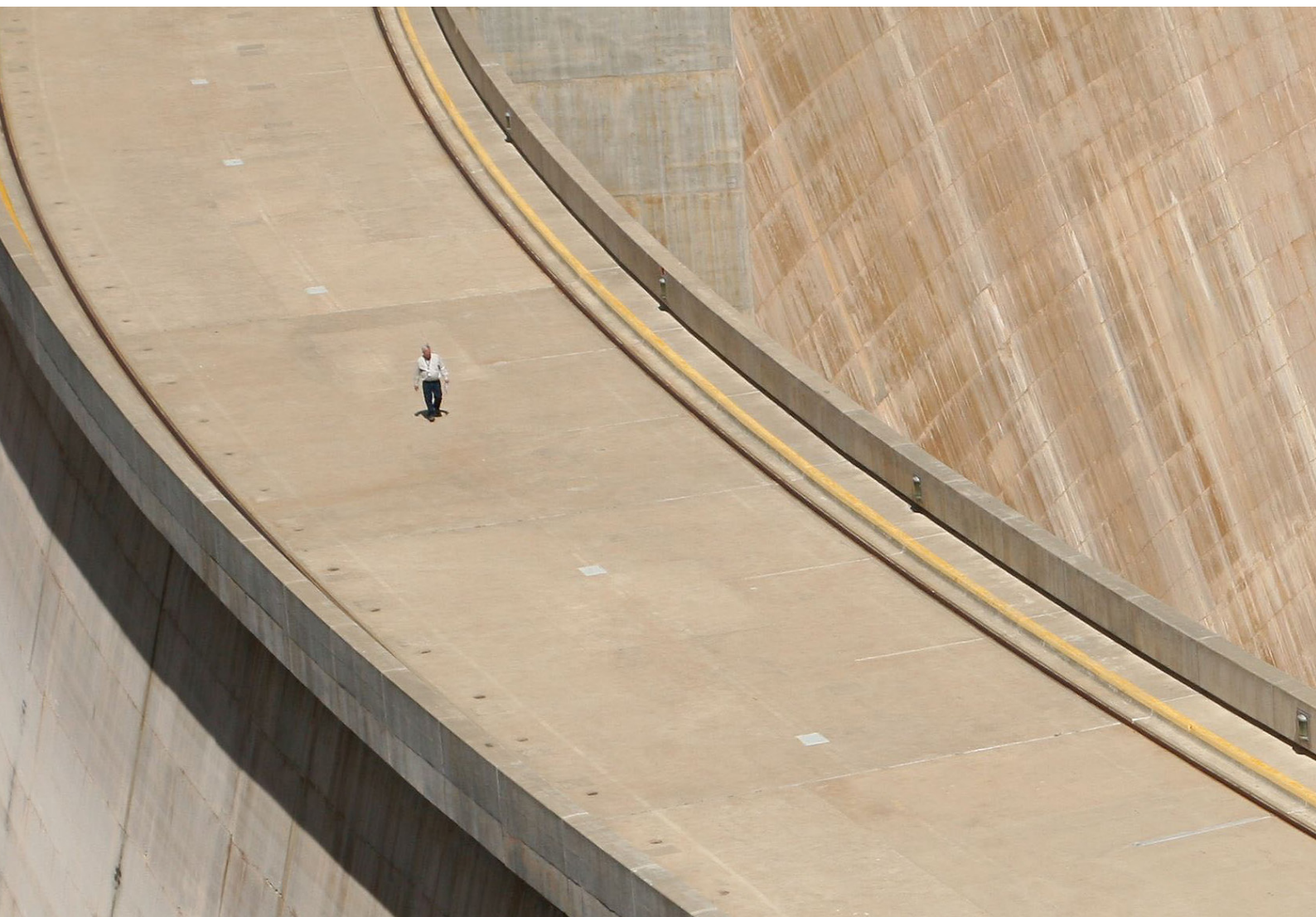


More from less — material resource efficiency in Europe

2015 overview of policies, instruments and targets in 32 countries



Slovenia 

May 2016



This country profile is based on information collected by Barbara Bernard Vukadin from the Slovenian Environment Agency. 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 November 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>

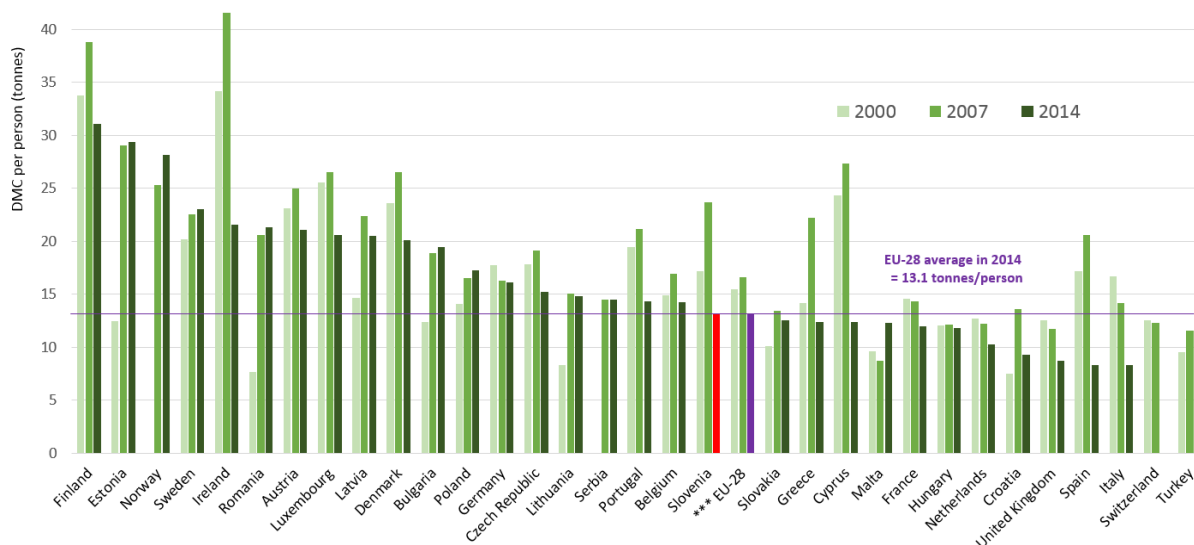
For information on climate- and energy-related policies, including those on energy efficiency, in the participating countries, please visit: <http://www.eea.europa.eu/themes/climate/ghg-country-profiles>

Slovenia, facts and figures

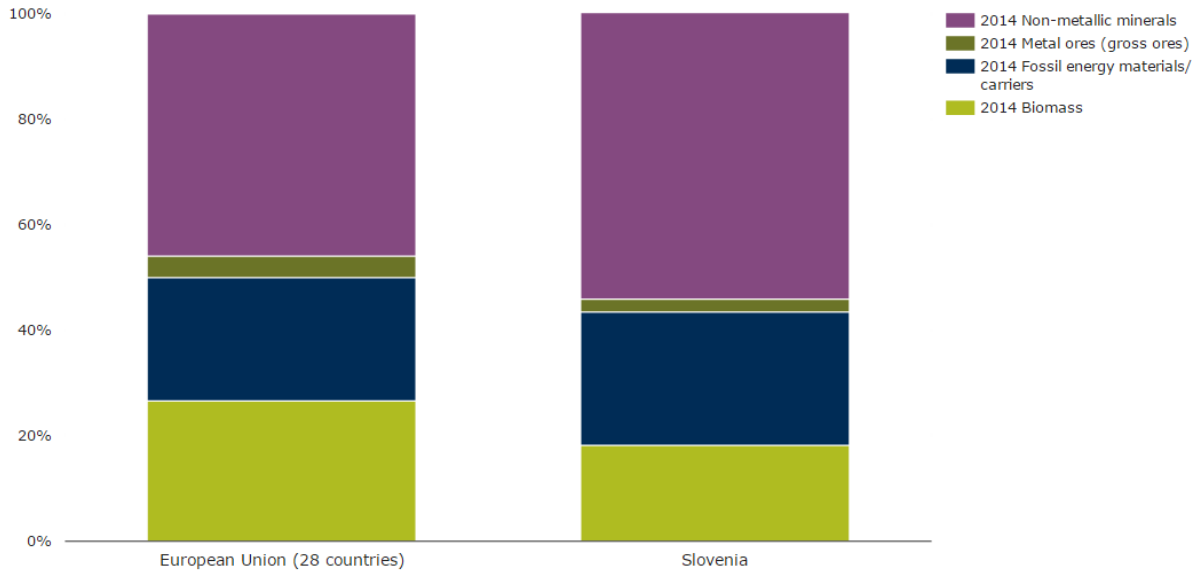
Source: Eurostat

	<p>GDP: EUR 37 billion (0.3 % of EU-28 total in 2014)</p> <p>Per person GDP: EUR 22,600 (in purchasing power standard) (82 % of EU-28 average per person in 2014)</p> <p>Use of materials: 27 million tonnes DMC (0.4 % of EU-28 total in 2014) 13.1 tonnes DMC/person (100 % of EU-28 average per person in 2014) Resource productivity 1.34 EUR/kg (68 % of EU-28 average in 2014)</p> <p>Structure of the economy: agriculture: 2.1 % industry: 28.4 % services: 69.5 % (2014 est.)</p> <p>Surface area: 20,300 square kilometres (0.5 % of EU-28 total)</p> <p>Population: 2.1 million (0.4 % of EU-28 total)</p>
	

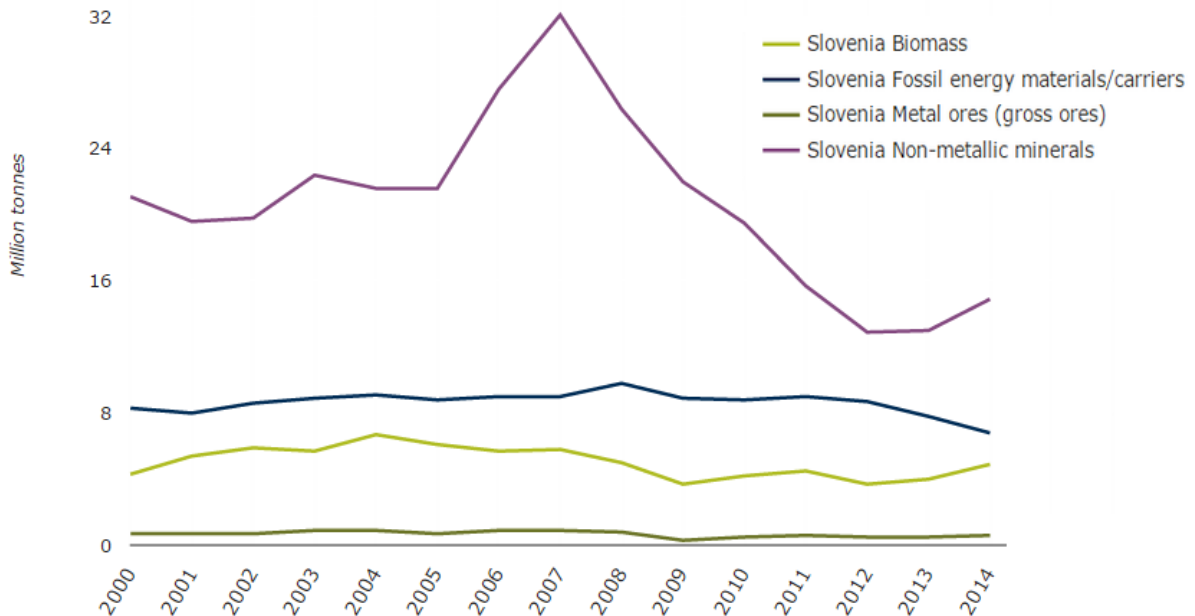
Use of materials (DMC) per person, participating countries and EU-28
(2000, 2007 and 2014)



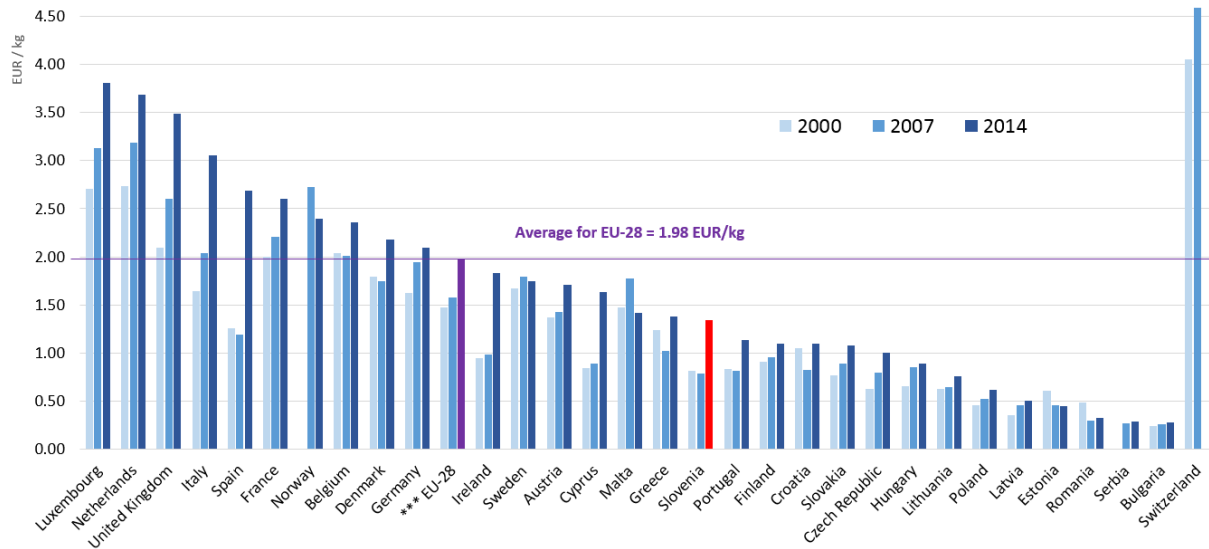
Domestic material consumption by category, EU-28 average and Slovenia (2014)



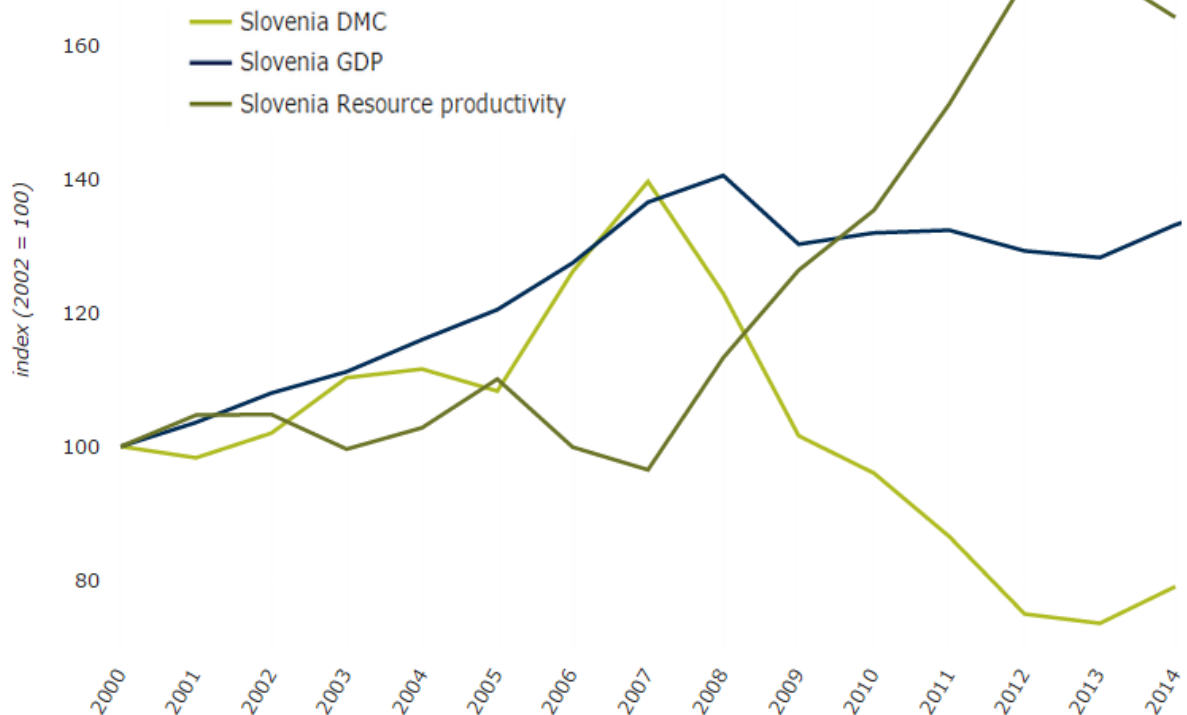
Trends in material consumption, Slovenia by category (2000–2014)



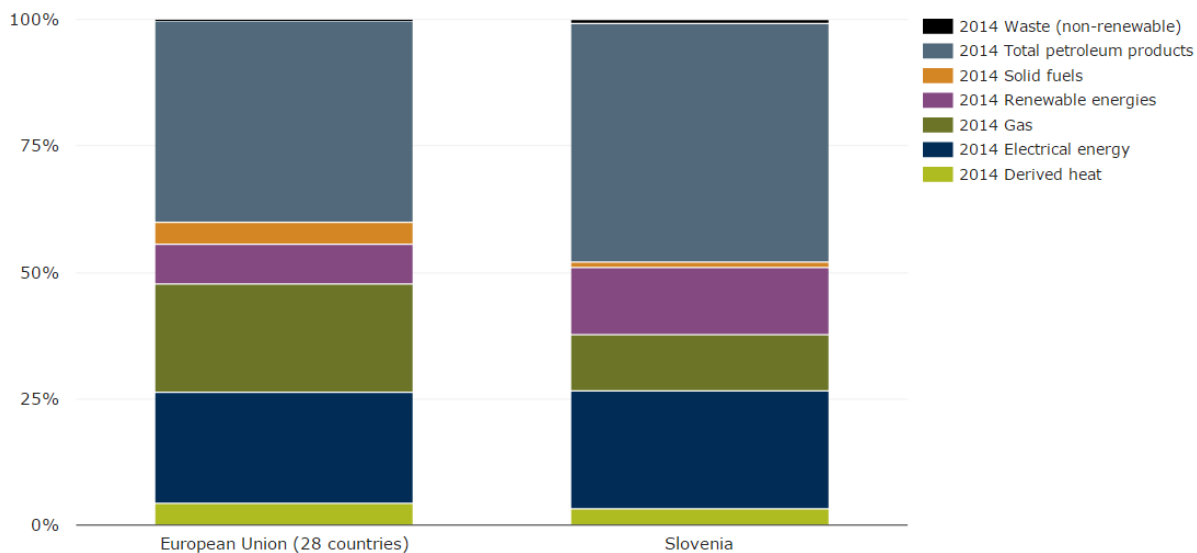
**Resource productivity (GDP/DMC), participating countries and EU-28
 (2000, 2007 and 2014)**



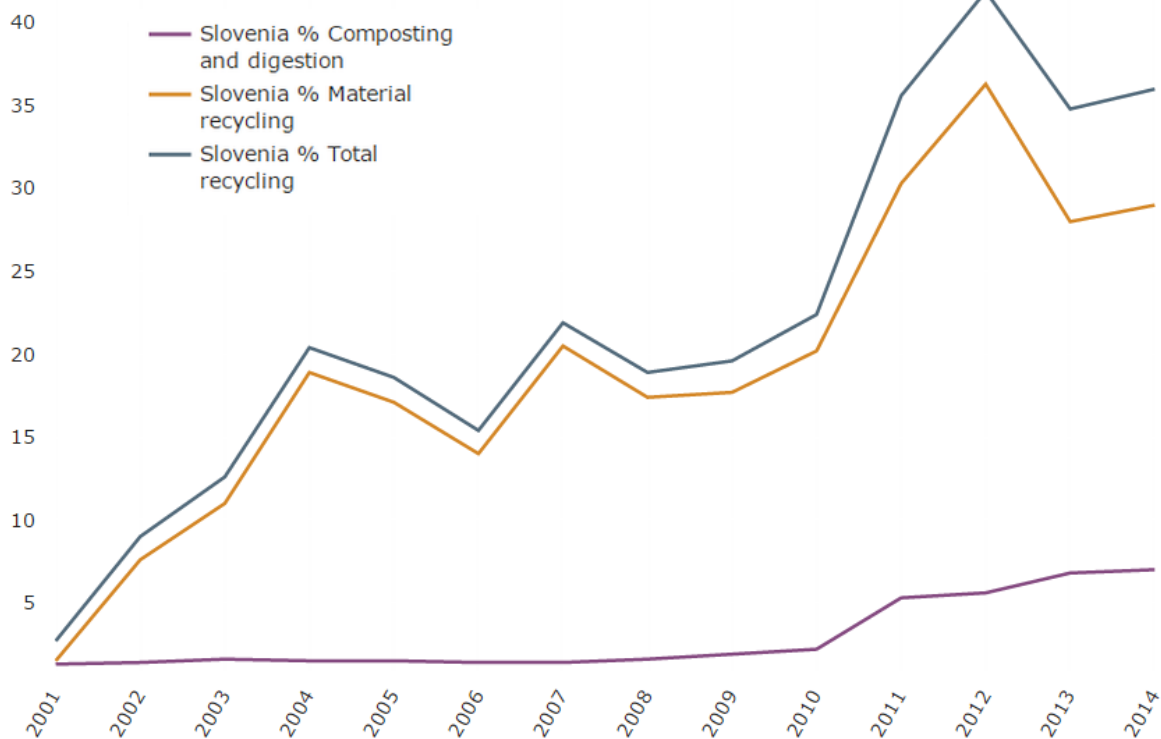
GDP, DMC and resource productivity trends, Slovenia (2000–2014)



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



Recycling of municipal waste, Slovenia (2001–2014)



Introduction

Slovenia does not have a dedicated national resource efficiency strategy or action plan.

Resource efficiency is addressed in some other policy documents, one of them is the recently adopted 'Framework Programme for Transition to Green Economy' with Action plan of Activities for 2015-2016.

Driving forces of material resource efficiency

Several factors are recognised as driving forces:

- Existence of some good practices on natural resource management, knowledge and good practices of some green companies in one side, but the lack of system approaching on inter-sectoral level with the aim to stimulate material resource efficiency on the other side.
- Slovenia has high dependence on the imports of materials
- In comparison with the EU average, Slovenian's companies are half less active in term of improving the material resource efficiency
- Benefits from the creation of green jobs (sustainable local self-supply and wood chains)
- Challenges on how to recognise and use the opportunities derived from transition to green economy

Priority material resources, sectors, and consumption categories

Priority materials

Sustainable use of wood, as a strategic Slovenian resource, will be stimulated with measurements, foreseen in the Framework Programme for Transition to Green Economy.

Secondary raw materials will be addressed in National Waste Management Plan, currently in the process of final harmonization before the adoption.

Priority industries and economic sectors

In the framework of Slovenian industrial policy, under the environmental-energy challenge and the efficient use of natural resources, based on sustainable production and consumption, four key industrial sectors have been identified:

- energetics / 'smart' systems;
- sustainable construction;
- manufacturing, especially wood processing, metal and the electrical and electronics industry
- chemical and process industry

Smart Specialisation Strategy addresses the following priority industry areas:

Health – medicine from natural components, natural cosmetics...

Mobility_ e-mobility, energy storage

Priority consumption categories

Sustainable mobility

Housing - Eco fund

Municipal waste – separate fractions collection

Policy framework

National strategies or action plans for material resource efficiency

Some political documents that address material resource efficiency are:

- 'Framework Programme for Transition to Green Economy' follows governmental coalition agreement as well as strategic documents of EC. Focus is on the following areas: Sustainable management of the resources, Promotion and support to green business, Support for green jobs, Demand for green services and products, green public procurement, Green fiscal reform, Sustainable urban development, Education and skills for green growth and Green agriculture and forestry. Main goals are to promote green economy as an opportunity for the development of new green technologies, new jobs, promotion and development of Slovenian knowledge through integrating existing policies and activities, and their over-engineering, accelerating the flow of knowledge and integration of stakeholders for the transition to green business practices and the development of green jobs, products and knowledge and prepare indicators and monitor the progress of the green economy.

The programme is accompanied by Action plan of Activities for 2015-2016.

http://www.vlada.si/delo_vlade/gradiva_v_obravnavi/gradivo_v_obravnavi/?tx_govpapers_pi1%5Bsingle%5D=%2FMANDAT14%2FVLADNAGRADIVA.NSF%2F18a6b9887c33a0bdc12570e50034eb54%2F27b40ae7c2ac5c6fc1257ee5002285f3%3FOpenDocument&cHash=9cd9fd2e7d9f8e5e808fca6cc252d484

- The Operational Programme for the Implementation of the EU Cohesion Policy 2014 – 2020 supports material resource efficiency measures for enterprises, as well as inquire of opportunities for using green products from domestic and foreign markets. These measures, under the priority axes for research, development and innovation and for small and medium enterprises, also include measures to support eco-innovation.

<http://www.energetika-portal.si/dokumenti/strateski-razvojni-dokumenti/operativni-program-za-izvajanje-evropske-kohezijske-politike/>

- The Slovenian Industrial Policy, 2013 recognises material resource efficiency as a challenge for sustainable construction and in processing sectors, such as wood and metals.

http://www.google.si/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCsQFjAA&url=http%3A%2F%2Fwww.mgrt.gov.si%2Ffileadmin%2Fmgrt.gov.si%2Fpageuploads%2FDPK%2FSSIP%2FSSIP_uradno_130207.doc&ei=5e1VZbWK5DeasXUgfgN&usg=AFQjCNGTPx7UYd3CKCtIgbEra59DsDjpmg&sig2=vFnPi9MspVDIR0g9nlkwFA&bvm=bv.91071109,d.d2s

- Action plan: the Wood is Beautiful plan contains measures which should lead to better utilisation of wood, which is still plentiful in Slovenia, as a resource but the added value remains relatively low which means that sectoral resource productivity is rather low.

http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/DPK/3_Les_je_lep_naslovnica_kazalo_novo_pdf.pdf

- The study *Efficient Use of Resources - Towards an Action Plan in Slovenia* introduces approaches addressing resource efficiency and waste prevention in European Union (EU) Member States. It was prepared in 2014 with the aim of presenting several concrete suggestions and to recommend the preparation of action plan on resource efficiency in Slovenia.

http://www.mkgp.gov.si/fileadmin/mkgp.gov.si/pageuploads/podrocja/odpadki/ucinkovita_raba_vir_0v.pdf

- Smart Specialisation Strategy is a common strategy of the government, the business sector and the industry, research organisations and civil society, which are all contributing to defining development priorities for the first time. By 2023, we would like to improve our competitiveness on the global market by increasing the extent of knowledge and technologies in Slovenia's exports, increase the share of high-tech intensive products in exports from 22.3 per cent to the EU-15 average of 26.5 per cent, increase the share of exported services with a high share of knowledge in all exports from 21.4 per cent to 33 per cent, which means halving the lag behind the EU average,

and increasing entrepreneurial activity from the current 11 per cent to at least the EU average, which is 12.8 per cent.

http://www.svrk.gov.si/fileadmin/svrk.gov.si/pageuploads/Dokumenti_za_objavo_na_vstopni_strani/SPS_10_7_2015.pdf

- The Action Programme on Municipal Waste will bring Slovenia closer to being a recycling society with the focus on the prevention of waste generation and using waste as a material resource.

http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/zakonodaja/varstvo_okolja/operativni_programi/op_komunalni_odpadki.pdf

The circular economy and closing material loops

A short study *Efficient Use of Resources - Towards an Action Plan in Slovenia* analysed the trends and potentials for a transition of Slovenia to a circular economy, and identified general obstacles and made recommendations on which elements are necessary to achieve a transition is available at:

http://www.mkgp.gov.si/fileadmin/mkgp.gov.si/pageuploads/podrocja/odpadki/ucinkovita_raba_vir_ov.pdf

The study includes the following topics: An EU policy framework with regard to resource efficiency; key environmental policy instruments, including the concept of circular economy and cradle-to-cradle; efficient use of resources in EU Member States; waste as a resource; the newest development documents in Slovenia; and preliminary recommendations.

In the Operational Programme for the Implementation of the EU Cohesion Policy 2014–2020 included the measures which could facilitate shift towards circular economy: closing material loops inside enterprises and networks – industrial symbiosis; initiating more efficient production processes; waste prevention; managing waste efficiently; and other material resources.

More details available at: http://www.energetika-portal.si/fileadmin/dokumenti/publikacije/op_sfc/op_sfc_2014-2020.pdf

In the Conference for Circular Economy in November 2015, organised by NGO, Ministry for the Environment and Spatial Planning and Government Office for Development and European Cohesion Policy, a discussion among different stakeholders was organised regarding the needs and opportunities for the transition to the circular economy. Some good practices on circular economy were presented as well.

<http://ebm.si/p/circonf/en/>

General policy objectives for material resource efficiency

Framework Programme for Transition to Green Economy includes the following objectives:

- Promote changing the waste to a resources
- Sustainable resource management
- Green products, green public procurement
- Sustainable building construction
- Green jobs creation

The Operational Programme for the Implementation of the EU Cohesion Policy 2014–2020 introduces an indicator on resources productivity, which anticipates improved resource productivity. It also supports eco-innovation, waste prevention and the efficient use of material resources.

Institutional setup and stakeholder involvement

Institutional set up for material resource efficiency policies

Framework Programme for Transition to Green Economy, addresses different ministries (Ministry for the Environment and Spatial Planning, Ministry for Economic Development and Technology, Ministry for Agriculture, Forestry and Food, Ministry for labour, Family, Social Affairs and Equal Opportunities, Ministry for Education, Science and Sport and others) and other stakeholders from business, local communities, NGOs, academy and other interested public.

Process to ensure stakeholder participation

To establish an effective transition, the Framework Programme for Transition to Green Economy envisages active and structured dialogue among key actors – ministries responsible for the environment and spatial planning, economy, development and education; local communities; economic actors and their associations, non-governmental organisations (NGOs) and young people. Involvement is planned to take place through regular meetings and other forms of dialogue through to concluding partnerships.

Suggestions for international support mechanisms to exchange experience

Some suggestions could be as follows:

- Common EU platform on resource efficiency:
 - data, indicators, reports;
 - case studies, good practice;
 - a list of all relevant initiatives related to resources efficiency/circular economy;
 - policy documents accepted at a national level;
 - network of institutions dealing with resource efficiency (perhaps the format established between DG ENER and DG Regio could be checked when setting up a network of representatives from managing and energy authorities)
- EU financial instruments to support resource efficiency – how to use the EU Cohesion Policy as a tool not just for energy efficiency but also for improved resources efficiency;
- information about how to design different instruments, etc. which would facilitate supporting resource efficiency would also be very useful.

Policy instruments

Policy instruments commonly used for material resource efficiency

In a broader sense, financial instruments could influence resource efficiency with, for example, taxes, on waste landfilling; charges, concession on non-metal mineral resources; and funds, such as eco-funds for buildings.

Examples of good practice

Green development model of Šentrupert municipality

Intended to be a self-sufficient and sustainable living community in 2025, the small municipality of Šentrupert has embraced an ambitious model of municipal development comprising an integrated policy and a strategic vision based in five main domains: economy, transport, environment, education and quality of life.

One of the most important municipal projects was the renovation of the local primary school, a low-energy nursery built entirely of wood with a wood chip boiler, and a charging station for electric cars. The wood processing centre in which wood waste entirely replace the fossil fuels as source of energy, could become a model for the rest of Slovenia. Consideration was also put to having as short as possible transport for biomass and to lower the energy consumption for public lighting. The other project focused on local food and self-supply with the greenhouses, heated using waste heat, from biomass electricity production.

<http://www.re-green.eu/en/go/case-of-the-month----entrupert>

<http://www.arhiv.slovenija-co2.si/index.php/dobre-prakse/trajnostna-proizvodnja-in-potronja/zeleni-razvojni-model-obine-entrupert.html>

[http://eregion.eu/wp-](http://eregion.eu/wp-content/uploads/2014/11/Gole_eEnvironment_of_the_neighboring_municipality.pdf)

[content/uploads/2014/11/Gole_eEnvironment_of_the_neighboring_municipality.pdf](http://eregion.eu/wp-content/uploads/2014/11/Gole_eEnvironment_of_the_neighboring_municipality.pdf)

http://www.siol.net/novice/slovenija/2015/03/zakaj_je_sentrupert_najbolj_prodorna_obcina_v_sloveniji.aspx

Reuse centres network

The network of 9 centres for waste reuse offers to individuals to bring unwanted items which could still be in use with someone else. They renovate and repair them and gave them second life. The items which would normally be put to waste are available for use by others. They work in the frame of social entrepreneur and employee difficult to employ persons.

Reuse centres contribute to waste minimisation, resource efficiency as well as circular economy.

<http://www.cpu-reuse.com>

Separate waste collection in Ljubljana and Vrhnika

The Slovenian capital is the first capital in Europe to declare the Zero Waste goal and in 2014 separately collected 61% of its municipal waste. The city has committed to halving the amount of residuals and increasing separate collection to 78% by 2025.

In a country that until 2001 had no national targets for separate collection of waste, the case of the small municipality of Vrhnika in Slovenia shows how a community can make strides towards a Zero Waste objective in a short time.

<http://www.zerowasteurope.eu/zw-library/case-studies/>

Targets and indicators

Targets for material resource efficiency

In most cases the EU targets have been implemented.

Action Programme on Municipal Waste target: 61–64 % recycling rate of municipal waste by 2020.

http://www.mop.gov.si/fileadmin/mop.gov.si/pageuploads/zakonodaja/varstvo_okolja/operativni_programi/op_komunalni_odpadki.pdf

In case of indicators included in Operational Programme for the Implementation of the EU Cohesion Policy 2014–2020, the target for resource productivity indicator anticipates that the overall resource productivity by 2023 should increase to 1,5 Euro/kg DMC, from 1,07 in 2011 – would increase by up to 1.5 GDP/DMC, from 1.07 in 2011, by 2023.

Indicators to monitor use of materials and resource efficiency:

Data for indicators on direct material input, domestic material consumption and resource productivity are calculated by the National Statistical Office. Assessments are prepared at the Slovenian Environment Agency (SEA) and at the Institute of Macroeconomic Analysis and Development (IMAD).

Indicators (SEA): http://kazalci.arso.gov.si/?data=group&group_id=18&lang_id=94

Latest indicator report (SEA):

http://nfp-si.eionet.europa.eu/publikacije/Datoteke/Kazalci%20okolja%20v%20Sloveniji/Kazalciokoljavsloveniji_en.pdf

Development report (IMAD):

http://www.umar.gov.si/en/publications/zapisi/?no_cache=1

Optional questions

Recent policy developments concerning natural resources in the broader sense of the term

A new Slovenia's development strategy is in preparation as well as some sectoral related programmes, like programmes on fishery, agriculture, transport and forestry. Amendments of Strategy on spatial planning and Energy concept for Slovenia are foreseen as well.

Which way should resource efficiency go in the future?

Towards changing the basic systems (urban/housing, food, mobility, energy...)

Reflections on the country's trends in the use of materials and resource efficiency

In Slovenia material resource use per person was lower than the EU average and after 2007 the DMC began to decline. The extraction of mineral resources for construction decreased by more than half, although there was a slight increase from 2013 to 2014. In 2014, approximately 15 million tonnes were used. The use of biomass slightly increase and the use of fossil energy sources slightly decrease in recent years.

Resource productivity in Slovenia has been increasing since 2007 (with a slight decrease in 2014) primarily due to the lower consumption of non-metallic minerals for construction.

The volume of separately collected fractions of municipal waste has been increasing in recent years and accounted for almost 65 % in 2014. Recycling rate of municipal waste was 36% in 2014. The strategic document lays down a target of 61–64 % recycling rate of municipal waste by 2020.