU
6	Entry into force of the EU Environmental Liability Directive (ELD) – species covered under the Birds and Habitats Directives, plus other species as defined by each of the Member States ( <i>adopted in 2004 and went into effect in 2007</i> )	LI
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (4)</i></b>		
1	Projects for specialised forms of tourism (nature and eco tourism) through the Structural Funds Programmes ( <i>revised in 2006</i> )	SU
2	Support for promotion of alternative forms of tourism in rural areas through the Rural Development Fund and Programmes ( <i>revised in 2006</i> )	SU
3	LIFE + ( <i>revised in 2007</i> )	SU
4	Entry into force of the EU Environmental Liability Directive (ELD) – soil, mining and waste treatment are key areas of implementation ( <i>adopted in 2004 and went into effect in 2007</i> )	LI

**APPENDIX III**  
**THE LIST OF THE ECONOMIC INSTRUMENTS FOR BIODIVERSITY PRE-FILLED**

Note: The tables below provide information on selected policies in those countries that did not submit a questionnaire response. They are filled in, based on information gathered by the Secretariat from:

- A) Third national reports to the Convention on Biological Diversity;
- B) OECD/EEA economic instrument database; and
- C) Other relevant materials such as the “Nature” chapter of the OECD Environmental Performance Reviews.

Delegates from these countries were asked to verify against this information as appropriate.

**<Denmark: 14 >**

<b><i>Inland water ecosystems (4)</i></b>		
1	Subsidies for stream restoration	SU
2	Charge on sewage discharge	PB
3	Tap water charge (tax)	PB
4	Duty on nitrogen	PB
<b><i>Marine and coast (2)</i></b>		
1	Action plan on the Aquatic Environment I/II	SU
2	Fee on fishing permit	PB
<b><i>Agriculture (4)</i></b>		
1	Subsidy for ecological agriculture	SU
2	Subsidies for activities concerning biocides	SU
3	Duty on pesticides	PB
4	Agreements on changed farm management in the Toendermarsh	Others
<b><i>Forest (2)</i></b>		
1	Subsidies for forest management	SU
2	Subsidies for wind-breaks planting	SU
<b><i>Species management (1)</i></b>		
1	Fee on hunting licence	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i></b>		
1	Duty on raw materials	PB

## &lt;Germany: 3&gt;

<b><i>Inland water ecosystems (2)</i></b>		
1	Water abstraction charge(Baden-Wuerttemberg, Berlin, Brandenburg, and other Länders)	PB
2	Charge for sewerage discharge (at the municipal level)	PB
<b><i>Agriculture (1)</i></b>		
1	Payments for promoting agri-environmental measures	SU

## &lt;Greece: 10&gt;

<b><i>Inland water ecosystems (1)</i></b>		
1	Charge on irrigation water	PB
<b><i>Agriculture (2)</i></b>		
1	Subsidy for pesticide-free cultivation	SU
2	Subsidy for waste treatment facilities on farms	SU
<b><i>Forest (1)</i></b>		
1	Charges to acquire grazing rights on public lands	PB
<b><i>Mountain (1)</i></b>		
1	Charge on entrance to national parks and monuments	PB
<b><i>Species management (3)</i></b>		
1	Charge on hunting licences	PB
2	Fishing rights for protected monk seals	MC
3	Payment of compensation for damaged nest and lost catches	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (2)</i></b>		
1	Subsidy for ecological areas	SU
2	Subsidy for landscape and nature conservation	SU

## &lt;Iceland: 7 &gt;

<b><i>Marine and coast (2)</i></b>		
1	Charge on fishing quotas	PB
2	Individual transferable fishing quota	MC
<b><i>Agriculture (1)</i></b>		
1	Subsidies for sustainable grazing	SU
<b><i>Forest (1)</i></b>		
1	Subsidy for forestry	SU
<b><i>Mountain (1)</i></b>		
1	Entry fees for protected areas	PB
<b><i>Species management (1)</i></b>		
1	Fee on hunting	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i></b>		
1	Subsidy for land conservation	SU



## &lt;Ireland: 4&gt;

<b><i>Agriculture (3)</i></b>		
1	The Rural Environmental Protection Scheme (REPS)	SU
2	The National Parks and Wildlife Farm Plan	SU
3	The Kerry Cattle grant scheme and the Irish Draught Mare	SU
<b><i>Forest (1)</i></b>		
1	The Native Woodland Scheme	SU

## &lt;Italy: 7&gt;

<b><i>Inland water ecosystems (3)</i></b>		
1	Rational fee for the use of public waters	PB
2	Charge on table waters battles	PB
3	Charge on water services	PB
<b><i>Agriculture (3)</i></b>		
1	Agri-environmental payment	SU
2	Headage payments for the breeding of traditional livestock strains	SU
3	Tax on synthetic pesticide	PB
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i></b>		
1	Fee for the use of public areas and soil	PB

## &lt;New Zealand: 6&gt;

<b><i>Inland water ecosystems (1)</i></b>		
1	Contestable Water Fund	SU
<b><i>Marine and coast (1)</i></b>		
1	Transferable fishing quota	MC
<b><i>Agriculture (1)</i></b>		
1	Sustainable Farming Fund	SU
<b><i>Others; e.g. land/soil management, ecotourism, mining, etc (3)</i></b>		
1	The Nature Heritage Fund	SU
2	Nga Whenua Rahui	SU
3	The Biodiversity Condition Fund	SU

## &lt;Poland: 9&gt;

<b><i>Inland water ecosystems (1)</i></b>		
1	Charge on water abstraction	PB
<b><i>Agriculture (1)</i></b>		
1	Agri-environmental programmes	SU
<b><i>Forest (4)</i></b>		
1	Charge for bush and tree removals	PB
2	Charge for premature harvesting of forests	PB
3	Grant for afforestation	SU
4	Tax exemption or reduction on land and forest	SU
<b><i>Species management (2)</i></b>		
1	Compensation/Liability payment for conservation	LI
2	Hunting permits and fishing permits	MC

<i>Others; e.g. land/soil management, ecotourism, mining, etc (1)</i>		
1	Charge for land use changes	PB

## &lt;Portugal: 9 &gt;

<i>Marine and coast (3)</i>		
1	Common fisheries Policy (CFP)	SU
2	The European Fisheries Fund (EFF)	SU
3	Removal of aid to fishing and plantations	PS
<i>Forest (2)</i>		
1	Permanent Forest Fund	SU
2	A 10% premium for plantation in the NNPA	SU
<i>Species management (2)</i>		
1	Hunting and fishing permits	MC
2	Compensation payment for damage from wolves	SU
<i>Others; e.g. land/soil management, ecotourism, mining, etc (2)</i>		
1	Corporate Income Tax incentives	SU
2	Taxes on recreation activities in protected areas	PB

## &lt;Spain: 2&gt;

<i>Inland water ecosystems (2)</i>		
1	Charge on water (Asturias, Balearic Islands, Catalonia, and other cities)	PB
2	Charge on purification (Castille-The Stain)	PB

## &lt;The United States: 18&gt;

<i>Inland water ecosystems (4)</i>		
1	Wastewater user charges	PB
2	Water user charges	PB
3	Public Community Water System Tax (New Jersey)	PB
4	Tradable development rights for Lake Tahoe watershed management	MC
<i>Marine and coast (5)</i>		
1	Charge for wetlands	PB
2	Fishery Resource Landing Tax (Alaska)	PB
3	Tradable fishing quota	MC
4	Tradable rights for wetlands conservation	MC
5	Wetlands mitigation banking	MC
<i>Agriculture (1)</i>		
1	Environmental Quality Incentives Program (EQIP)	SU
<i>Forest (4)</i>		
1	Charge on grazing on public land	PB
2	Forest renewal tax (South Carolina)	PB
3	Tradable development rights for pinelands management	MC
4	Stewardship Incentive Program	SU
<i>Species management (1)</i>		
1	Hunting and fishing licenses (Louisiana)	MC
PB	Oyster sales fee (Texas)	PB

<i>Others; e.g. land/soil management, ecotourism, mining, etc (3)</i>		
1	Subsidy for land preservation	SU
2	Severance taxes (Alabama, Arkansas)	PB
3	Mining severance tax (Utah)	PB