

European Environment Agency



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

COUNTRY PROFILE:

Greece

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 Dimitris Tsotsos from the Greek Ministry of the Environment, Energy & Climate Change (YPEKA). 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 Greece – facts and figures

1.1 General facts and figures about the country

	 Population (projected inhabitants for 2010) [1] Percent of total EEA-32 Surface area (km²) [2] Percent of total EEA-32 	11,305,118 1.93% 131,957 2.33%
Source: https://www.cia.gov/library/public ations/the-world- factbook/index.html	GDP at market prices – Purchasing Power Standard – Current Prices (Million Euro, 2009) [3]	247,104
	 Percent of total EEA-32 (minus Liechtenstein) 	1.9%
	GDP per capita in Purchasing Power Standards (PPS) [4] EU27=100 (2009)	94
	Urban population (rate of pop., 2009) [5]	61.2%
	Main economic sectors and their share in total GDP (2009 est.) [2]	
	Agriculture	4%
	Industry	17.6%
	Services	78.5%
	EU accession date [6]	1.1.1981

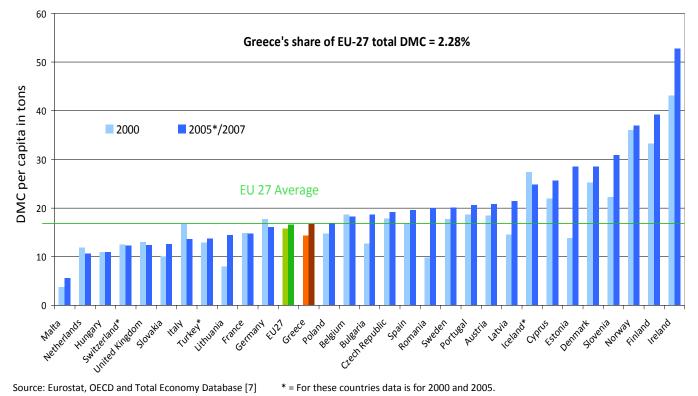
Additional relevant background information on Greece (and on 37 other EEA member and cooperating countries) can be found at the SOER2010 website: <u>http://www.eea.europa.eu/soer/countries/gr</u>



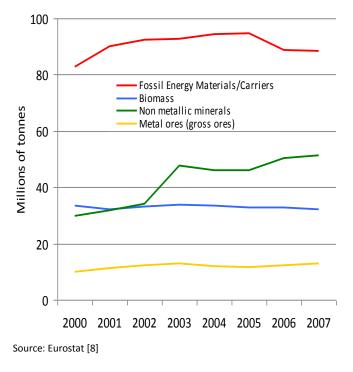


1.2 Facts and figures on resource efficiency for Greece

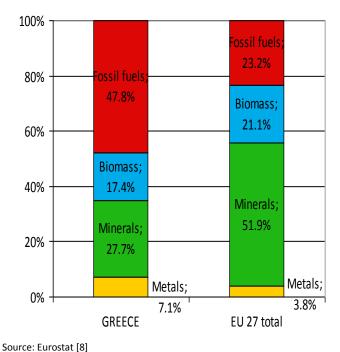
Use of resources per capita 2000 and 2007 [tonnes DMC/capita]



Domestic Material Consumption by category over time, Greece



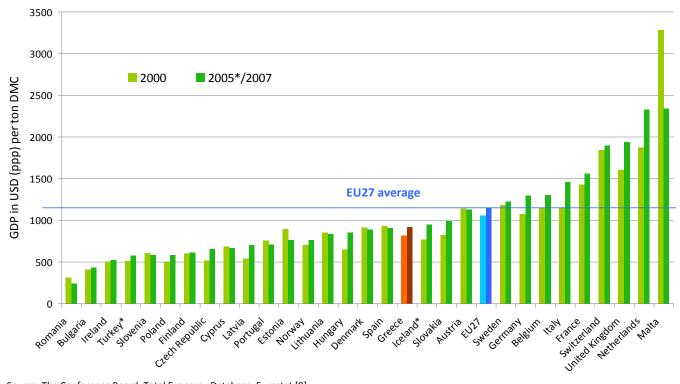
Breakdown of DMC by type of materials (2007)



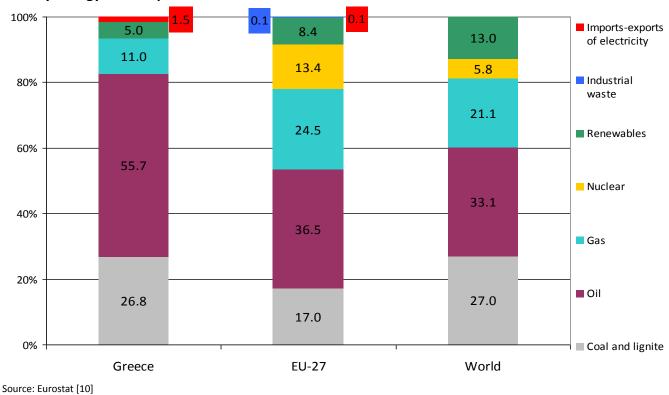




Material productivity 2000 and 2007 [USD ppp/ton DMC]



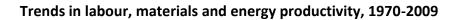
Source: The Conference Board, Total Economy Database, Eurostat [9] * = For these countries data is for 2000 and 2005.

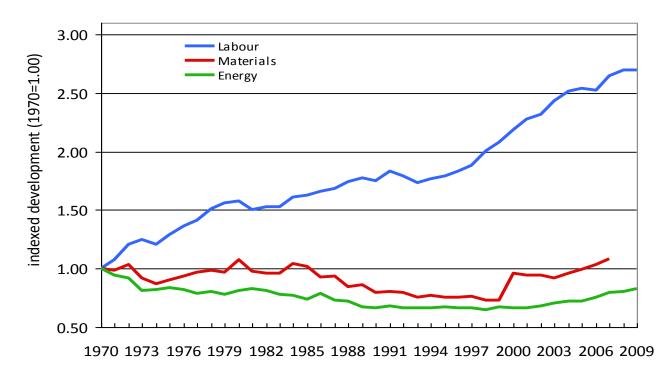


Primary energy consumption









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





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

Starting at the beginning of the previous decade, as a necessity to meet EU-set recycling/recovery targets for various economic sectors, and gradually evolving the recognition about Greece's huge potential in renewable energy sources (photovoltaic systems, wind energy), the idea of resource efficiency has become a central issue in the Government's central policy in the last years as a driving force, not only to protect the environment and recover lost resources, but also as an initiator for economic growth. As a matter of fact, under the occasion of the recent economic crisis the re-shuffling of the economic model from resource wasting into a resource efficiency perspective is seen as an opportunity not only to save resources and cut cost factors but to reduce Greece's dependence from imports of goods/energy.

Under this framework any investments in the country dealing with resource efficiency, in particular energy efficiency and promotion of renewable energy sources are given highest priority for approval.

In the last 2 years the overall driving force to recycle major waste streams has initiated the design and implementation of resource efficiency policy for solid waste, by which all recyclable materials (including biodegradable waste) have to be extracted from waste fractions so that in the final landfill sites only non-recyclable materials should be disposed off.

3. Overall Policy Approach for Resource Efficiency

In 2010, the Ministry of the Environment, Energy & Climate Change adopted the **Green Growth Strategic Action Programme** (2010 -2015). Main programmes/instruments which directly address resource efficiency include policies/activities in which, among others, actions for changing patterns of production and consumption, Energy Conservation activities, Green Public Procurement etc. are promoted through concrete financial instruments (total budget for the period 2010-2015: EUR 44 billion).

The Green Growth policy is the central strategy for Greece for changing the overall economic model of the country and is declared by the Prime Minister and practically implemented by YPEKA. The **Greek Sustainable Development Strategy** is included in the Green Growth Strategic Action Programme. **MoEECC** (YPEKA) is by Prime Minister's decision the main implementing body for resource efficiency strategy. Within this policy energy conservation and increase of the percentage of renewable energy sources (Laws 3851/2010 and 3855/2010) is a key issue.

In the <u>National Strategic Framework Programme</u> 2007 – 2013 (approved in 2006) there are specific actions focusing on waste recycling activities (as a clear resource efficiency policy target) whereas actions of wider perspective for resource efficiency (e.g. conservation/efficient use of water resources, efficient management of solid wastes etc.) form the framework of this programme.





The establishment of **the Green Fund** (Law 3889/2010) in 2010 allows a wide distribution of funds (coming from environmental taxes, fees etc.) to targeted actions dealing with environmental protection in which resource efficiency policies proclaimed by YPEKA (including resource efficiency measures) play an important role for priority funding. Indicative measures are:

- Reduction of energy consumption in households and public buildings
- Replacement of conventional by renewable energy sources
- Interconnection of island energy networks with the central energy system (to reduce losses of energy)
- The sustainable use of water sources

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

Since 2001 the Programme for the recycling of waste tires, end-of life vehicles, waste electrical and electronic equipment (WEEE), waste batteries and accumulators and waste oils (Law 2939/2001) has established the polluter-pays principle, requiring the participation of producers of such waste in Alternative Management Systems, so as to organize their collection, after separating them at source, transport, temporary storage and recovery. Quantitative targets for separate collection and recovery have been set for each waste stream. Additional waste streams such as construction/demolition (CD) waste have been added to the program in recent years.

The overall target of this programme, as stated in Law 2939/2001, is to promote the recovery of usable materials from waste streams and to reduce the production of new packaging materials and other products (e.g. batteries/accumulators).

In 2010, the Action Plan for energy conservation in urban/commercial housing for the period 2010 – 2015 was launched where energy conservation measures in buildings are financially supported and implemented. An expected value of EUR 9 billion is foreseen after the end of the program.

The overall promotion of **renewable sources of energy** is accelerated: financial instruments were launched in 2010 and have recently started to be implemented for investors interested for photovoltaic systems and for other renewable sources (e.g. wind energy)

Green Public Procurement Programmes are set up in new legislative measures (Law 3855/2010) under the supervision of YPEKA for whole public sector in Greece.

Promotion of the purchase of new "resource efficient" vehicles by withdrawing from the market those cars which were produced up to 1998 and giving economic incentive (reduction of taxes) for the purchase of new technology (better fuel utilization, less emissions).





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

The focus in Greece is mainly on energy efficiency measures and waste recovery/recycling.

6. Strategic objectives, targets and indicators on resource efficiency

The targets set in the respective EU Directives for recycling of specific waste streams (batteries, End-of-life vehicles, waste tires etc.) are followed, aiming at the widest possible reduction of those waste streams to be finally disposed of in waste landfills.

For energy conservation, the widest possible increase of the use of renewable energy sources (up to 40% in electricity production in 2020) in the overall energy potential of the country and the reduction of energy consumption by 20% by the year 2020 are the targets set up in the overall national policy framework for the promotion of the Green Growth Economy (Law 3851/2010).

"Indirect" targets such as the creation of 180 000 new jobs in the energy conservation sector and the rational use of natural resources till 2015, or the absorption of foreseen funds in the **Green Growth Strategic Action Programme** (2010 - 2015) are also envisaged.

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

YPEKA is the principle "driver" for resource efficiency policies since it incorporates the two major issues dealing with resource efficiency (environment-recycling + energy).

Under the "umbrella" of YPEKA:

- The National Organization for the Alternative Management of Packaging and Other **Products** deals with the supervision of the material recovery from waste recycling.
- The Green Fund is a major tool for financing, among others, resource efficiency measures.
- **The Inter-Ministerial Committee for Green Public Procurement** (set up by representatives of YPEKA, Ministry of Regional Development, Ministry of Economy, and Ministry of Infrastructure) will coordinate all functions related to the promotion of Green Public Procurement in the whole public sector.

Various YPEKA services as well as financial institutions are involved in the implementation of the actions for energy conservation in housing/buildings.

Ministry of Regional Development & Competitiveness is in charge for specific actions dealing, among others, with "green investments" including recycling activities and reuse of waste.





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

The public awareness campaign on portable batteries recycling (2005 – 2010) is a good example how a targeted action can bring concrete results. This campaign has been the driving force for the increase in the used battery collection rate; from 4% in 2005 to 33% in 2010. The collection rate now exceeds and precedes the prescribed percentage/date of EU Directive (25%/2012).

The targeted focus of the campaign on effective battery users (e.g. children) has caused a dramatic demand for collection bins. About 52 000 have been placed throughout the country, which has increased the collection possibilities for batteries. Only Germany has more battery recycling bins than Greece, and Greece has by far the most per inhabitant.

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

Sharing good practice experiences and the impact of these practices in policy reform for resource efficiency. If/how these practices have acted as catalysts/pilot projects for drafting new policy measures in various countries.





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:21352 016~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

[10] Eurostat

Energy statistics, uploaded Oct 2010

Environmental Accounts, and OECD.

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, <u>www.conferenceboard.org/data/economydatabase/</u>; 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

National Strategic Framework Programme 2007 – 2013 http://www.espa.gr/en/Pages/Default.aspx

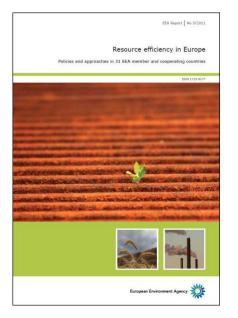




Green Growth Economy http://www.ypeka.gr/LinkClick.aspx?fileticket=CEYdUkQ719k=&tabid=37







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

