METHODOLOGICAL NOTE

Definitions:

Environmental taxes

The European Commission provides a definition of environmental taxes in the book "Environmental taxes - a statistical guideline" (2001), as 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 approach is borrowed from international guidelines for compiling of statistics on environmental taxes and is also adopted in the Eurostat methodological guide for the compilation of the satellite account of expenditure on environmental protection.

The tax base plays a fundamental role in the definition of environmental tax at international level; the purpose of the tax, as defined by lawmakers, is not, however, considered relevant.

While the rationale for the introduction of such taxes, whether they be fiscal or environmental, is not decisive for the classification of such taxes, the impact that they have on the costs and prices of pollutants is important. The statistical guidelines formulate the consideration that: 'The environmental impact of a tax is expressed mainly through the impact that this tax has on the relative prices of products and activities related to the environment, in combination with the relative price elasticity. The definition of environmental taxes used in the statistical framework, therefore, highlights the potential effect of a particular tax in terms of impact on costs and prices'.

In this context, environmental taxes include taxes on energy, transport, pollution and resources; taxes, like value-added tax (VAT), are excluded as they are applied to all products. Environmental taxes are a subcategory of indirect taxes.

In line with the definition provided by statistical guidelines, environmental taxes in this context include taxes that fall into three main categories and are subdivided into:

- Energy taxes
- Transport taxes (excluding fuels)
- Taxes on pollution and resources

ENERGY TAXES

Energy taxes include taxes on energy products used for both transport and combustion processes (so-called 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.

Taxes on CO2 emissions are included under the “energy” macro-group rather than the "pollution" one as they are often introduced to replace energy taxes; it, therefore, becomes difficult to identify the specific CO2 emission component separately from energy taxation.

A further representation of energy taxes is expressed through the determination of tax revenues stemming exclusively from the transport use of fuels. Thus, the fuel taxes category only includes excises which are levied on the transport use of fuels/energy products and hence forms a subgroup of energy taxes. The methodology through which this tax subgroup is identified is outlined under the heading "Transport fuel taxes".

TRANSPORT TAXES

Transport taxes (excluding fuels) mainly consist of taxes relating to the ownership, the registration and use of motor vehicles. They also include taxes on other means of transport (e.g. aircrafts), and related transport services (for example, taxes on charter flights or passengers’ fees) when these taxes are deemed to comply with the general definition of environmental taxes. Transport taxes may be applied either on a "once-off" basis, for example, on vehicles imports or sales, or may be "recurrent" taxes, such as an annual road tax. As already mentioned, excise duties on gasoline, diesel and other fuels used for transportation are not included here; these duties are included among taxes on energy products.

TAXES ON POLLUTION

The final category, taxes on pollution and resources, includes two groups of environmental taxes.

Pollution taxes concern the air and climate protection sector and include taxes on pollutants emissions (either measured or estimated) in the air and water, the management of solid waste and taxes for the abatement of noise and vibrations. Taxes on CO2 emissions, already included among energy taxes, are excluded.

The second group, resource taxes, includes taxes associated with the extraction or use of a natural resource. Therefore, licenses paid for hunting, fishing and similar activities are classified as resource taxes, because these activities lead to a reduction in natural resources. It is to be noted that taxes on the extraction of oil or gas are no longer classified as resource taxes, in line with the statistical guideline which excludes all taxes on the extraction of oil and gas from the definition of environmental taxes.

The list of Italian environmental taxes, classified in accordance with the above mentioned categories, is provided below.

Italian Environmental taxes by category

ENERGY
In-bond surcharge on liquefied petroleum gases (LPG)
In-bond surcharge on mineral oils
Excise duty on mineral oils
Excise duty on liquefied petroleum gases (LPG)
Additional tax on electrical energy - towns and provinces (abolished - only for time series)
Excise duty on electricity
Excise duty on methane
Excise duty on coal
TRANSPORT
Public motor vehicle register tax (IPT)
Tax on insurance for civil liability (for vehicles)
Motor vehicle duty paid by household
Taxes on the use of fixed assets
POLLUTION AND RESOURCES*
Special regional tax on dumping
SO2 and NOx pollution tax
Local tax for environmental protection
Regional tax on aircraft noise
Contribution for plant protection products and pesticides

* In Italy there are no environmental taxes belonging to the category 'Resources'

Total taxes includingSocial Security Contributions (SSC)

Total taxes including SSCrepresent the total revenue deriving from direct and indirect taxes, paid both at central and local levels, plus the mandatory contributions paid to the National Health Service.

Transport fuel taxes

Fuel taxes are taxes levied on energy products used exclusively for both public or private transport purposes. The purpose of this indicator is to highlight the tax burden on the transport sector in relation to the total consumption of energy products.

This indicator is computed on the basis of the consumption of fuels and petrol (published, in the case of Italy, by the Ministry of Economic Development); it divides the revenue on the basis of the product use, and takes the specific exemptions and tax relief into account.

Implicit tax rate on energy

The implicit tax rate (ITR) on energy is calculated as the ratio between total energy tax revenue and final energy consumption, as calculated by Eurostat, aggregating different energy sources on the basis of each source's net calorific value.
The ITR on energy is expressed in euro per tonne of oil equivalent (TOE).

Fiscal tax rates

Fiscal tax rates are the excise duty rates applicable in the fuel sector in the European Union.
In collaboration with the Member States, the European Commission has established the "EXCISE DUTY TABLES" showing rates in force in the Member States of the European Union. This publication, that covers all EU Member States, aims to provide up-to-date information on Member States main excise duty rates as they apply to typical products. The information is supplied by the respective Member States.

Tax burden

To improve the transparency of oil prices and to strengthen the internal market, the European Commission's Oil Bulletin presents weekly consumer prices for petroleum products in EU countries.
In particular, the Commission publishes the consumer prices of petroleum products inclusive of duties and taxes and net of duties and taxes.
The calculations performed show tables aimed at highlighting the overall tax burden in terms of excise duty and VAT.

Average values

The proposed graphs and tables report both the weighted averages for two groups of countries:

- The whole European Union (EU27)
- The euro area which currently consists of 19 countries (EA19).

The approach adopted to determine the weighted averages, in line with Eurostat standard practice, is to focus on the GDP-weighted average.

Sources

Processing of the data published in the book: "Taxation trends in the European Union" by the European Commission –"Taxation and Customs Union" in collaboration with Eurostat.

Rates of current excise duties on energy products published in the “Energy products and Electricity” tables by the European Commission - Taxation and Customs Union.

Processing of the data published by the European Commission for the Weekly Oil Bulletin.

Abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia

EU27 – European Union of 27 countries

EA19 – Euro Area (AT, BE, CY, EE, FI, FR, DE, EL, IE, IT, LV, LT, LU, MT, NL, PT, SK, SI, ES)