

#### PROGRESS REPORT ON ENVIRONMENTAL ACCOUNTING – ITALY London Group Meeting, Copenhagen, 22-24 September 2004

### **General overview**

After several years of methodological and experimental work, aimed at building the knowledge basis and the data sets required for the implementation of selected environmental accounts, EA in Italy is currently undergoing a phase of consolidation of production. In particular, time series of data for periods stretching out in the present millennium have been published or are about to be published and data collection and elaboration processes are being organised in a way suited to ensure regular and timely production of the main current products of the Italian EA.

Work on environmental accounting carried out at Istat has therefore continued, in the period following the Rome meeting of the London Group of last November, along the lines exposed on that occasion, which can be thus summarised:

- consistency with the European Strategy for Environmental Accounting and with the Italian Environmental Action Strategy for Sustainable Development;

- close link to the Eurostat work programme;

- focus on the modules for which harmonised methods, handbooks, compilation guides and standard tables have been agreed upon at the European level;

- concentration of efforts on Economy-wide Material Flow Accounting, NAMEA and EPEA modules implementation;

- dissemination of figures through the Istat web site and through contributions to the Istat environment statistics compendium and to the Report on the State of the Environment addressed to the Parliament by the Ministry of the Environment;

- description of methods in ad hoc publications;

- support to the experimental work aimed at integrating environmental and economic issues in public planning.

#### **Economy-wide material flow accounting**

In the first half of 2004, the economy-wide material flow accounts and related indicators already made available in 2003 for the 1980-1998 period (namely the DMI, DMC, PTB, TMR, TMC, PTBIF accounts and indicators) have been updated up to 2001. The data have been included in a report to Eurostat, who gave financial support to the project, and are currently being revised for publication on Istat's web site and Istat environment statistics compendium.

These indicators are now being calculated for 2002. For the same year, the calculation of the whole sequence of MF accounts described in Eurostat's methodological guide - now available with reference to 1997 only - is foreseen.

A study of the feasibility of a Physical Input/Output Table (PIOT) of the Italian economy has been finalised during the last months, leading to the formation of an ad-hoc Working Group for the experimental realisation of an Italian PIOT.

Finally, Istat is contributing – together with APAT (the Italian National Agency for Environmental Protection and Technical Services) – to the work carried out within the European Topic Centre on Waste and Material Flows, as well as to the meetings and activities promoted on this topic by the OECD, who has recently taken a lead role in MFA development.

# NAMEA

In addition to the products mentioned in last year's update for Italy, a time series of NAMEA-air tables has been recently completed, covering all years from 1990 to 2000. These have been included in a report to Eurostat – who provided financial assistance – and will be soon made available to the public through Istat's web site and the Istat environment statistics compendium.

The coverage of air emission accounts for Italy has been enlarged in terms of pollutants: these now include ten air pollutants, namely  $CO_2$ ,  $SO_x$ ,  $NO_x$ ,  $N_2O$ ,  $NH_3$ ,  $CH_4$ , CO, NMVOCs,  $PM_{10}$  and Pb (the latter two were not included before).

The methodologies used for emission allocation to activities have been revised and improved through work of a Working Group of experts from Istat, APAT as well as the Ministry of Productive Activities. E.g. emissions now refer to resident units, rather than to the Italian territory.

Besides air emissions, the data that are about to be published include the direct intake from nature by economic activity of four resources: endogenous steam, fossil fuels, minerals, biotic materials, providing a split by directly extracting activity of the MFA aggregate "Used domestic extraction".

In the tables, emissions and resource intake data are linked to households expenditure (by purpose) and to economic and social variables broken down by economic activity (production, value added, intermediate consumption; employment in full-time jobs and thousand persons).

Finally, an ad-hoc joint Working Group set-up with a local research Institute is about to finalise NAMEA-type air emission and resource intake accounts for Tuscany, referring to year 2000.

## **Environmental protection expenditure account**

The available information basis is still not sufficient for a complete implementation of the EPEA. While working for the development of this basis – by studying sources and gathering data – the Institute works at the production of statistics on Environmental Protection Expenditure of the public and business sectors, on the one hand, and at the partial implementation of the EPEA for selected environmental domains on the other hand.

New results with respect to those presented in the Rome meeting concern the Central Government and the business sector.

As far as the Central Government is concerned, a time series of environmental protection expenditure aggregates consistent with the EPEA schemes has been calculated for the 1995-2002 period. Some additional aggregates relating to important environment-related activities, not entirely covered by the EPEA – such as management and protection of soil, sea and coastal zones – have also been calculated for the same period<sup>1</sup>.

As far as the business sector is concerned, EPE data coherent with the EPEA and disaggregated by environmental domain according to the CEPA are now being regularly collected through the annual

<sup>&</sup>lt;sup>1</sup> A further data set that has been made available in the National Accounts framework concerns public expenditure classified by function (according to the COFOG). However, this data set is difficult to be used for EPEA purposes, mainly due to the inadequate breakdown by environmental domain.

surveys on business economic accounts (concerning both SMEs and large enterprises); the first year of these data, referring to 2001, is already available<sup>2</sup>.

These data, as the ones released in the past, have been and/or will be disseminated through the communication channels mentioned above in the "general overview" part, as well as through the 2004 OECD-Eurostat Joint Questionnaire.

As far as future developments are concerned, projects are being started for the construction of a time series of the EPEA tables for the wastewater and waste management domains, and of a complete SERIEE system of accounts for the water domain (i.e. including also the Resource Use and Management module of the system).

<sup>&</sup>lt;sup>2</sup> Previously, data broken down by environmental domain the were available only for 1997; these data were collected through the first survey on business EPE carried out in 1999 in the context of the Intermediate Census of Industries and Services.