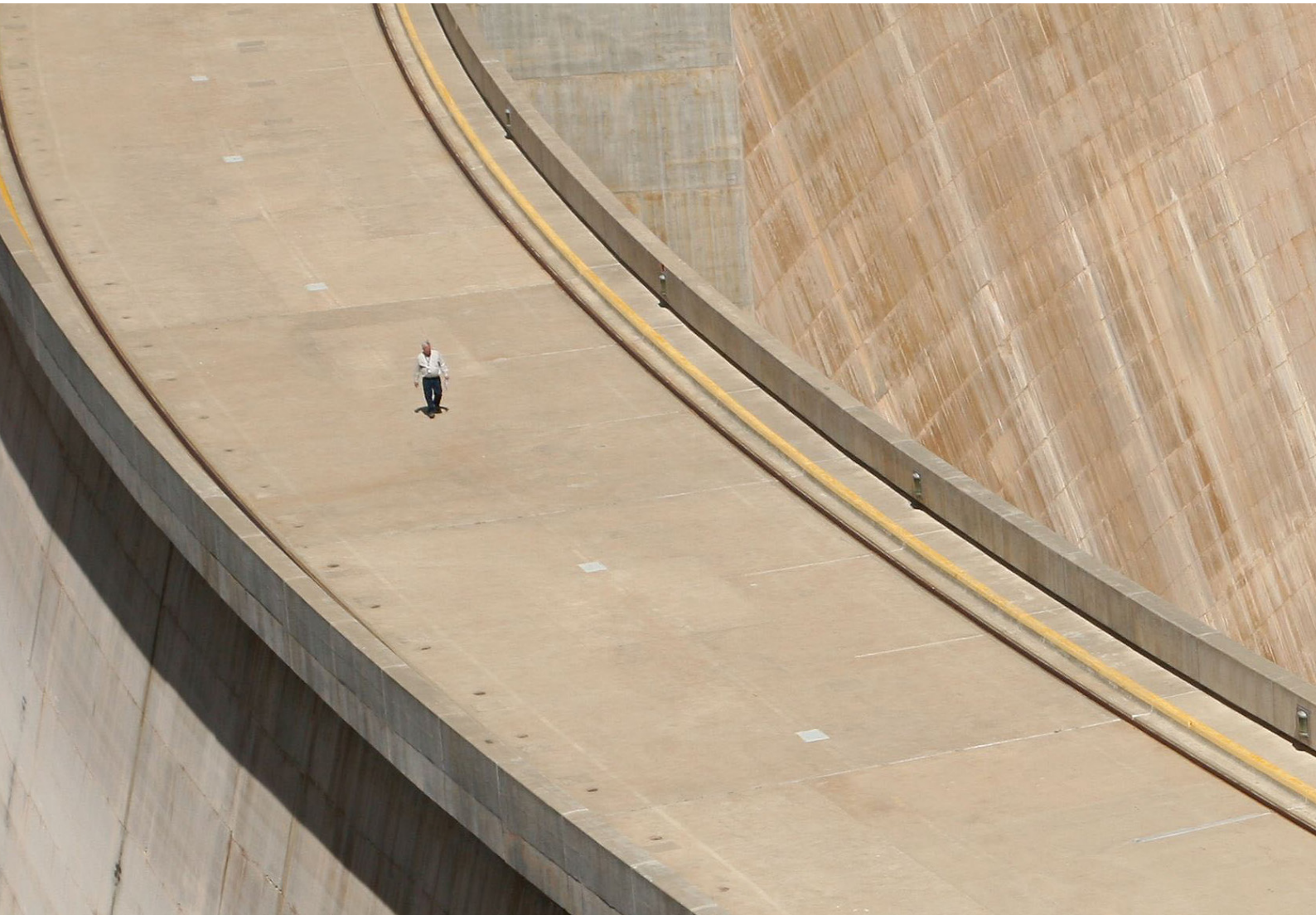


More from less — material resource efficiency in Europe

2015 overview of policies, instruments and targets in 32 countries



Spain 

May 2016



This country profile is based on information collected by the Eionet network in Spain. This document should not be seen as an official list of government priorities and is not necessarily an exhaustive list of all national material resource efficiency policies, objectives, targets or activities in place. The information is current as of June 2015.

This country profile was prepared as part of the 2015 EEA review of material resource efficiency policies, that aimed to collect, analyse and disseminate information about the development and implementation of material resource efficiency policies in EEA member and cooperating countries. The work resulted in the following outcomes:



32 short country profiles (this document) – self assessments prepared by countries, describing the current status of material resource efficiency policies including key strategies and action plans, policy objectives, instruments, targets and indicators, and the institutional setup. Countries were also invited to share reflections on the future direction of resource efficiency policies.

EEA report *More From Less – material resource efficiency in Europe* – prepared by the EEA and ETC/WMGE, the report analyses trends, similarities and differences in policy responses, showcases selected policy initiatives from the countries, and offers some considerations for the development of future policies.

The EEA report *More from less – material resource efficiency in Europe* and the 32 country profiles are available at: <http://www.eea.europa.eu/resource-efficiency>



For information about trends and policies on municipal waste management in the participating countries, please visit: <http://www.eea.europa.eu/publications/managing-municipal-solid-waste>

Information about EU Member States' waste prevention programmes can be found at: <http://www.eea.europa.eu/publications/waste-prevention-in-europe-2015>

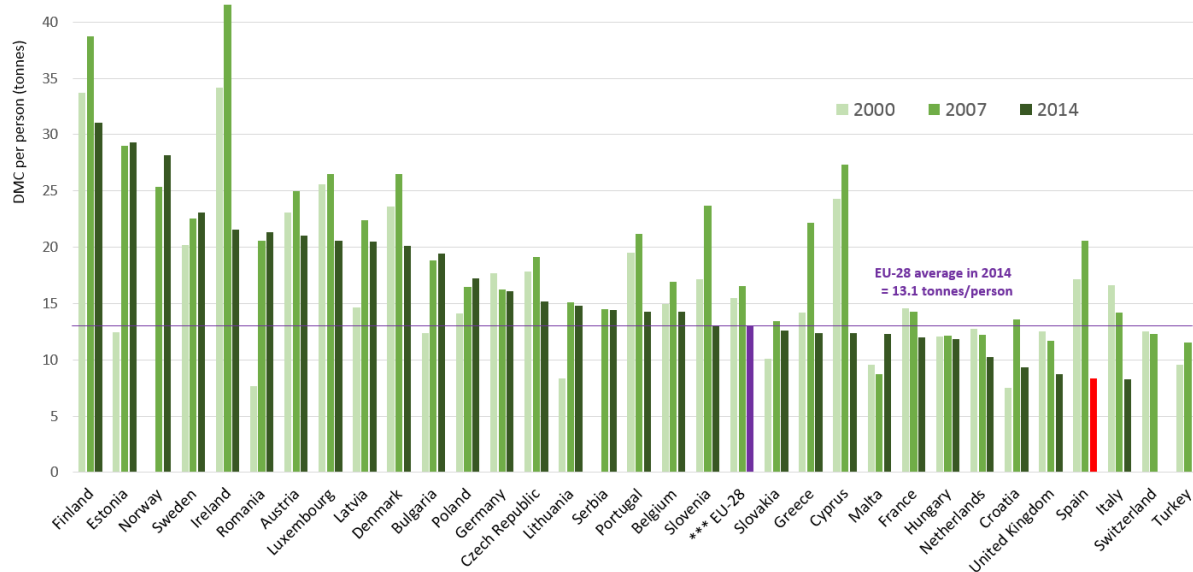
For information on climate- and energy-related policies, including those on energy efficiency, in the participating countries, please visit: <http://www.eea.europa.eu/themes/climate/ghg-country-profiles>

Spain, facts and figures

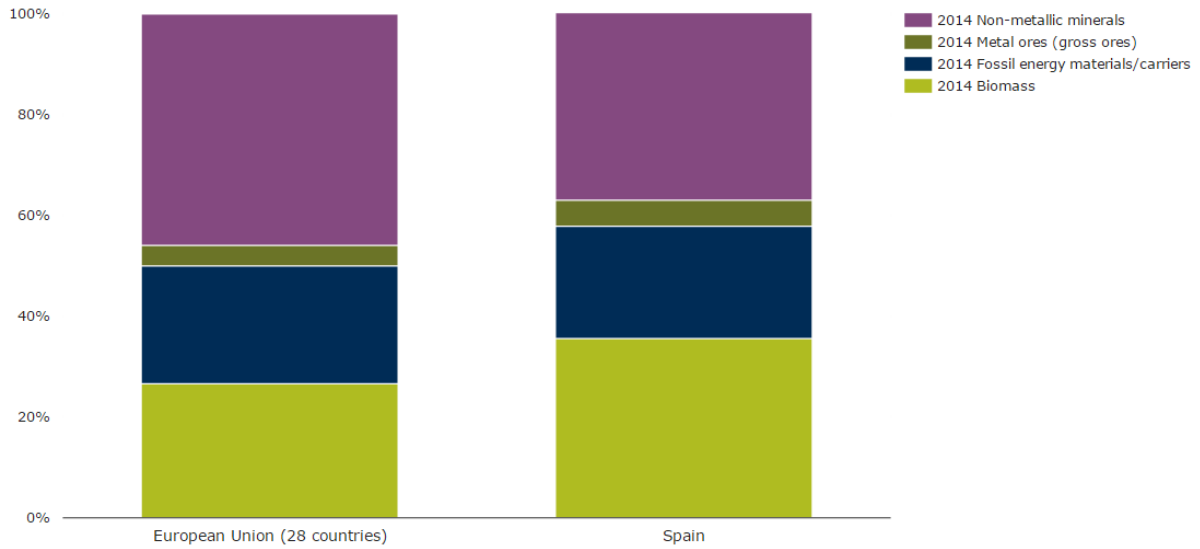
Source: Eurostat

	<p>GDP: EUR 1,041 billion (7.5 % of EU-28 total in 2014)</p>
	<p>Per person GDP: EUR 25,000 (in purchasing power standard) (91 % of EU-28 average per person in 2014)</p>
	<p>Use of materials:</p> <p>387 million tonnes DMC (5.8 % of EU-28 total in 2014) 8.3 tonnes DMC/person (64 % of EU-28 average per person in 2014) Resource productivity 2.68 EUR/kg (135 % of EU-28 average in 2014)</p>
	<p>Structure of the economy:</p> <p>agriculture: 3.2 % industry: 25.4 % services: 71.4 % (2014 est.)</p>
	<p>Surface area: 506,000 square kilometres (11.3 % of EU-28 total)</p> <p>Population: 46.5 million (9.2 % of EU-28 total)</p>

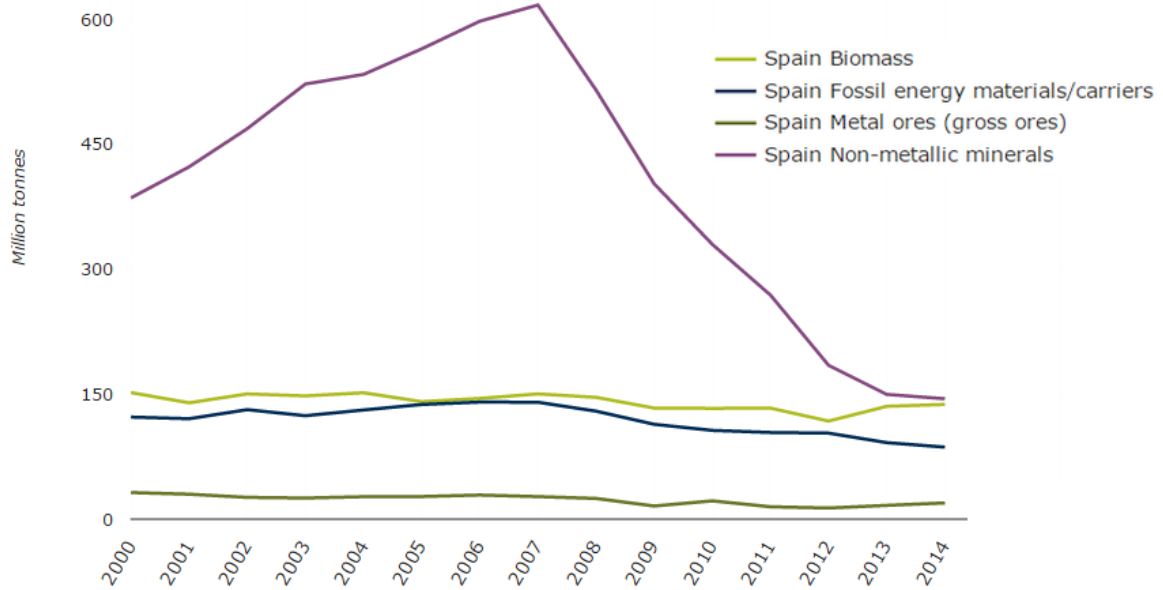
Use of materials (DMC) per person, participating countries and EU-28
(2000, 2007 and 2014)



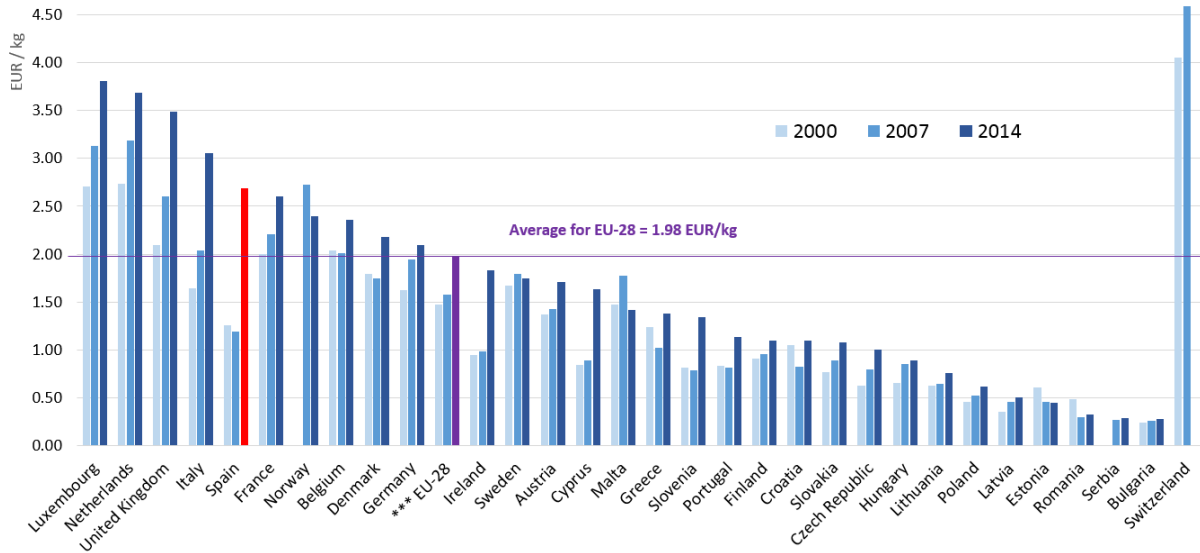
Domestic material consumption by category, EU-28 average and Spain (2014)



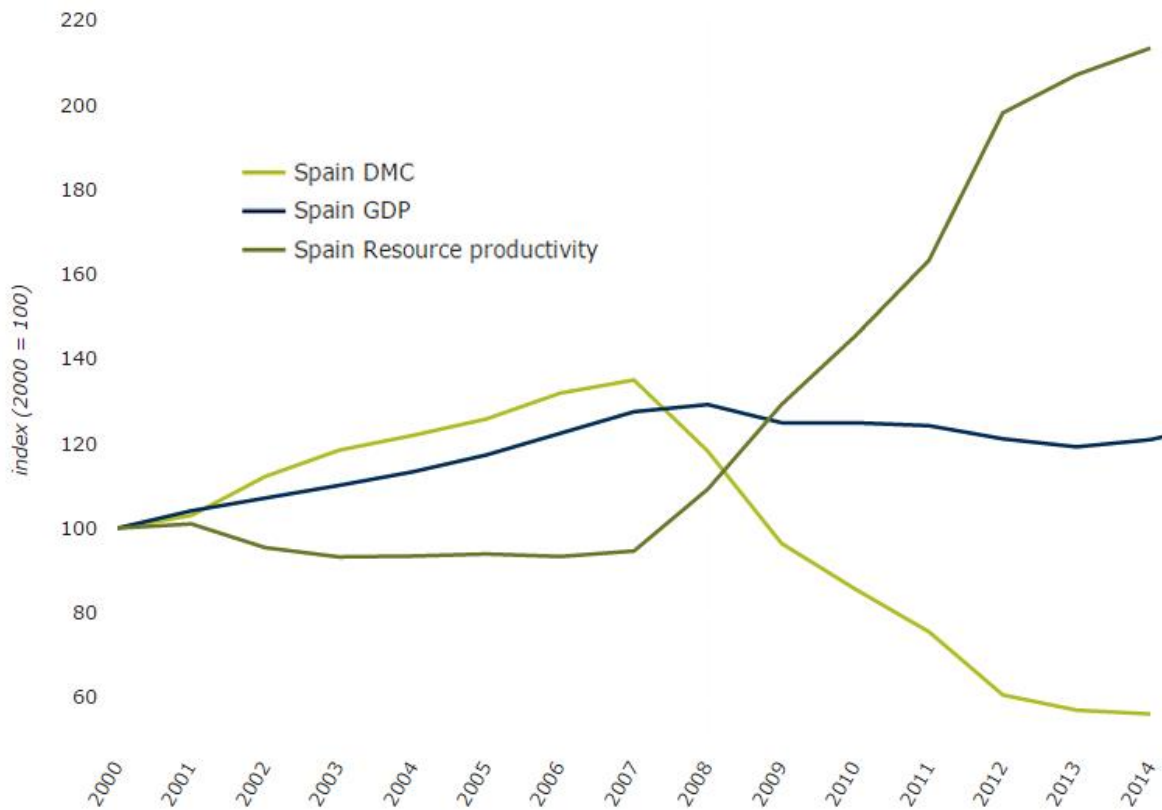
Trends in material consumption, Spain by category (2000–2014)



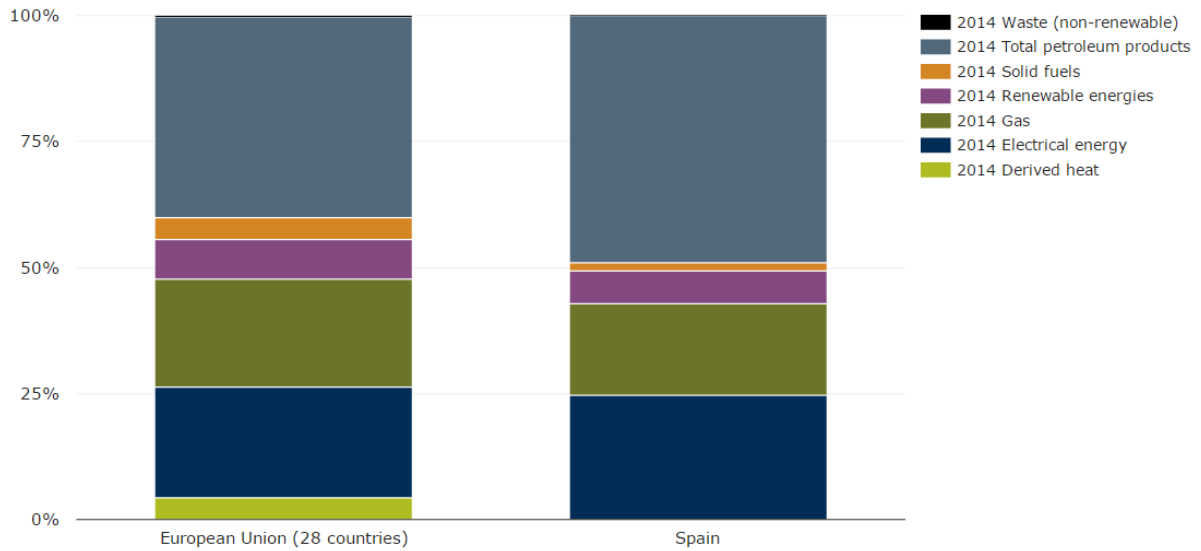
**Resource productivity (GDP/DMC), participating countries and EU-28
 (2000, 2007 and 2014)**



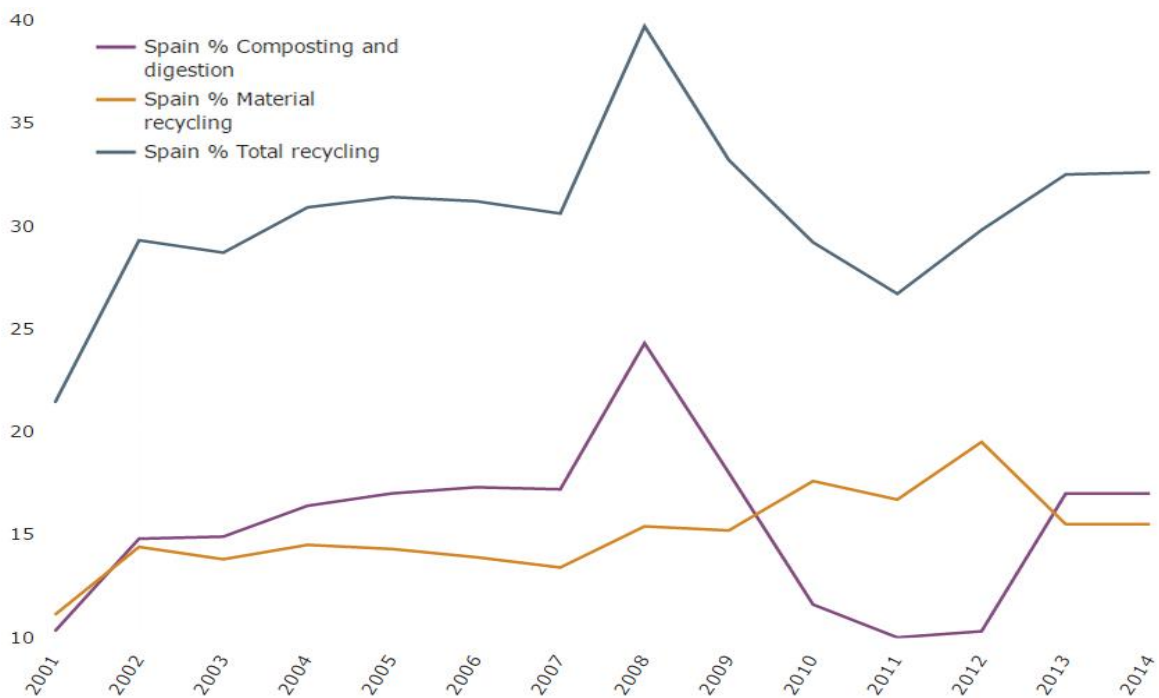
GDP, DMC and resource productivity trends, Spain (2000–2014)



Share of final energy consumption by fuel type, EU-28 and Spain (2014)



Recycling of municipal waste, Spain (2001–2014)



Introduction

There is no specific strategy or action plan on resource efficiency in Spain.

Nevertheless, the European Commission's Communication: A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy (COM(2011)21) is mentioned and several plans and programmes refer to it.

Resource efficiency and a focus on materials are included in several other policy areas (see section on Policy framework).

Scope of material resource efficiency

The term resource efficiency is not defined explicitly but might be interpreted, for example, as reduced and efficient use of raw materials and energy, doing more with less raw materials, and renewable energy alternatives.

Driving forces of material resource efficiency

Major concerns include competitiveness and employment, while others relate to incentives to reduce import dependency on non-renewable materials and energy or to stabilise raw material prices by expanding markets for good quality recycled materials and consolidate demand from industry.

Priority material resources, sectors and consumption categories

Priority materials

All products and services in general are considered priority. Several research initiatives to improve the resource efficiency of specific materials can be found in the Basque Country's IHOBÉ initiatives and projects, as well as in other regional government initiatives, for example:

- Catalunya: http://residus.gencat.cat/web/.content/home/ambits_dactuacio/planificacio/precat20/pinfrecat20_webcast.pdf
- Andalusia: <http://www.juntadeandalucia.es/fomentoyvivienda/portal-web/web/areas/vivienda/texto/d44aba8d-7c19-11e2-b0f6-877399b3c564>

Priority industries and economic sectors

Power generation

In addition to the objectives and targets related to promoting renewable energy in the national plan, there are initiatives such as a voluntary agreement aimed at achieving a 100 % separate collection of used cooking oil from hotels and restaurants (360 000 hotels and restaurants in Spain) and energy recovery from used oils in biofuel plants (<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/convenios-acuerdos-voluntarios/Convenio-voluntario-6-con-FEHR-GEREGRAS.aspx>).

Manufacturing industry, including food sector

In the food sector, the national strategy More Food Less Waste aims to improve efficiency in the consumption, production and distribution of food, as well as to reduce losses along the food chain (<http://www.magrama.gob.es/en/alimentacion/temas/estrategia-mas-alimento-menos-desperdicio/>; http://www.magrama.gob.es/imagenes/en/Libro%20de%20la%20estrategia_ENG_baja_tcm11-286285.pdf; <http://www.magrama.gob.es/en/alimentacion/temas/estrategia-mas-alimento-menos-desperdicio/enespana.aspx>).

Services, including tourism

Priority consumption categories

All types of goods and services, particularly:

Power generation

- strategies to achieve 100 % renewable energy use in biosphere reserves in Spain (http://www.magrama.gob.es/es/ceneam/grupos-de-trabajo-y-seminarios/red-espanola-reservas-biosfera/Energ%C3%ADas_renovables_para_las_RERB_tcm7-330164.pdf; http://www.magrama.gob.es/es/ceneam/grupos-de-trabajo-y-seminarios/red-espanola-reservas-biosfera/02-1-RB_Urdaibai_planificacion_energetica_tcm7-307651.pdf), and initiatives on biomass and renewable energy in Spain's national parks under the Ministry of Food, Agriculture and Environment (MAGRAMA) and the Institute for Diversification and Saving of Energy (IDAE) (<http://www.magrama.gob.es/es/prensa/noticias/parques-nacionales-y-el-idae-colaborar%C3%A1n-en-actuaciones-de-eficiencia-y-sostenibilidad-energ%C3%A9tica-/tcm7-310242-16>);
- biofuel production from used kitchen oils from hotels and restaurants;
- ongoing work to improve the separate collection of home-used kitchen oils;
- public procurement of electricity from 100 % renewable sources.

Manufacturing industry, including food sector

- the food manufacturing and processing industry is part of the Food Chain Initiative and the More Food Less Waste strategy, mentioned above;
- greener public procurement of catering services, procurement and promotion of innovation in contracting of public works such as roads, and promotion of some high-quality recycled materials (ongoing initiative).

Services, including tourism

Policy framework

National strategies or action plans for material resource efficiency

- National Programme on Waste Prevention (2014–2020), Spanish Strategy on Food Waste, and draft of a new State Plan on Waste (<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/participacion-publica/Residuos-2015-Proyecto-Plan-Estatal-Marco-Gestion-Residuos-Estudio-Ambiental-Estrategico.aspx>).
- National Action Plan on Energy Efficiency (2014–2020), which also focuses on biomass and fossil fuels.
- National Integrated Plan on Tourism (2012–2015) ([http://www.minetur.gob.es/turismo/es-ES/PNIT/Documents/Plan%20Nacional%20e%20Integral%20de%20Turismo%20\(PNIT\)%202012-2015.pdf](http://www.minetur.gob.es/turismo/es-ES/PNIT/Documents/Plan%20Nacional%20e%20Integral%20de%20Turismo%20(PNIT)%202012-2015.pdf)) and Spanish Plan on Tourism (2012–2015), which aim to link sustainability issues with economic opportunity and offer innovation support to this important economic activity and social responsibility, while indirectly looking for quality growth and an efficient use of material resources, water and energy.
- PEMAR (National Plan on Waste 2015–2020), which aims at securing a sustainable raw secondary material supply, raising resource efficiency in production when closing cycles in a circular economy, making consumption more resource efficient and enhancing resource-efficient closed-cycle management. PEMAR attaches particular importance to improving awareness and information, education and training, and innovation, and to strengthening voluntary agreements between industry, citizens and public administration.
- National Plan on Smart Cities (<http://www.agendadigital.gob.es/planes-actuaciones/Paginas/plan-nacional-ciudades-inteligentes.aspx>).

Currently several regional governments, including the Basque Country, Catalunya and Galicia (http://www.xunta.es/dog/Publicados/2015/20150112/AnuncioO3G1-291214-0001_es.html), are

developing or have developed their own legal or planning initiatives to promote resource efficiency both in energy, materials and recycling and to reduce the environmental impacts of raw material use.

Recently approved legislation also aims to improve the contribution of waste management to environmental and climate protection as well as to increased resource efficiency in waste management through strengthening waste prevention and recycling – for example the Royal Decree on waste electrical and electronic equipment (WEEE) (http://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-1762).

Ongoing work on the draft of Bio-Economy Strategy co-ordinated by National Institute on Agriculture and Agrifood Research (INIA) are focusing on promoting the sustainable use of some biological resources through bio-innovation and its application in various industrial sectors, thus contributing to improved material and energy efficiency, climate protection and the use of materials and energy from renewable sources.

The circular economy and closing material loops

PEMAR wants to promote closed-cycle management, the circular economy and a more sustainable resource-efficient material flow management. Strategies include separate collection of several domestic wastes such as biowaste, paper and glass, as well as the different materials that are contained in WEEE and old cars, through improving pre-treatment and recycling conditions to promote the production of high-quality recyclates, and the recovery of energy from non-recyclable waste, all the while reducing landfill of resources contained in waste. This is also a legal commitment established, for example, in Law 22/2011 on waste and the new Royal Decree on WEEE.

The instrument of extended producer responsibility is a significant tool in new legal requirements and plans and programmes on waste.

Voluntary agreements are also key tools to consolidate a more sustainable activity on the part of producers and distributors, by, amongst other measures, strengthening waste prevention and recycling in several sectors, such as the food chain, textiles and the plastics industry (<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/convenios-acuerdos-voluntarios/>).

General policy objectives for material resource efficiency

Cross-cutting policy objectives pertain to economic opportunity, improved productivity, cost reduction and greater competitiveness. Policies on products and services include ways to reduce inputs, minimise waste, improve management of resource stocks, change consumption patterns, optimise production processes, management and business methods, and improve logistics. Policies

also aim to help and stimulate technological innovation, and boost employment and human capital through green technology and green competitiveness.

Legal goals include the Law on Waste (<https://www.boe.es/buscar/act.php?id=BOE-A-2011-13046>) and the new Royal Decree on WEEE (<http://www.boe.es/boe/dias/2015/02/21/pdfs/BOE-A-2015-1762.pdf>). Securing the supply of raw materials and making the economy more independent of raw material imports is also a concern mentioned in the Royal Decree on WEEE.

Institutional set-up and stakeholder involvement

Institutional set-up for material resource efficiency policies

Several ministries are involved in green public procurement:

- by 31 December 2014, 100 % of new PCs and laptops were Energy Star rated;
- of 1 456 paper publications in 2014, 1 075 were on recycled paper and 351 were on FSC-certified paper – that is, 97.94 % of paper publications were on recycled/FSC paper;
- paper publications as a proportion of all publications fell from 75.36 % in 2006 (1 456 on paper out of a total of 3 548) to 45.55 % in 2014 (2 995 on paper out of a total of 3 974), the remainder being electronic;
- public contracting (green public procurement) of electricity supply by MAGRAMA from companies producing 100 % from renewable sources, certified by the National Commission on Energy; also the Administrator of Railway Infrastructures (ADIF);
- carbon footprinting and reporting in some public administration buildings – MAGRAMA has elaborated a plan to reduce the carbon footprint of its buildings in Madrid, and the Environmental Education Centre in Valsain (Segovia) has been calculating its carbon footprint since 2010 and has achieved effective emission reductions.
- initiatives to improve energy efficiency include the Basque Country's Ecodesign Guidelines for Products that use Energy (IHOBE Guidelines) (<http://www.ihobe.eus/BuenasPracticas/ficha.aspx?IdMenu=2d012435-6270-4197-a059-374276974174&Cod=93729162-ab74-4387-b79f-62eee6ff1b8e&Idioma=es-ES>).

Process to ensure stakeholder participation

Legal public information procedures take into account the views of stakeholders and citizens.

Suggestions for international support mechanisms to exchange experience

- Eco-Management and Audit Scheme (EMAS) Awards – inspiring examples of EMAS-registered organisations include the Cartagena Port Authority (2015 EMAS Award), demonstrating that reductions in energy consumption, energy from renewables, better separate collection of wastes and recycling are key tools for improving resource efficiency;
- EEA and European Commission initiatives, as well as the UN system.

Policy instruments

Policy instruments commonly used for material resource efficiency

- Mandatory legal instruments, plans and programmes, voluntary agreements (<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/convenios-acuerdos-voluntarios/>) as well as education schemes.
- Biomass and renewable energy in Spain's national parks (MAGRAMA and IDAE) (<http://www.magrama.gob.es/es/prensa/noticias/parques-nacionales-y-el-idae-colaborar%C3%A1n-en-actuaciones-de-eficiencia-y-sostenibilidad-energ%C3%A9tica-/tcm7-310242-16>).

Examples of good practice

- Voluntary agreements schemes, as a strategic tool to go further than legal commitments (<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/convenios-acuerdos-voluntarios/>).

Targets and indicators

Targets for material resource efficiency

- Mandatory obligations contained in laws and royal decrees, such as the Law on Waste, the Royal Decree on WEEE and the Royal Decree on construction and demolition waste.
- Aspirational targets in the Plan on Green Public Procurement, the Plan on Waste (2008–2015), the new (draft) State Plan on Waste, and the Waste Prevention Programme (2014–2020).
- A 10 % prevention (reduction) in waste generated by 2020 relative to 2010.
- Article 22 Law 22/2011 on waste – preparing for reuse, recycling and recovery.
- By 2020, at least 50 % (weight) recycling of domestic and commercial waste paper, glass, plastic, biowaste and other recyclables.
- By 2020, at least 70 % (weight) reuse, recycling and other recovery of non-hazardous construction and demolition waste (excluding category 17 05 04 of the waste list) (<http://www.boe.es/buscar/doc.php?id=BOE-A-2011-13046>).
- The Renewable Energy Plan (2011–2020), approved by the Council of Ministers on 11 November 2011, establishing objectives and targets in line with Directive 2009/28/CE (European parliament and Council, 23 April 2009); Royal Decree 661/2007 regulating special electricity production; and Law 2/2011, of 4 March 2011 on sustainable economy (http://www.idae.es/uploads/documentos/documentos_11227_PER_2011-2020_def_93c624ab.pdf).

Indicators to monitor use of materials and resource efficiency:

Waste prevention indicators

Indicators include total and per person amounts of:

- waste generated/year
- waste generated/economic activity
- waste generated/year/GDP
- municipal waste/year
- hazardous waste/year/gross added value (industry)
- construction and demolition waste /year/GDP
- packaging waste/year

- WEEE/year
- end-of-life cars /year
- old tyres/year
- batteries/year
- research, development and innovation of projects on waste prevention and sustainable consumption.

http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/planes-y-estrategias/Programa_de_prevenccion_aprobado_actualizado_ANFABRA_11_02_2014_tcm7-310254.pdf

<http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/planes-y-estrategias/Planes-y-Programas.aspx#para0>

Plan on waste indicators

http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/participacion-publica/20150601estudioambientalestrategicopemar_tcm7-383821.PDF

http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/participacion-publica/20150601pemarconsultapublica_tcm7-383820.pdf

Indicators on per person ratios were included in several of the plans and programmes mentioned above.

Optional questions

Which way should resource efficiency go in the future?

Improving communication and awareness of the links between competitiveness-employment-resource efficiency and sustainability