

2011 Survey of resource efficiency policies in EEA member and cooperating countries

COUNTRY PROFILE:

Italy



Country information on resource efficiency policies,
instruments, objectives, targets and indicators,
institutional setup and information needs

May 2011

This country profile is based on the information provided by Cristian Mastrofrancesco from the Italian National Institute for Environmental Protection and Research (ISPRA). The information is current as of February 2011.

This country profile was prepared as part of the EEA-ETC/SCP 2011 survey of resource efficiency policies, which aims to collect, analyze and disseminate information about national experience in the development and implementation of resource efficiency policies in EEA member and collaborating countries. The work resulted in the following outcomes:

- **Short 'country profiles' (this document)** - self assessments prepared by countries, describing the current status of resource efficiency policies, including key strategies and action plans, policy objectives, instruments, targets and indicators used, institutional setup and information needs.
- **Summary report** - prepared by the EEA and ETC/SCP, the report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies information needs and knowledge gaps.
- A session on resource efficiency policies during the 2011 EIONET workshop to discuss further needs and to facilitate information sharing and experience exchange among EIONET members.

More information about resource efficiency policies, including an analytical report "Resource efficiency in Europe" and thirty one country profiles, can be found at:

<http://www.eea.europa.eu/resource-efficiency>

1 Resource use in Italy – facts and figures

1.1 General facts and figures about the country



Source:
<https://www.cia.gov/library/publications/the-world-factbook/index.html>

Population (projected inhabitants for 2010) [1]	60,340,328
➤ Percent of total EEA-32	10.3%
Surface area (km ²) [2]	301,340
➤ Percent of total EEA-32	5.3%
GDP at market prices – Purchasing Power Standard – Current Prices (Million Euro, 2009) [3]	1,471,643.5
➤ Percent of total EEA-32 (minus Liechtenstein)	11.3%
GDP per capita in Purchasing Power Standards (PPS) [4] EU27=100 (2009)	104
Urban population (rate of pop., 2009) [5]	68.2%
Main economic sectors and their share in total GDP (2009 est.) [2]	
Agriculture	1.8%
Industry	24.9%
Services	73.3%
EU accession date [6]	Founding member 1.1.1958

Additional relevant background information on Italy (and on 37 other EEA member and cooperating countries) can be found at the SOER2010 website:

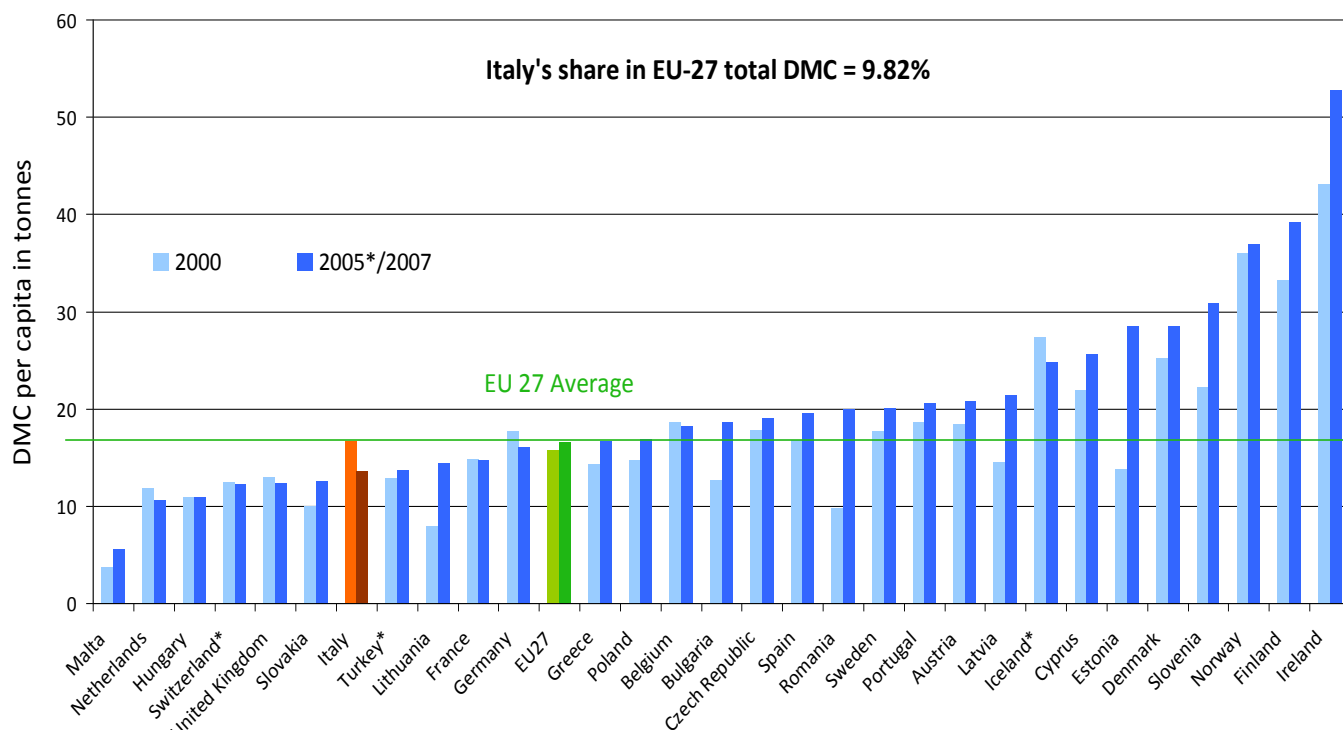
<http://www.eea.europa.eu/soer/countries/it>

Factsheet on national waste policies for Italy is available at:

http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=IT

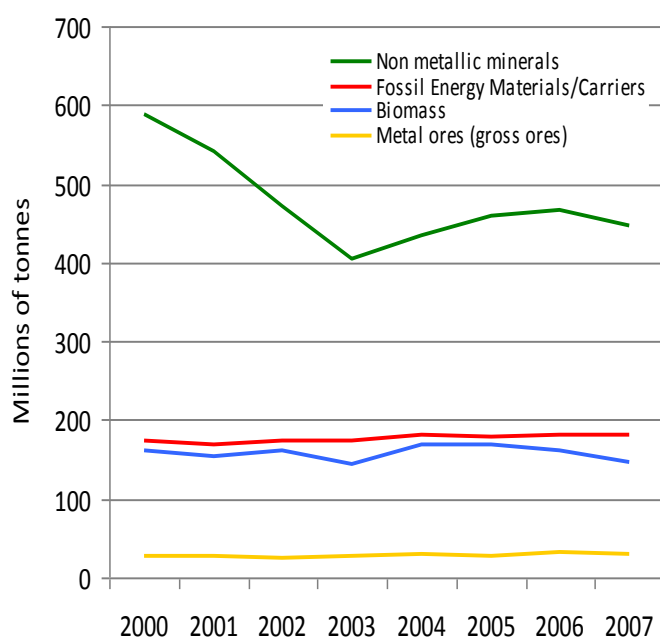
1.2 Facts and figures on resource efficiency for Italy

Use of resources per capita 2000 and 2007 [tonnes DMC/capita]



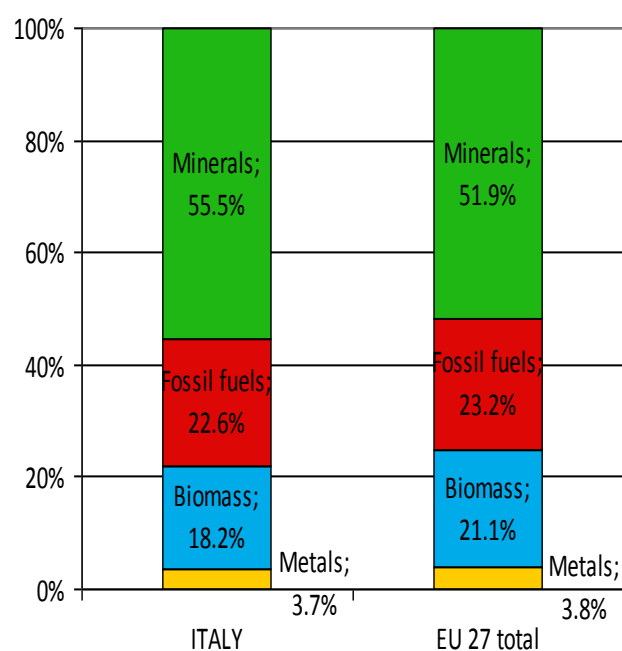
Source: Eurostat, OECD and Total Economy Database [7] * = For these countries data is for 2000 and 2005

Domestic Material Consumption by category over time, Italy



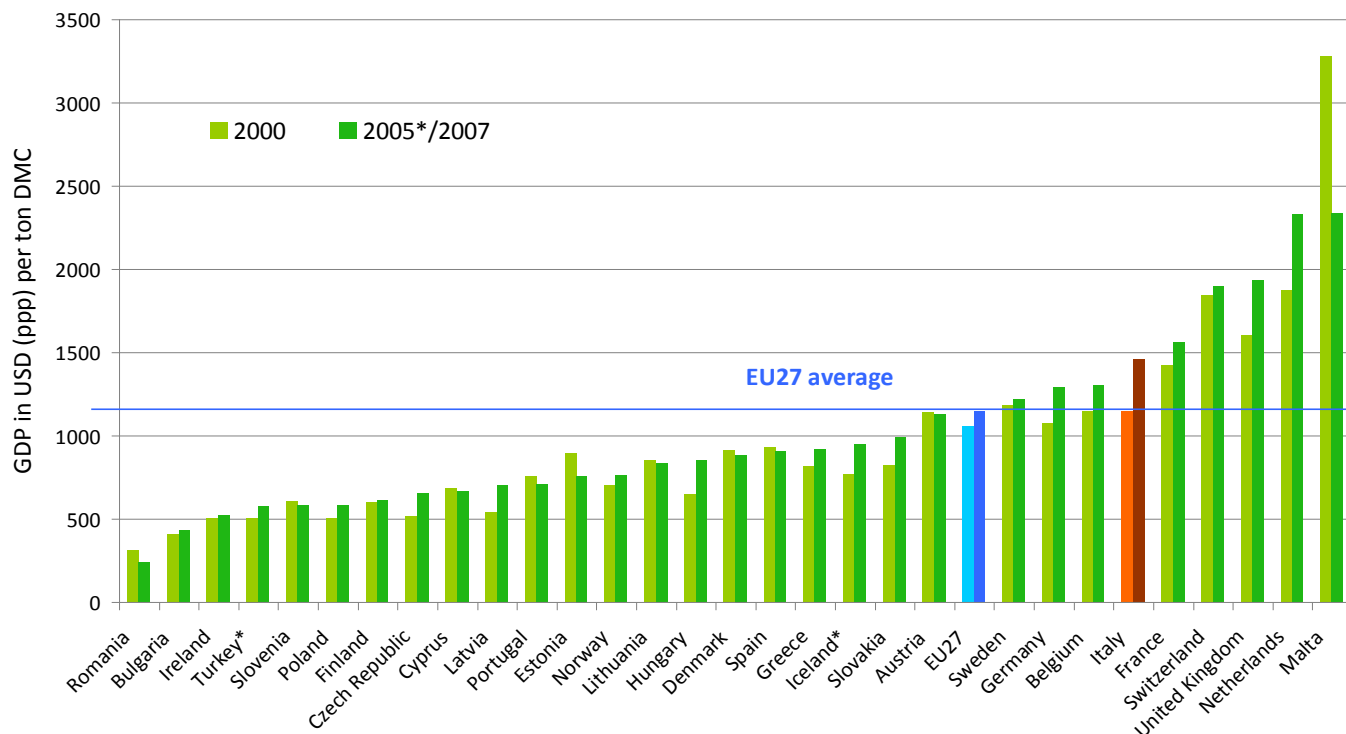
Source: Eurostat [8]

Breakdown of DMC by type of materials (2007)



Source: Eurostat [8]

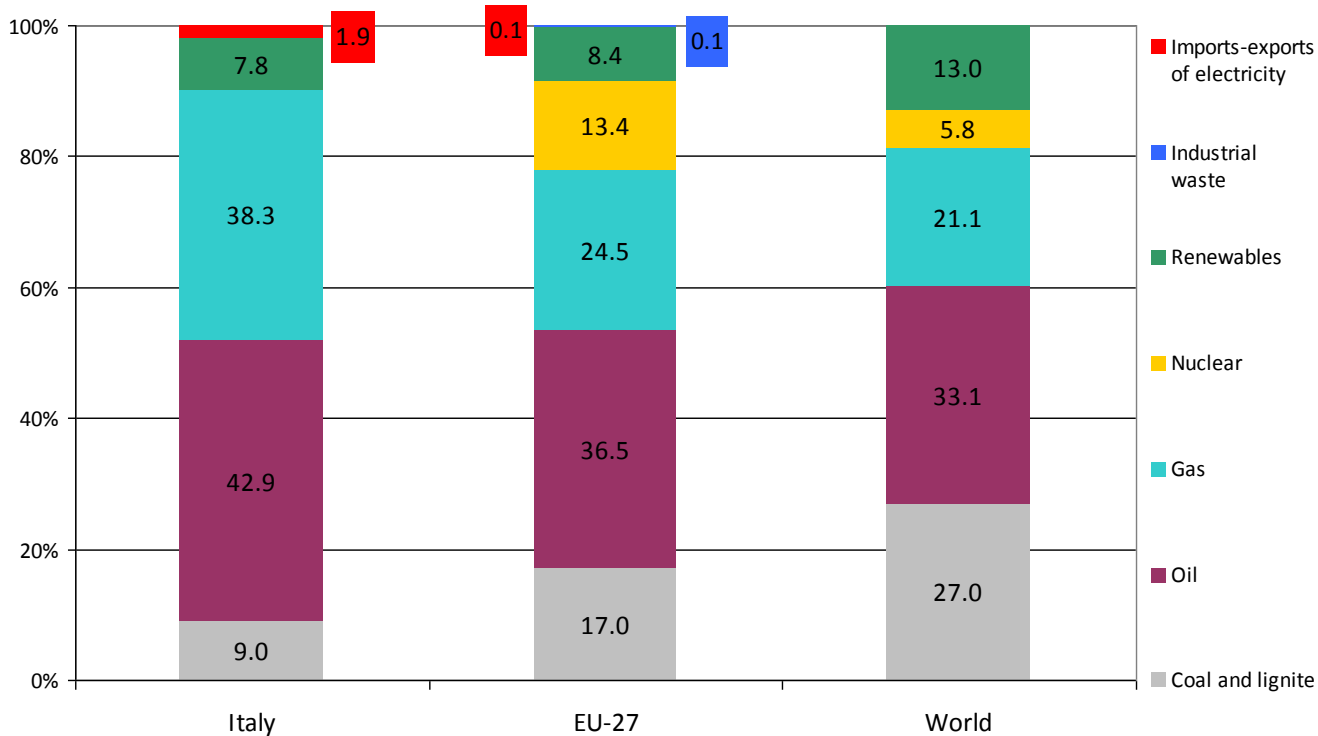
Material productivity 2000 and 2007 [USD ppp/ton DMC]



Source: The Conference Board, Total Economy Database, Eurostat [9]

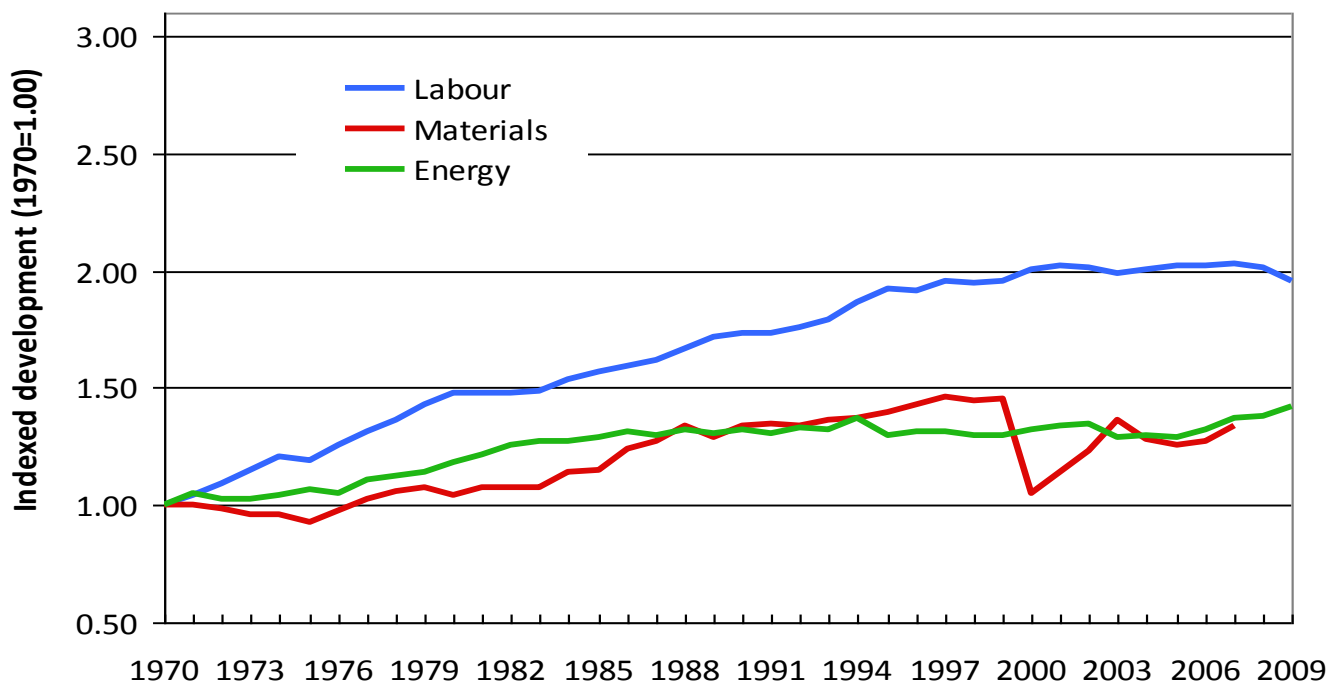
* = For these countries data is for 2000 and 2005.

Primary energy consumption



Source: Eurostat [10]

Trends in labour, materials and energy productivity, 1970-2009



Source: Total Economy Database, IFF Database, WI Database, Eurostat, OECD, IEA Database [11]

2. Evolution and main drivers for the development of resource efficiency policies

The driving element for the Environmental Action Strategy for Sustainable Development (EASSD) and for the definition of targets is essentially a decoupling between economic growth and pressure on the use of natural resources and on the environment, especially in agriculture, power and transport sectors. The specific indicators for use of material, soil, energy, water, resources, and waste production per units of economic wealth, added value or per capita, must decrease relative to economic growth (partial decoupling) and finally stabilise or decrease in absolute terms (absolute decoupling).

Italy has recognised the need to diversify its energy portfolio to reduce the strong dependence on imports of fossil fuels and electricity and also to reduce emission levels. In July 2009, the Government announced a Law to recommence the country's nuclear power programme and to start building a new nuclear power plant by 2013. A one year moratorium on the work was adopted in March 2011, after the Fukushima nuclear plant accident.

3. Overall Policy Approach for Resource Efficiency

So far there is no national strategy explicitly devoted to "Resource efficiency", but its underlying aspects are integrated in the following documents:

1. Environmental Action Strategy for Sustainable Development (2002)

The Italian Environmental Action Strategy for Sustainable Development (EASSD) was approved by the Inter-ministerial Committee for Economic Planning (CIPE) on the 2nd August 2002 and is currently in its implementation phase. CIPE is organised into six Commissions, one of which is devoted to Sustainable Development.

The Italian EASSD contains four broad priority themes:

- Climate Change and stratospheric ozone;
- Protection and sustainable valorisation of Nature and Biodiversity;
- Quality of the environment and quality of life in urban areas;
- Exploitation of resources and waste generation

Priorities addressed in this last section are the use of natural resources, production-consumption cycles, water resources and waste.

The CIPE identifies the structures and bodies to ensure monitoring of the implementation and see that the objectives are fulfilled by means of a Technical Board to the CIPE Commission for Sustainable Development, which is formed by representatives of the Ministry of Economy, the Regions and other Ministry representatives competent on the treated subject.

http://www.minambiente.it/index.php?id_sezione=396

In Italian only. An unofficial translation into English is available at:

<http://www.un.org/esa/agenda21/natlinfo/countr/italy/Italian%20NSDS.pdf>

2. Preliminary document on Sustainable Consumption and Production (2008)

The IMELS is elaborating a National Strategy for Sustainable Production and Consumption through the work of some Management Committees and different specific working groups which published, on September 2008, a document including “Contribution for the drafting of a National Strategy for Sustainable Production and Consumption”. The overall objective is a sustainable use of natural resources.

Currently, the IMELS has started an internal and external consultation on this document. This will be used for the review of the New Italian Strategy for Sustainable Development, which will include SCP as main theme. This new strategy will be in line with the policies included in the renewed EU Strategy for Sustainable Development adopted by the European Council of June 2006.

http://www.dsa.minambiente.it/gpp/file/Documento_SCP_20.09.08.pdf (in Italian only).

4. Strategies or action plans to improve resource efficiency for individual economic sectors, products or product groups

Italian National Energy Efficiency Action Plan (2007)

In its NEEAP, Italy is required to demonstrate to the European Commission how the Government intends to reach its indicative 9.6% energy savings target by 2016. The Plan takes into account measures already adopted under Law no.296/2006 (the 2007 Finance Act) and other measures already implemented in 2006 and 2007. The plan addresses industrial, residential, tertiary and transport sectors.

Main measures: white certificates, fiscal measures to encourage energy efficiency of buildings, transport, biofuels, domestic electrical appliances, lighting, industrial motors.

The Italian Law No 99/2009 provided for the publication of an Extraordinary Plan for Energy Saving and Efficiency. The plan envisages: improved coordination among central and local administrations, promotion of sustainable construction and refurbishment of buildings, provisions for stimulating the supply of energy services, incentives for micro and small co-generation systems, mechanisms apt to boost the demand of white and green certificates, encouraging auto-productions of energy in SMEs.

Italian National Action Plan on Green Public Procurement (2008)

The objective of the GPP Action Plan is to integrate environmental considerations into the procurement process of Public Authorities and to guide their choices of goods, services and works that have the lowest environmental impact. The use of the GPP, in synergy with the other IPP instruments, may produce significant strategic environmental results, such as a reduction in climate-changing gas emissions, a reduction in production of waste and production of hazardous substances and an improvement in efficiency and savings of natural resources (mainly energy).

The GPP National Action Plan is being implemented by a “GPP Committee”, an inter-ministerial working group (Comitato di gestione) and an advisory board (Tavolo permanente) which includes representatives from trades unions, scientists and other stakeholders.

http://www.minambiente.it/home_it/menu.html?mp=/menu/menu_attivita/&m=Acquisti_Verdi.html&lang=it

Italian National Renewable Energy Action Plan (2010):

The Italian National Renewable Energy Action Plan was published by the Ministry of Economic Development on the 10th of June, 2010. The document was drawn up in collaboration with the Ministry for the Environment, Land and Sea (IMELS) and the Ministry of Agricultural, Food and Forestry Policies.

Following the EU Directive 2009/28/CE, the plan sets up strategies and action lines in order to reach the national target of 17% of energy produced by renewable sources by 2020. In particular, renewable energy shares in transport, electricity, and heating and cooling should reach 6.38%, 28.97% and 15.83%, respectively. That would lead to an increase in the use of hydro, wind, solar and geothermal power as well as biomass, and changes in the current incentive mechanisms.

Industry:

Concerning “energy efficiency”, the 2007 Finance Act launched the Programme “Industria 2015”, promoted by the Ministry of Economic Development with the aim of increasing national companies’ competitiveness e.g. in the energy efficiency and renewable markets. To this end, the Programme foresees new instruments such as the “Industrial Innovation Projects” (Progetti di Innovazione Industriale – PII). The first tender has been launched in March 2008 in the field of “energy efficiency” and has financed 30 projects in the fields of photovoltaic, bioenergy, wind, high efficiency building materials and advanced industrial technologies. The total amount of incentives is 200 million EURO, 54% of which is to be awarded to SMEs.

Public Sector:

The Italian National Action Plan on Green Public Procurement, invites public purchasers to use the “best economic” offer system to award tenders, instead of the “minimum price” system. They are also invited to use environmental technical specifications in the calls for bids, both as minima (core) criteria and award criteria.

Core and award environmental criteria are defined by the ministry of the environment (by the way of the NAP GPP Committee) and formally adopted by a ministerial decree.

Criteria for some product groups have been formally issued: IT (computers, printers, copiers, and multifunction equipment), paper, and soil amending. Others have been submitted to the GPP NAP Committee for approval: construction materials, energy services, food and catering, furniture, textiles.

The national target is set to 30% of all the public purchases with environmental criteria by the end of 2010. The monitoring will be made with the collaboration of ISPRA (the National Institute for Environmental Protection and Research), and will use as indicator the amount of green public purchase (in euro) / total public purchase for every product group.

Households and Buildings:

Measures provided in Budget Law 2007 relevant to energy saving potential include a tax deduction, available to both domestic and commercial consumers of energy, worth 55% of the total amount of expenditures sustained to enhance the energy efficiency of buildings. Eligible expenditures include those aimed at reducing thermal losses, the installation of solar collectors for hot water production, the installation of condensing boilers and the construction of high efficiency buildings. Budget Law 2008 confirmed fiscal incentives and added further measures including the extension of the 55% tax deduction to 2010. This rebate is fully monitored by ENEA, so that results in terms of costs, energy saving, number and variety of measures is documented.

The 2008 Financial Act grants tax deduction to the “Fair Purchasing Groups” (Gruppi di Acquisto Solidali - GAS). These groups, fostering the seasonal products consumption, contribute to the reduction of the environmental impact due to long transport of goods over long distances.

5. Individual types of resources identified as priority for national or sector-specific resource efficiency policies

The development of renewable energy sources has been one of the priorities of Italy's energy policy together with the promotion of energy efficiency. The most relevant objectives are: energy supply security, reduction in energy costs for businesses and individual citizens, promotion of innovative technology, environmental protection (reduction in polluting and greenhouse gas emissions), and therefore, ultimately, sustainable development.

In the medium to long term, Italy aims to redress the balance of its energy mix, which is currently dependent on imported fossil fuels. Italy's primary objective is therefore to make an extraordinary commitment to increasing energy efficiency and reducing energy consumption. This strategy will also be a determining factor in reaching the targets for reductions in greenhouse gas emissions and the proportion of total energy consumption to be covered by renewable sources.

6. Strategic objectives, targets and indicators on resource efficiency

Concerning the **Use of natural resources**, the overall objective is a reduction of resource exploitation without affecting the quality of life.

Specific objectives

- improvement of the efficiency of the production/consumption model (eco efficiency);
- reform of the fiscal policy, in terms of ecology, towards resources exploitation;
- introduction of external costs (environmental and not) within the overall price of raw materials, products of the main production/consumption systems and construction projects;
- progressive shifting from the sale of consumption goods to equivalent services;
- application of indicators for material flows and material inputs for the evaluation of economic policies;
- steering citizens consumption and PA purchasing models towards goods and services with minimum use of materials.

Indicators

- Total Material Requirement (TMR) eventually linked to GDP as a general indicator for the dematerialization of the economy;
- Ecological footprint;
- Material Input Per Unit Service (MIPS).

The Italian National Institute of Statistics (Istat) published on May 2010 the time series on the material flows of the Italian socio-economic system for the years 1991-2007. Indicators used are Domestic extraction (DE), Direct Material Input (DMI), Domestic Material Consumption (DMC), Physical Trade Balance (PTB) and Total Material Requirement (TMR).

Targets

- Reduction of Italian TMR by -25% by 2010, -75% by 2030 and by -90% by 2050;
- Within PAs, by the end of 2009;
- at least 30% of the public purchases shall match ecological requirements. The monitoring will be made with the collaboration of ISPRA and will use as indicator the amount of green public purchase (in euro) / total public purchase for each product group;
- 30-40% of durable goods with reduced energy consumption.

In relation to **Water resources**, the overall objectives are: the preservation and the restoration of water resources, the improvement of the quality of water resources, a sustainable management of water resources production/consumption system.

Relevant specific objectives

- reduction of loss in the agricultural and civil sector;
- reduction of consumption;
- substitution of spring water quota with agricultural and industrial waste water;
- reduction of the civil and industrial load of natural water;
- improvement of the reliability of the depuration in the civil and industrial sector;
- improvement of the network of dump collection in the civil and industrial sector;
- reduction of fertilizers and control agents in the agricultural sector;
- protection, improvement and restoration of all water resources;
- promotion of water saving, recycling and reuse;
- adoption of a tariff based on the marginal cost.

Indicators

- Percentage difference between withdrawal and use;
- Consumption per GDP unit;
- Consumption pro capita;
- Percentage of covered demands with waste water.

Regarding **Waste**, the general objective is a reduction of production, recovery of materials and energy from waste.

Specific objectives (and indicators related)

- Reduction of urban waste production;
- reduction of special waste production;
- reduction of dangerous waste;
- recovery of materials and recycling of urban waste;
- recovery of energy from waste.

Indicators

- Total production, pro capita production, production / GDP unit;
- Dangerous waste / total waste. The target is a reduction of dangerous waste with regards to 2000 data of the 20% by 2010 and 50% by 2020;
- Separately Collected Fractions (SCF) – SCF, SCF per capita, amount of each single fractions from SCF, mass concentration of SCF versus the whole production, amount of total material recovered, amount of material recovered per each single fraction, mass concentration of waste sent to recovery.

SCF Targets (Legislative Decree 152/2006): recovery from 45% in 2008, up to 65% by 2012. In 2008, the actual data is 30.6% (Northern Italy 45.5%, Central 22.9%, Southern 14.7%).

- Electric energy produced from waste, thermal energy produced from waste - CDR, amount of incinerated waste and contained calories, production and use of CDR.

7. The institutional setup for the development and implementation of resource efficiency policies

Resource efficiency policies are set up by various Ministries which are politically responsible, but Environmental NGOs, Trade Unions, Enterprises and local authorities (Regions) are all involved in the implementation step.

Ministry of Economic Development

MED is responsible for national energy policy and the present government has devoted strategic importance to energy issues. A new Department of Energy has been established under which three different Directorates General operate: DG for Energy and Mineral Resources, DG for Security of Supply and Energy Infrastructures and DG for Nuclear and Renewable Energy.

Ministry for the Environment, Land and Sea

IMELS is responsible for issuing of environmental legislation and regulations, supervising the implementation of the environmental legislation at regional level, replacing Regions and other local authorities in their competences if necessary.

In coordination with the Ministry of Economic Development, IMELS has been responsible for the promotion and the development of renewable energy and for energy efficiency.

Regulatory Authority for Electricity and Gas

An independent body established to regulate and maintain oversight of the electricity and natural gas sectors. It's funded by means of an annual contribution paid by industry. Its judgements and evaluations enjoy a high degree of autonomy from the government. Functions include retail tariff determination, defining service quality standards and determining the technical and economic conditions governing access and interconnections to the networks.

ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development)

Pursuant to art. 37 of Law no. 99 of July 23rd, 2009, the Agency's activities are targeted to research, innovation technology and advanced services in the fields of energy - especially renewable energy sources and nuclear. ENEA performs research activities and provides agency services in support to public administrations, public and private enterprises, and citizens.

Any strategy or action plan must find its continuity in a system of Regions, autonomous provinces and local authorities, according to the subsidiary principle, through the definition of policies, programmes and actions at every level.

8. Selected policy instruments or initiatives on resource efficiency presented in more detail

- Label of the National Association of Biological Architecture for recycled construction materials;
- Tax on plastic bags;
- Aggregates tax;
- White certificates.

The Italian white certificate scheme was introduced in 2005. The obligations are set for distributors of electricity and gas with more than 100,000 clients, who carry out energy efficiency projects in their clients (households and all kinds of industries) to meet these obligations. At least 50 % of the energy savings have to be achieved through direct energy savings of electricity or gas. Up to 50% of energy savings may be realised through changes in fuels.

9. Topics of interest and information needs for follow up work

- Comparison of resource efficiency policies and the way they are implemented in different countries (sharing of good practices)
- Discussion of the policy effectiveness of different resource efficiency policies

10. References

10.1 Facts and figures about the country

[1] Eurostat, 2011 [demo_pjan]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en

[2] CIA World Factbook (2009 est.)

<https://www.cia.gov/library/publications/the-world-factbook/index.html>

[3] Eurostat, 2011 [nama_gdp_c]

<http://appsso.eurostat.ec.europa.eu/nui/show.do>

[4] Eurostat 2011 [tsieb010]

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsieb010&plugin=0>

[5] World Bank, Migration and Remittances Factbook 2011

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21352016~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

[6] European Commission 2008

http://europa.eu/abc/12lessons/key_dates/index_en.htm visited December 15, 2008

[7] Eurostat, OECD and Total Economy Database

DMC data from Eurostat Database, Material Flow Accounts, and OECD, Population data from Eurostat Database, Population, and The Conference Board — Total Economy Database, September 2010. www.conference-board.org/data/economydatabase/

[8] Eurostat

Material flow accounts, env_ac_mfa, uploaded June 2010

[9] The Conference Board, Total Economy Database, Eurostat

GDP data from The Conference Board — Total Economy Database, September 2010, www.conference-board.org/data/economydatabase/ ; DMC data from Eurostat Database on Environmental Accounts, and OECD.

[10] Eurostat

Energy statistics, uploaded Oct 2010

<http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/database>

[11] Total Economy Database, IFF Database. WI Database, Eurostat, OECD, IEA Database

GDP data and Labour data from The Conference Board — Total Economy Database, September 2010, www.conferenceboard.org/data/economydatabase/; DMC data for 1970–1999 (EU-15): IFF database; DMC data for 1992–1999 (EU-12): WI database; DMC data for 2000–2007: Eurostat Database on Material Flow Accounts except Turkey: OECD database; TPES data from IEA Database

10.2 Resource Efficiency Policy References

Environmental Action Strategy for Sustainable Development (2002)

http://www.minambiente.it/index.php?id_sezione=396 (Italian only)

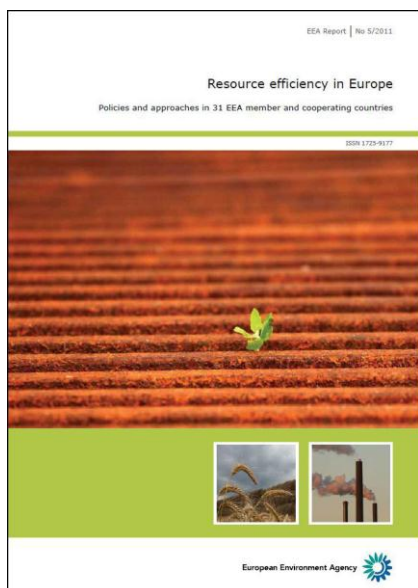
<http://www.un.org/esa/agenda21/natlinfo/countr/italy/Italian%20NSDS.pdf> (unofficial English version)

Preliminary document on Sustainable Consumption and Production (2008)

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Italian National Action Plan on Green Public Procurement (2008)

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Resource efficiency in Europe

Policies and approaches in 31 EEA member and cooperating countries

Further information about resource efficiency policies, including the analytical report and thirty-one detailed country profiles, are available on the EEA website:

<http://www.eea.europa.eu/resource-efficiency>

Selected examples of resource efficiency policies, instruments or targets presented in the thirty one detailed country profiles

