

## **Revision of SEEA 2003:**

### **Issue paper: Environmental taxes**

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## Introduction

Within the UN Committee of Experts on Environmental-Economic Accounting (UNCEEA) and the London Group (LG) it was agreed to discuss the further developments of SEEA 2003 in the field of environmental economics. The aim being to elevate related statistics to an agreed international standard.

In SEEA 2003 taxes are described in chapter 5 within the framework of the Environmental Protection Expenditure Accounts (EPEA) and in chapter 6 relating to environmental taxes specifically.

This issue paper presents identified issues in relation to environmental taxes. The paper discusses and proposes the scope for the planned revision of SEEA 2003.

The issue identified in the research list adopted by the UNCEEA is the following: Environmental taxes are broadly defined in the SEEA-2003. Recently OECD and Eurostat have tested a definition of environmental taxes in several countries (see chapter 2 country experiences). There is a further need to standardize the definitions of environmental taxes taking also into consideration the practical implementation of these concepts.

There are a range of countries around the world that has implemented environmental taxes. The European countries, North America, Sri Lanka, India, South Africa and to some extent also Uganda have one or more taxes related to the taxation of behaviour of environmental harmful activities. Other countries are still evaluating the effect and possibilities to develop them such as China and Pakistan.

When discussing fiscal regulatory issues with colleagues around the world there are always confusions concerning the labelling of the items. A government performs regulatory functions as well as establishing a cash flow to the state budget. For political reasons many governments prefer to label a certain action as a fee rather than as a tax.

In order to assist in the allocation of taxes versus fees the SEEA 2003 included a discussion on the topic. It has also been recognised by the experts revising the SNA 93 that there are difficulties establishing if an item should be recorded in the national accounts as a tax or as a fee. It is important for the SEEA to keep separate general issues concerning taxes and fees from specific environmental tax issues.

# 1. Taxes

Taxes on products are defined in the SNA 93 (D2) as:

§7.48 Taxes are compulsory, unrequited payments, in cash or in kind, made by institutional units to government units. They are described as unrequited because the government provides nothing in return to the individual unit making the payment, although governments may use the funds raised in taxes to provide goods or services to other units, either individually or collectively, or to the community as a whole.

The revision of the SNA will not change this definition and it can therefore continue to be applied.

The final draft chapter 7 of the SNA therefore includes a description of taxes versus fees (new paragraph 7.75). The border line cases are most apparent when it comes to licenses and permits. The draft chapter describes how an item should be recorded as a tax when little or no work is provided by the government for exchange of a service. The item should be recorded as a fee if the government is providing some type of control or “proper regulatory function” along with the licences.

→ See chapter 3A for a discussion and suggestions related to clarifications of taxes versus fees.

## 1.1 Environmental taxes

### Definitions

In 2001 the European Commission (Eurostat, DG TAXUD), the OECD, the International Energy Agency and experts on environmental accounts at national level produced a guideline on how to develop environmental taxes. The guideline includes the definition, data sources and how to use and interpret results.

### SEEA 2003/European Commission definition currently in use

In chapter 6 of the SEEA 2003 the concept and outline of environmental taxes are described. The description in the SEEA is based on the 2001 OECD/EC definition of an environmental tax.

*“A tax whose tax base is a physical unit (or a proxy of it) of something that has a proven, specific negative impact on the environment.”*

This definition is solely based on the physical unit of the tax. This means that motive from the legislator is disregarded.

### OECD

The OECD has together with the EEA developed a database for economic instruments related to the environment. Part of this database captures taxes. The theoretical definition of an environmental tax (it is called environmentally related taxes in the database) has been modified slightly compared to the 2001 definition.

The definition used is the following:

*“This database defines environmentally related taxes as any compulsory, unrequited payment to general government levied on tax-bases deemed to be of particular environmental*

*relevance. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments.”*

Consistently with the EC 2001 definition the purpose of the legislator is not of concern in the OECD definition. It is explained on the web-site of the database that *“The focus is instead on the potential environmental effects of the given tax, which is determined by the tax impacts on the producer and consumer prices in question, in conjunction with the relevant price elasticities”*.

→ See chapter 3B for a discussion and suggestions related to definitions.

### **Tax bases**

Eurostat (2001) agreed to group environmental taxes into four categories such as energy, transport, pollution and resources. These groups were selected to facilitate analytical applications. The separate groups are described below. Annex A also describes what tax bases were agreed upon to be included.

Value Added Tax is excluded from environmental taxes.

→ See chapter 3C for a discussion and suggestions related to VAT.

### **Energy taxes**

This group includes taxes on energy products used for both transport and stationary purposes. The most important energy products for transport purposes are petrol and diesel. Energy products for stationary use include fuel oils, natural gas, coal and electricity. The CO<sub>2</sub>-taxes are included under energy taxes rather than under pollution taxes. There are several reasons for this. First of all, it is often not possible to identify CO<sub>2</sub>-taxes separately in tax statistics, because they are integrated with energy taxes, e.g. via differentiation of mineral oil tax rates. In addition, they are partly introduced as a substitute for other energy taxes and the revenue from these taxes is often large compared to the revenue from the pollution taxes. This means that including CO<sub>2</sub>-taxes with pollution taxes rather than energy taxes would distort international comparisons. If they are identifiable, CO<sub>2</sub>-taxes should be reported as a separate category next to energy taxes. SO<sub>2</sub>-taxes may be subject to the same problem as CO<sub>2</sub>-taxes but should be recorded under the category pollution.

→ See chapter 3D for a discussion and suggestions related to SO<sub>2</sub>-taxes.

### **Transport taxes**

This group mainly includes taxes related to the ownership and use of motor vehicles. Taxes on other transport equipment (e.g. planes), and related transport services (e.g. duty on charter or scheduled flights) are also included here, when they conform to the general definition of environmental taxes. The transport taxes may be ‘one-off’ taxes related to imports or sales of the equipment or recurrent taxes such as an annual road tax. Taxes on petrol, diesel and other transport fuels are included under energy taxes.

### **Pollution taxes**

This group includes taxes on measured or estimated emission to air and water, management of solid waste and noise. An exception is the CO<sub>2</sub>-taxes, which are included under energy taxes as discussed above. SO<sub>2</sub>-taxes are included here.

### **Resource taxes**

Under the OECD/EC definition resource taxes typically includes taxes on water abstraction, forest and some raw materials like gravel.

Taxes on oil and gas extraction are excluded from the definition of environmental taxes.

→ See chapter 3E for a discussion and suggestions related to taxes on oil and gas extraction.

## 1.2 Taxes within Environmental Protection Expenditure Accounts

In the EPEA the following kinds of taxes are accounted for<sup>1</sup>:

- other taxes on production, levied on the production of environmental protection services;
- taxes on products, levied on the output of environmental protection services;
- specific taxes, i.e. taxes ear-marked for financing the production of environmental protection services;
- other environment-related taxes, i.e. taxes on a physical environmental tax base, but not ear-marked for environmental protection activities.

It is worth noting that only the ear-marked taxes and the other environment-related taxes fall into the Eurostat 2001 “environmental taxes” category because they comply with the guidelines definition.

According to the SNA, other taxes on production consist of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold. The EPEA, consistently with national accounts, records in Table B all the production costs incurred by EP producers, including other taxes on production.

Taxes on products consist of not deductible taxes, like e.g. VAT, paid at the moment of the purchases of environmental protection services: to account for these taxes is important in order to estimate the whole cost borne for the uses of environmental protection services; in the EPEA these taxes are included in national expenditure for environmental protection that is quantified at purchasers’ prices (Table A).

The environmental taxes accounted for in the EPEA are the specific taxes and the other environment-related taxes.

Specific taxes are taxes ear-marked for environmental protections purposes, i.e. the revenue from these taxes is used for subsidising the production of environmental services, financing non-market activities or paying current transfers or investment grants, capital formation of non-market Specialised Producers or other capital transfers for environmental protection. Earmarked taxes are taken into account in the analysis of financing of environmental protection. In the EPEA they are mainly accounted for in Table C to describe how the national EP expenditure is financed by the different institutional sectors.

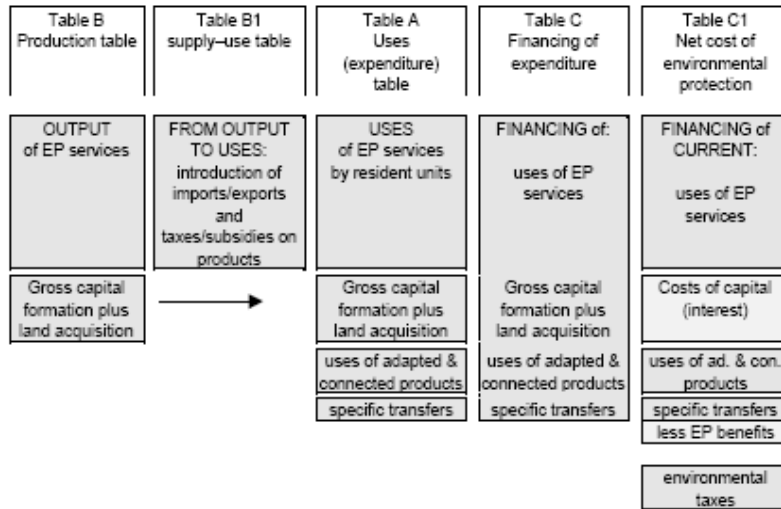
The other environment-related taxes are taxes levied on a physical environmental tax base, but not ear-marked for environmental protection measures, like e.g. carbon or energy taxes. In the EPEA these environment-related taxes neither constitute elements of national expenditure nor contribute to the financing of national expenditure. These taxes are taken into

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<sup>1</sup> For more details see e.g. Eurostat handbook on GG and specialised producers, §§ 4.3.3 and 4.6

account in Table C1 in order to calculate the ‘total environment-related financing burden’ in addition to the ‘net cost of environmental protection’ by sector. The main objective of Table C1 is to calculate the ‘net cost of environmental protection’ by sector. This indicator already incorporates the effect of all taxes taken into account somewhere in the EPEA tables A-C, except for the environment-related taxes that are not earmarked. As a matter of fact the net cost indicator incorporates the contribution of taxes already captured in Tables B1 and A as taxes on products or in Table B as taxes on production (e.g. vehicle taxes on garbage trucks) and those earmarked taxes captured in Table C that were used to finance current national expenditure (see Eurostat, 2002, SERIEE Environmental Protection Expenditure Account – Compilation Guide, ch. 5).

**Figure 1: Outline of the EPEA**



Eurostat 2002

→ See chapter 3F for a discussion and suggestions of taxes in relation to the EPEA.

## **2. Country experience of data collection**

### **The national accounts as information base**

Within the European Union work on environmental taxes resulted in a guideline published in 2001. Currently there is an exchange of data between Eurostat and DG TAXUD to compile environmental taxes as part of total taxes. Data on taxes from the Member Countries' transmission to the Eurostat national accounts are delivered to DG TAXUD for further classification. Based on this a joint publication is annually produced for EU-27 and Norway on taxes. Data on environmental taxes from this publication are later on also published on Eurostat's web-site related to environmental accounts.

The national accounts are published world wide. A lot of countries publish detailed statistics on government finances and tax revenues from the national accounts. Some of them are for example the United States, Canada, Australia, New Zealand and India. However, a brief discussion with the statistical offices in these countries revealed that so far none of them have attempted to bring these taxes and levies together to summarise environmental taxes.

### **The OECD as information base**

There are a number of countries reporting to the OECD for the OECD/EEA database on instruments used for environmental policy and natural resources management. It is easy for an "outside" user to access the data collected by the OECD. The difficulty is to know the original source of the data (although the OECD describes on the web-site that the taxes are mainly collected from ministries of finance), what the methodology is behind that data (accrual data or cash basis<sup>2</sup>), the completeness of the data (are all taxes included) and if the reported data can be compared with other countries. From the database it is also not possible to calculate indicators such as share of total tax revenues. Regardless of the issues surrounding the data in the database there is information available that can be a starting point for further analysis.

### **To conclude country experience**

From a perspective of an external user there are a couple of approaches available to extract information on environmental taxes. Either to go to the national statistical offices and extract what you can find in the publications or turn to the OECD database. In the first case you can quite easily compare your findings with other statistics from the national accounts such as total revenues or GDP. The user would be confident that the coverage and methodologies are comparable. The user would however be dependant on the available disaggregates from the national accounts or hope that the statistical office compiles environmental taxes as a separate item. The second case would be to find detailed information from the OECD where separate taxes are identifiable. In this case, the user would not know what methodology lies behind the data or the complete coverage.

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<sup>2</sup> Accrual means that the amount of taxes paid are allocated to the year they were supposed to have been paid. Cash basis means that the taxes are recorded when they were paid in to the government. The national accounts recommend the accrual basis for the calculations.



### **3. Points for discussions and decisions**

#### **A. Taxes – a definition**

As the environmental accounts is a satellite account to the national accounts we will use the same tax definition. However, as the SNA revision has pointed out and from the experience of experts it is sometimes difficult to establish what a tax is and what is a fee. Political influences sometimes labels actions and new measures depending on the acceptability of the society. It is therefore important for the statistician to evaluate the individual measure and classify it according to a strict framework. While it is true that in most cases the decision is taken within national accounts, there may be cases where the environmental accountant can significantly contribute to the decision (this is, for example, our own experience) because of his/her deep knowledge on the specific measure.

*A1. It is suggested that the SEEA rev. will further develop the paragraph clarifying the difference between a tax and a fee in accordance with the final draft chapter 7 of the SNA rev both in general terms and for more environmentally related items.*

#### **B. Environmental taxes – a definition**

The definition described in Eurostat (2001) was developed by the environmental accounts experts in Europe and accepted at the time by the European Commission in the form of DG TAXUD and Eurostat, the OECD and the IEA as well. Today DG TAXUD is producing in cooperation with Eurostat an aggregate of environmental taxes still following the agreement of 2001.

The OECD on the other hand has modified the definition. When the database was established the national delegates of the OECD working party on national environmental policy could not agree on the available definition. The term is therefore “environmentally related taxes”. This means that a softer approach is used to accepting a tax as environmental. One example is that the database includes all resource taxes. This was decided due to the cultural and historical background that may create differences among countries in applying the same instrument.

It was noted in the Eurostat (2001) that the term “environmentally related taxes” is more precise but that the term “environmental tax” is a more convenient and more common. That is why the latter term has stayed on at the statistical offices and other users.

On a practical level, the two definitions have not meant different taxes to be reported or labelled as an environmental tax. Looking at what is delivered to the different reporting tools (ESA 95 or the OECD) the taxes are not that different. What is different is sometimes that a complete coverage of taxes is not available in the OECD reporting. A previous evaluation of taxes reported to Eurostat and to the OECD also revealed some discrepancies in the levels of revenues (Eurostat 2006).

*B1. It is suggested to use the definition of “A tax whose tax base is a physical unit (or a proxy of it) of something that has a proven, specific negative impact on the environment.” In accordance with Eurostat 2001 and SEEA 2003.*

#### **C. Value Added Tax**

Some specifics discussed in Eurostat (2001) concerns value added tax (VAT). It was decided then to exclude VAT from the concept of environmental taxes. VAT was excluded because it is deductible for many producers but not for households: This was considered to have no influence on the relative prices in the same way that other taxes on environmentally related tax bases do (i.e. VAT is related to price and not to the good itself).

*C1. It is proposed to exclude calculations of VAT in the concept of environmental taxes.*

EEA (2005) argues that sometimes VAT rates are differentiated with explicitly environmental rationale. However, if the OECD/EC definition is to be used in the SEEA the motive of a certain action is not under consideration and thereby leaving VAT outside the concept of an environmental tax. It would of course be a possibility to record and monitor VAT as a sub-set of environmental economic instruments. The EEA argues that it would be important to follow VAT as it can be differentiated for environmental reasons, and could therefore potentially be considered a subsidy

*C2. It is proposed that a discussion in the SEEA could highlight the subsidy aspect of VAT.*

#### **D. Tax on sulphur**

Studies on environmental taxes have highlighted the issue of the difficulties separating taxes on sulphur from taxes on carbon dioxide. The studies have also argued that taxes on sulphur is important from an energy perspective as it directly puts a higher price on fuels with higher sulphur content (Statistics Denmark, Finland, Norway and Sweden (2003), Statistics Norway (2004)). Today sulphur taxes are classified as a pollution tax according to the guidelines of Eurostat (2001).

*D1. It is proposed to include sulphur taxes as an energy tax instead of a tax on pollution.*

*D2. It is proposed to, as for carbon dioxide taxes, keep the tax as a separate item under the category energy taxes for facilitated analytical benefits.*

#### **E. Tax on Oil and Gas extraction/ resource rents**

Some additional specifics were discussed in Eurostat (2001) concerning tax on oil and gas extraction. It was decided then to exclude these types of taxes from the concept of environmental taxes.

Taxes on extraction of minerals and petroleum are often designed to capture the resource rent. They do not influence prices in the way that other environmental taxes, e.g. product taxes, do.

The resource rent = the value of output less all extraction costs (including a normal return to fixed capital). It represents a kind of "pure profit" from extraction (see e.g. European Commission 2000a).

A tax on the resource rent does not introduce a difference between the price received by the extractor and the price paid by the users in the way that a product tax does, and the market price will be affected only if supply of the product changes because of the tax on the resource rent. For petroleum and minerals where prices are determined on the world market, the effect on prices of a tax on the resource rent in a single country should be small.

In addition to this it was argued in Eurostat (2001) that the revenues from oil and gas are also highly volatile, reflecting fluctuations in the prices of oil and gas. As sub-soil assets are only important in a few countries comparability world-wide would be reduced.

However, resource extraction can lead to environmental problems, such as pollution and soil erosion. In the OECD/EEA database these are treated as environmentally related taxes. See comment below on resource taxes.

*E1. It is suggested to exclude taxes on oil and gas extraction if it is considered to be a resource rent. As the tax base is not a physical unit but a result of output value the payment in itself does not influence prices. The payment can therefore not be considered an environmental tax. If there is a country specific requirement to highlight resource rents it should be kept separate to the sum of environmental taxes.*

*E2. The SEEA rev. should clarify better what type of resource taxes can be included. It is important to describe that each tax needs to be evaluated on its own merits. One example is the Aggregates levy in the UK. This is a resource tax on the commercial exploitation of rock, sand and gravel. It is charged at the rate of £1.60 per tonne and applies to anyone who is responsible for commercially exploiting aggregates in the UK, such as quarrying operators, mobile crusher operators and operators of dredgers. There is a similar tax in Sweden called Natural gravel tax that is applied at a rate of 13 SEK per tonne gravel and has been evaluated to belong to the area of natural resource taxes.*

#### **F. Taxes under the EPEA framework**

The Environmental Protection Expenditure Account take into consideration taxes on production and taxes earmarked for environmental purposes. It is important that the analytical values of the EPEA together with other approaches to measure environmental economic instruments are kept close to one another. This will reduce the difficulty of separating one area from another.

*F1. It is proposed that the revised SEEA includes in the same chapter the discussions on environmental taxes and EPEA for example some text / guidance is needed to work out how both concepts can be introduced in close connection with each other in a consistent way.*

#### **G. Emission trading permits**

This discussion will be based on the issue paper by Thomas Olsen, Statistics Denmark.

# Annex A: Tax bases

## Tax bases included in the environmental tax statistics framework (Eurostat 2001)

### Measured or estimated emissions to air

- Measured or estimated NO<sub>x</sub> emissions
- SO<sub>2</sub> content of fossil fuels
- Other measured or estimated emissions to air

### Ozone depleting substances (e.g. CFC or halon)

### Measured or estimated effluents to water

- Measured or estimated effluents of oxydizeable matters (BOD, COD)
- Other measured or estimated effluents to water
- Effluent collection and treatment, fixed annual taxes

### Certain non-point sources of water pollution

- Pesticides (Based on e.g. chemical content, price or volume)
- Artificial fertilisers (Based e.g. on phosphorus or nitrogen content or price)
- Manure

### Waste management

- Waste management in general (e.g. collection or treatment taxes)
- Waste management, individual products (e.g. packaging, beverage containers)

### Noise (e.g. aircraft take-off and landings)

### Energy products

- Energy products used for transport purposes
  - Unleaded petrol
  - Leaded petrol
  - Diesel
  - Other energy products for transport purposes (e.g. LPG or natural gas)
- Energy products used for stationary purposes
  - Light fuel oil
  - Heavy fuel oil
  - Natural gas
  - Coal
  - Coke
  - Biofuels
  - Other fuels for stationary use
  - Electricity consumption
  - Electricity production
  - District heat consumption
  - District heat production

### Transport

- Motor vehicles, one-off import or sales taxes
- Registration or use of motor vehicles, recurrent (e.g. yearly) taxes

### Resources

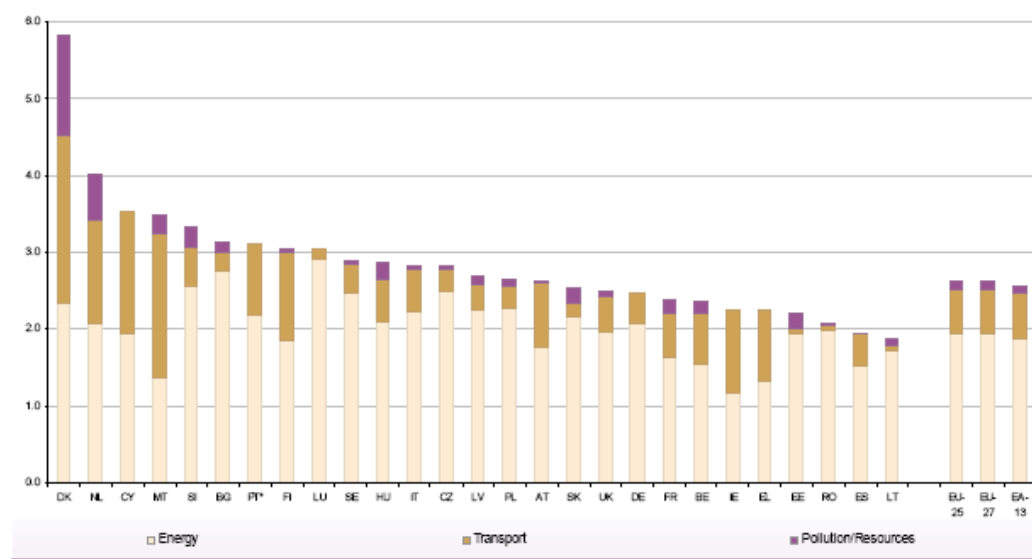
- Water abstraction
- Extraction of raw materials (except oil and gas)
- Other resources (e.g. forests)

## Annex B: Country examples

### Europe

One example of data from the EU data collection is Figure 1. It shows environmental taxes as a share of GDP for EU-27 member states and Norway. It is seen that the main contribution relate to energy and transport taxes. Only a few has one or more taxes on either pollution or resources.

**Figure 1. Environmental tax revenues by Member State and type of tax 2005, in % of GDP**

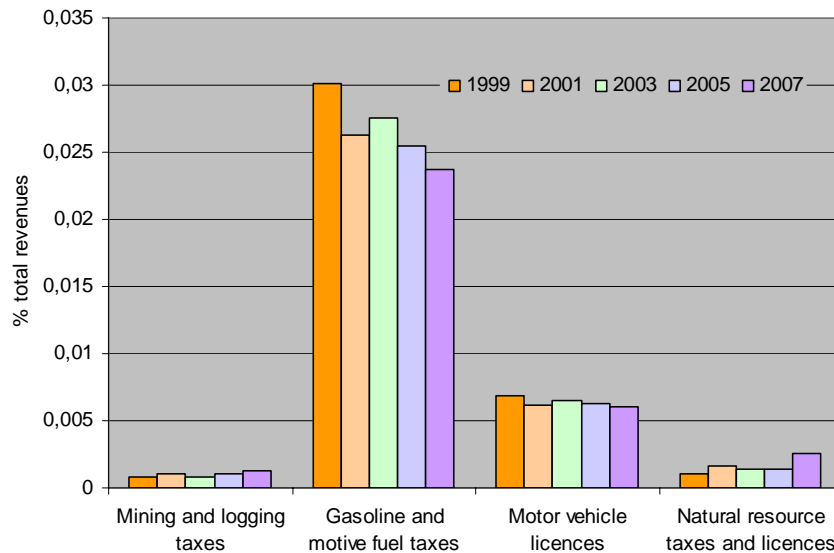


Note: \*PT: 2004. EU-25, EU-27, EA-13: weighted average.

Source: Commission Services

A quick search on the web-site of Statistics Canada showed that some taxes could be identified through the regular production of the national accounts. Canada also reports taxes to the OECD. The taxes available through the OECD database are fuel taxes.

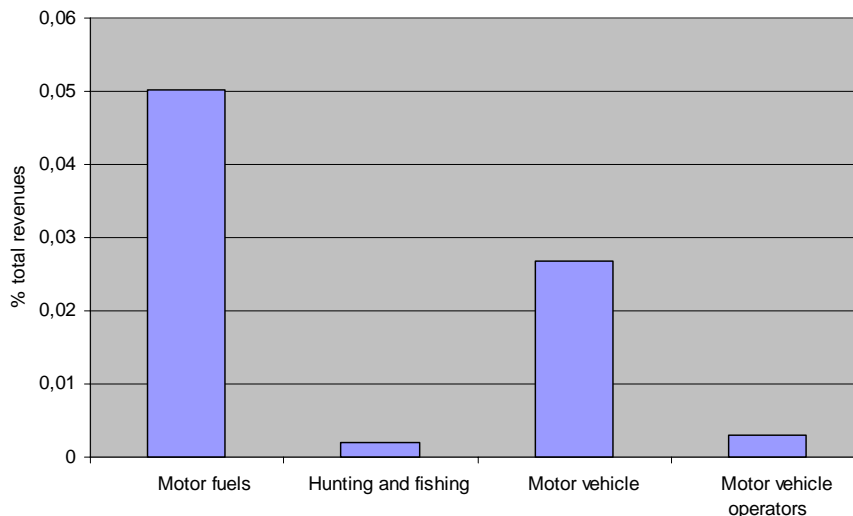
**Figure 2. Potential environmental taxes as share of total taxes in Canada 1999-2007**



Note: Some Quebec motor vehicle license administrative fees are included in sales of goods and services for the period 1988/1989 to 1997/1998. From 1998/1999 onward, these fees are included under other taxes - motor vehicle licenses [Source: CANSIM, table 385-0001 \(for free\), Statistics Canada](http://www.cansim.ca/cansim/table-385-0001) (Data extracted 2008-03-14)

Figure 3 show an example of what can be found at the US Census Bureau that could potentially be seen as environmental taxes.

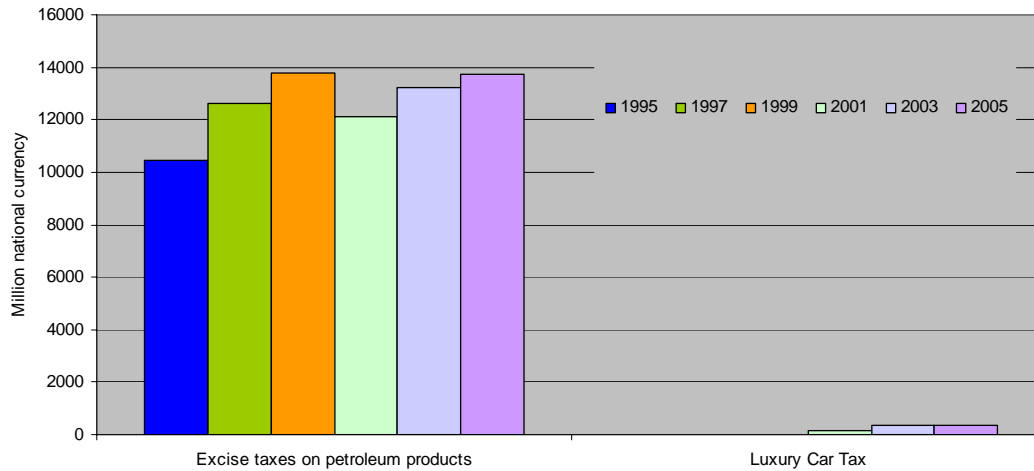
**Figure 3. Potential environmental taxes as share of total taxes in the United States 2006**



U.S. Totals; includes the 50 state Governments and does not include the District of Columbia or any local government. Source: US Census Bureau (Data extracted 2008-03-14) <http://www.census.gov/govs/statetax/0600usstat.html>

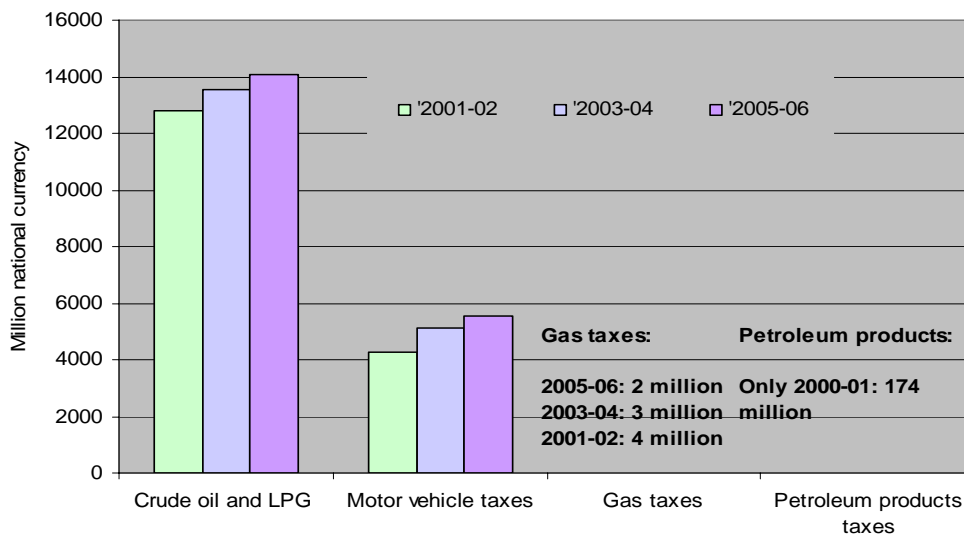
Australia do not compile environmental taxes as a component within the environmental accounts but report to the OECD database. A quick comparison between the OECD data and what is reported in the national accounts at the ABS as tax revenues for the government reveals that some taxes are not reported to the OECD (compare figure 4+5). One such tax is the tax on Crude oil and LPG and another is stamp duty on vehicle registration. The car luxury tax reported to the OECD could not be identified in the publication by the ABS.

**Figure 4. Environmental taxes in Australia 1995-2005**



Source: OECD database on environmentally related taxes, data extraction 2008-03-14

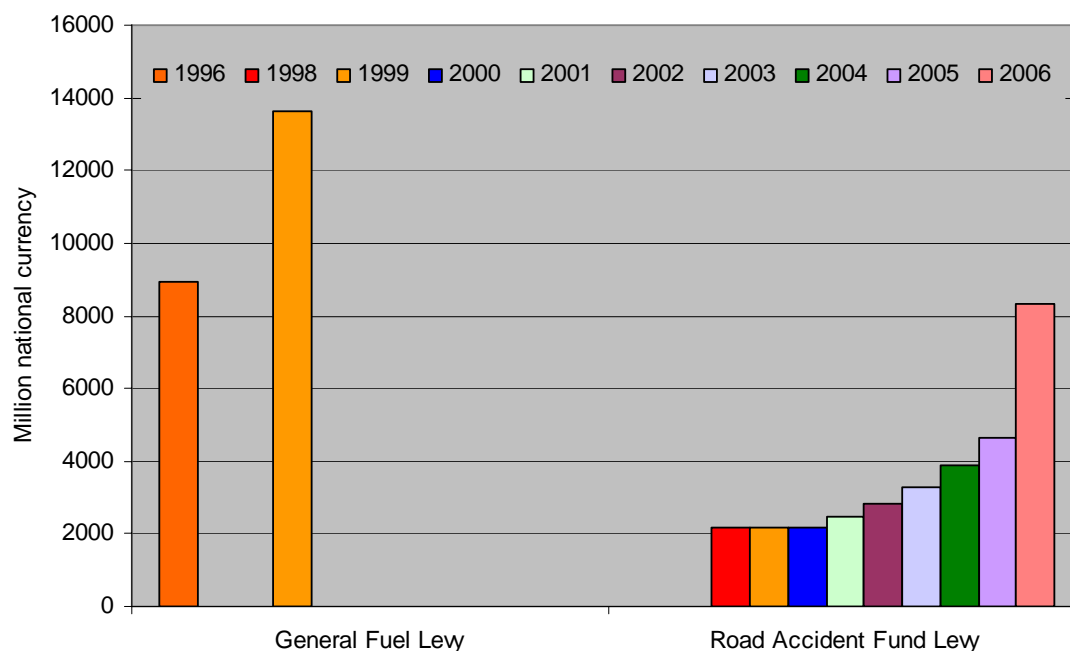
**Figure 5. Potential Environmental taxes in Australia 2001-02 to 2005-06**



Source: ABS Taxation revenue 5506

Another case where taxes are reported to the OECD is South Africa. Taxes available for the period 1996-2006 mainly consists of a road accident fund levy as seen in figure 6.

**Figure 6. Environmental taxes in South Africa 1996-2006**



Source: OECD database on environmentally related taxes, data extraction 2008-03-14

In 2006 South Africa's National Treasury drafted a policy paper *A framework for considering market-based instruments to support environmental fiscal reform in SA*. This paper uses SNA definition for a tax and the definition of an environmental tax is following the Eurostat (2001) publication.

The study is listing several taxes and charges related to the environment.

**List 1: Current environmentally related taxes and charges in South Africa (2007)**

SECTOR	LEVY (charge)	LEVEL APPLIED	APPLICATION	TAX RATE
Transport fuels	General Fuel Levy	National	Petrol Diesel Biodiesel	121 cents per litre. 105 cents per litre. 63 cents per litre.
	Road Accident Fund Levy	National	Petrol, Diesel, Biodiesel	41.5 cents per litre.
	Equalisation Fund Levy	National	Petrol, Diesel, Biodiesel	Currently set at zero
	Customs and Excise Levy	National	Petrol, Diesel, Biodiesel	4 cents per litre
Vehicle taxation	<i>Ad Valorem</i> Customs & Excise Duty	National	All passenger and light commercial vehicles	Graduated rate based on the vehicle price with an upper ceiling of 20 per cent.
	Road Licensing Fees	Provincial	All registered vehicles	Fees vary between different provinces – usually based on weight.
Aviation taxes	Aviation Fuel Levy	National	Aviation fuel sales (wholesale)	1,5 cents per litre on all fuel sales excluding foreign operators.
	Airport charges	National	Landing charge, parking charge, and passenger service charge	Charges imposed to fund the operation of the South Africa Civil Aviation Authority (SACAA).
	Air Passenger Departure Tax	National	International air travel from SA	R120 per passenger; R60 per passenger to BLNS countries.

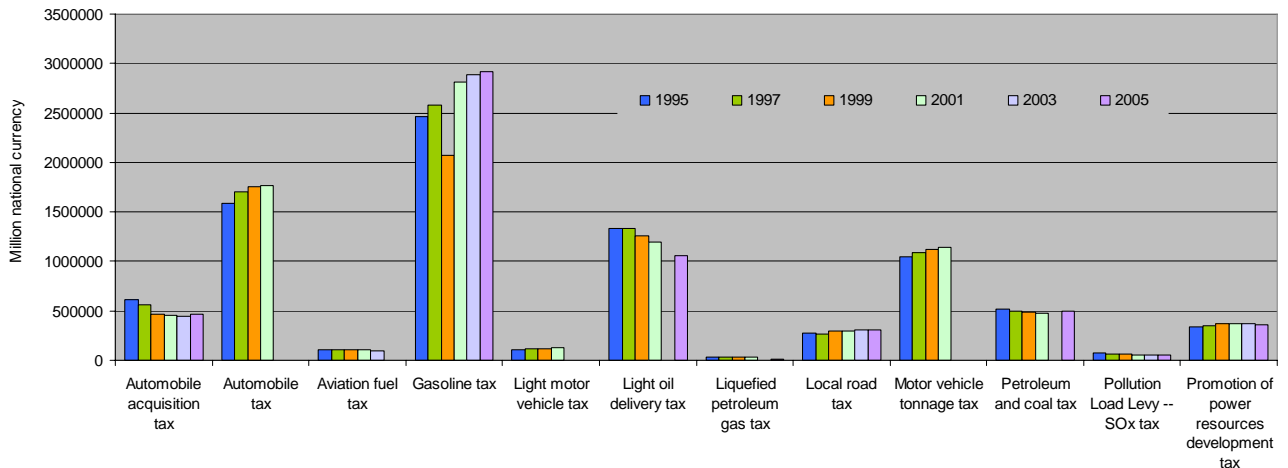


Product taxes	Plastic shopping bags levy	National	All plastic shopping bags	3 cents per bag
Electricity	NER Electricity Levy	National	All electricity generated	A levy per kWh is implemented on all electricity generated to fund the National Electricity Regulator.
	Local Government Electricity Surplus	Local	Electricity distributed to end-users by municipalities	Implicit tax rates vary between different municipalities. Total surplus revenue raised by metropolitan municipalities is approximately R1.4 billion.
Water supply	Water Resource Management Charge,	National	All registered water use from DWAF water schemes	Charge rates vary according to different users. The aim is to recover costs associated with water supply and abstraction.
	Water resource development and use of water works charge.	National	All registered water use from DWAF water schemes	Charge rates vary according to different users. The charges aim to recover the costs associated with the construction, operation and maintenance of water schemes.
	Water Research Fund Levy	National	All registered water use from DWAF water schemes	This levy earmarked to fund the operations of the Water Research Commission.
Waste water	Waste Water Discharge Charge System (proposed)	National framework with rates likely to be set at CMA and WMA level	All (DWAF) registered waste water dischargers	The WDCCS is in the process of being developed. 3 components are proposed for the system. 2 cost recovery based charges and a levy/tax on waste effluent. Rates to be determined.

National Treasury (2007)

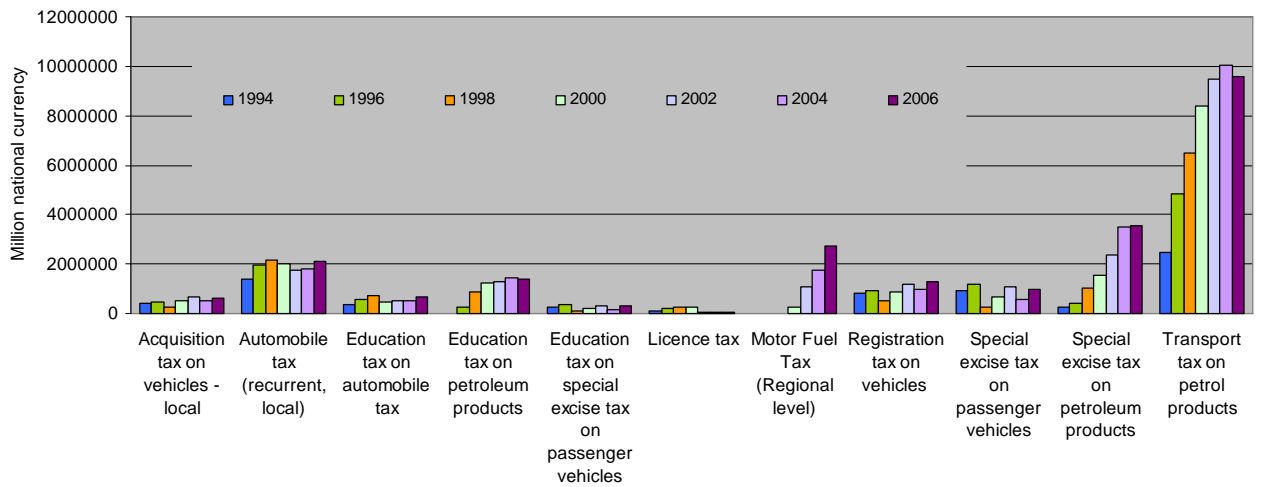
Other examples of countries reporting to the OECD are Japan, Korea and Mexico. The data are shown below.

**Figure 7. Environmental taxes in Japan 1995-2005**



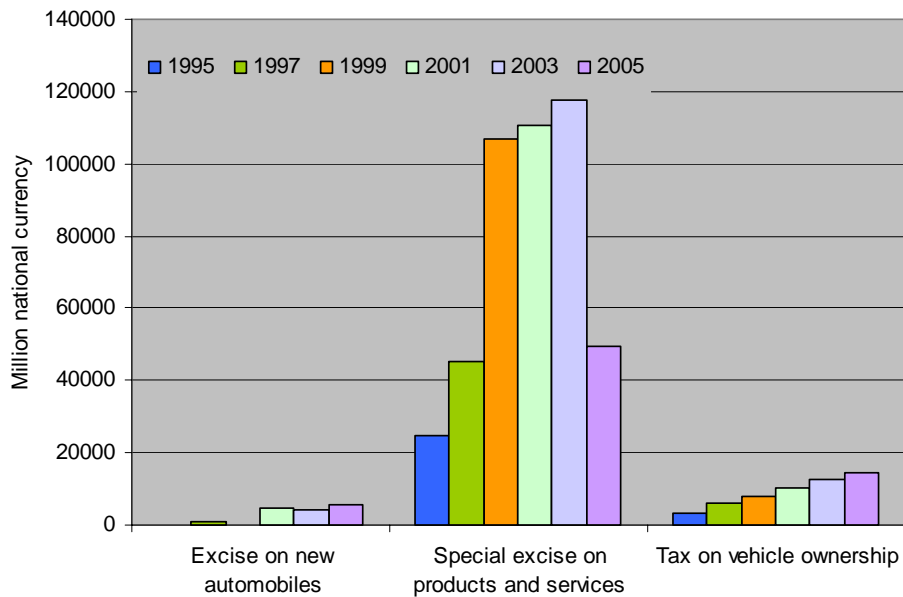
Source: OECD database on environmentally related taxes, data extraction 2008-03-14

**Figure 8. Environmental taxes in Korea 1994-2006**



Source: OECD database on environmentally related taxes, data extraction 2008-03-14

**Figure 9. Environmental taxes in Mexico**



Source: OECD database on environmentally related taxes, data extraction 2008-03-14

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## **Web-sites for data access**

### **US census bureau:**

*State Government Tax Collections: 2006*

<http://www.census.gov/govs/statetax/0600usstax.html>

### **Statistics Canada:**

*Consolidated federal, provincial, territorial and local government revenue and expenditures*

[http://cansim2.statcan.ca/cgi-](http://cansim2.statcan.ca/cgi-win/cnsmcgi.exe?Lang=E&Accessible=1&ArrayId=T1328&ResultTemplate=CII\SNA_&RootDir=CII/&Interactive=1&OutFmt=HTML2D&Array_Retr=1&Dim=-#HERE)

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### **Australian Bureau of Statistics:**

*Taxation revenue*

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### **Statistics New Zealand:**

*Crown accounts – Taxation revenue*

<http://www.stats.govt.nz/NR/rdonlyres/EDCF7FDF-4E0F-4AA5-BB44-84E673C5B0F8/14929/caayejun05alltables.xls>

### **Indiastat:**

*Taxation*

<http://www.indiastat.com/india/ShowData.asp?secid=270&ptid=8&level=2>

### **OECD/EEA database on instruments used for environmental policy and natural resources management**

<http://www2.oecd.org/ecoinst/queries/index.htm>

### **Commission Services, Eurostat: Environmental tax revenues**

[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=1996.45323734&\\_dad=portal&\\_schema=PORTAL&screen=welcomeref&open=/env/env\\_acc&language=en&product=EU\\_MASTE R\\_environment&root=EU\\_MASTER\\_environment&scrollto=0](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996.45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/env/env_acc&language=en&product=EU_MASTE R_environment&root=EU_MASTER_environment&scrollto=0)